THE UNIVERSITY
OF ILLINOIS
LIBRARY
634.05
GRD
V.48

GARDENING Illustrated

Founded by W. Robinson, Author of "The English Flower Garden"

No. 2443—Vol. XLVIII. JANUARY 2, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

INDEX—Illustrations in Capitals

Alpine foothills, with a notebook on 7
Apple Ecklinville Seedling 3
Apples worth planting, some 3
Begonia bulbs, storing 11
Camellias 11
CAMELLIAS, SINGLE AND SEMI-DOUBLE 11
CATANANCHE CŒRULEA 9
Christmas decorations 2
Chrysanthemums, two good yellow 2
Edgings for winter and spring 4
Elæagnus macrophylla 6
Erica carnea 3
Eritrichium nanum... 3
Forget-me-nots 5
Furze, dwarf (Ulex nanus) 3
GARDEN AND COTTAGE IN SURREY, AN OLD TUDOR... 5
Gillenia trifoliata ... 5
Gladioli notes 4
Gladiolus bulbs, large v. small 4
Grease banding, attention to 10
Hairbell, the Bearded (Campanula barbata) 8
HAMAMELIS MOLLIS 6
Hemerocallis flava ... 8
Laurustinus hedges ... 6
LAVATERA OLBIA ... 8
Lilacs, grafted 2
Mealy bug, coal tar remedy for 3
MARTYNIA PROBOSCIDEA, THE REMARKABLE SEED-POD OF 3
Mr. W. P. Thomson ... 2
Muehlenbeckia nana... 5
Myrtus communis var, tarentina 6
Notes and reflections for the New Year ... 1
Osmanthus armatus... 6
OUR CALENDAR WRITERS 14
Parks and gardens of Paris and Brussels... 9
Peach and Morello Cherry, the 10
Peach and Nectarine trees under glass and outside, planting ... 10
Pear, the Seckle 3
Peas, a succession of... 12
Phlomis Russelliana... 8
Potatoes, sprouting seed... 12
Rhododendrons, creeping 2
Rockspray (Cotoneaster horizontalis), the horizontal 6
Romneya trichocalyx... 8
Rose Aspirant Marcel Rouyer 3
Sweet Peas, 1926 classification of 8
TECOPHILÆA CYANOCROCUS 2
Vegetables, forcing ... 12
Vines, pruning 10
VIOLET (VIOLA BIFLORA), THE TWO-FLOWERED 7
W. E. Th. Ingwersen... 2
Zonals for winter blooming 11

Notes and Reflections for the New Year

The ordering of seeds

With almost every post we are receiving the annual seed catalogues issued by the various seed houses throughout these islands, and even the oldest gardener has some enjoyment in glancing through the pages of these and debating as to what must be ordered for the approaching season. Many of us have got past the stage where the descriptions of novelties fill us with a great desire to grow them, but still, very few can fully resist the temptation to order a few of such.

Novelties

I have, at moment of writing, had no time to more than glance through such lists as have come to hand, so will not attempt to discuss these, it being, really, more profitable to go into the merits of such kinds as have proved worthy of wide cultivation. Annually I order and test under ordinary conditions several of the new varieties offered, but always rely on proved standard sorts for providing necessary supplies, the "novelties," if they fail, not being given the opportunity of causing a gap in the supplies. This is especially necessary in the case of vegetables.

What to avoid

As I have just said, novelties must never be entirely relied on in the production of a steady supply of vegetables, while it is, also, unwise to fill conspicuous flower-beds with new and untried kinds that may, very conceivably, fail to give real satisfaction. Relegate all such, therefore, to some spot where a failure is of but small consequence.

Good novelties of former years

It is now many years ago since Messrs. Sutton introduced that finest of all dwarf annual plants, the Nemesia, and I think I may claim to have been one of the very first in Scotland to grow it. From the first this plant was a great success, and even yet it is grown with great satisfaction all over the country. China Aster Hohenzollern was introduced some 30 years ago, I should think, and well I remember trying it for the first time. It could only be had in white then, while now the range of colour is as wide as is usually found in this annual. Dimorphotheca aurantiaca was another novelty that I tried as soon as Messrs. Barr offered it to the public, and it was a success from the first.

Other successful novelties

Among numerous new things tested during the last 35 years I make special note of Marguerite Carnations, Antirrhinum Eclipse, A. Fireflame, Geum Mrs. Bradshaw, G. Lady Stratheden, Cyclamen Scarlet King, Mignonette Covent Garden Favourite, Polyanthus Barr's Giant-flowered Deep Crimsons, P. Munstead strain, Schizanthus Dr. Badger's strain, and Wallflower Fire King.

Good vegetable novelties

Peas are always a most important crop, and one is always pleased to find something good in the new varieties offered. Good varieties I tried as

Ring out the old, ring in the new,
Ring, happy bells, across the snow;
The Year is going, let him go;
Ring out the false, ring in the true.

—*Tennyson*

novelties include The Pilot, The Lincoln, Glory of Devon, Royal Salute, and Rearguard. In Beetroot, Galloway Purple or Non-bleeding; Tomatoes, Holyrood, Stirling Castle, Laird's Supreme, Hawlmark, and Tait's Selected; Lettuces, Holborn Standard, New York Giant, and Webb's Wonderful. All of these I tried when first introduced, and all are still well worth growing.

THE FAILURES

I am afraid that these are more numerous than the successes, and I can hardly give a list of them; suffice it to say that, in the majority of cases, I am convinced that the main cause of failure was the unsuitability of my soil or climate to the varieties that failed, and that such failures are valuable as showing the gardener that he ought to carefully study the varieties that really succeed, and stick closely to these as his sheet anchor.

ORDER SEEDS EARLY

There is no advantage, but the very opposite, in keeping back the seed order, for when the year's supply is at hand, early in January, one need never lose a favourable opportunity to have crops put in. It is also an advantage to the seed merchant, as he can get orders made up in comfort and without having to report "sold out," as not infrequently he has to do when the order is delayed until sowing-time arrives. C. BLAIR.

Preston House, Linlithgow.

NOTES OF THE WEEK

W. P. Thomson

CONGRATULATIONS to our colleague, Mr. W. P. Thomson, who will be the recipient of the Veitch Memorial Medal in gold, to be presented at the annual general meeting of the Royal Horticultural Society in February. Veitch Memorial Medals are given to those who have helped the advancement and improvement of the science and practice of horticulture. For over 38 years Mr. Thomson has been on the editorial staff of GARDENING ILLUSTRATED, and, happily, we still have the advantage of his counsel and advice, based, as it is, upon long years of experience. We know that readers will join with us in conveying to Mr. Thomson our heartiest congratulations on the honour which is to be conferred upon him.

W. E. Th. Ingwersen

Our esteemed contributor and well-known grower of alpine plants, formerly of Messrs. Gavin Jones and Ingwersen, Letchworth, has now started a nursery of hardy and alpine plants on his own account. His address is Birch Farm Hardy Plant Nursery, Sharpthorne, Sussex, and it is interesting to recall that this nursery adjoins the estate of William Robinson at Gravetye Manor, East Grinstead. Mr. Ingwersen sends us a list of seeds of alpines and hardy plants, which will be very useful to those who wish to raise a stock of plants. The seeds may result in some fine and novel things as there is always the probability of obtaining some interesting hybrid forms. Valuable advice is given as to the plan to follow in the raising of these seeds. From Mr. Ingwersen's experience as a traveller and his wide knowledge of hardy and alpine plants we hope that success may follow his venture.

Christmas decorations

After the Christmas and New Year are over there is often some heartburning when it is found that, to provide decorations, not a few evergreens have been, to put it mildly, cut injudiciously. It is too often the case, however, that the responsible party is he who sends out the cutters with a general order to "cut a load of evergreens for decoration." Here and there one may find a cutter who can select judiciously and cut in such a manner that a branch or a spray is not missed. Unfortunately, the majority do not consider the possible effects of their cutting, and a shapely or promising shrub or tree is mutilated and ruined. Nothing is more regrettable, and the gardener, who, as a rule, is responsible for the cutting of the decorative material, ought either to supervise the cutting or mark distinctly what is to be cut and to place a trustworthy man in charge. By so doing, much damage and not a little recrimination at a later date may be saved.

A SCOTTISH GARDENER.

Two good yellow Chrysanthemums

Admittedly "big blooms" are not now so popular as they formerly were, but most of us like to grow a few plants on which one or two blooms are allowed to develop. Personally a lover of yellow Chrysanthemums, I saw, a year or two ago, two magnificent sorts in Queen's Park, Glasgow, where there is, annually, a superb display of the winter flower. These were A. S. Watt and Princess Mary, both types of what a Chrysanthemum ought to be. Dwarf in habit, yet of vigorous growth, they bear exceptionally large blooms which are full of substance and which last for a very considerable period. Attracted by the Queen's Park examples, I procured cuttings of both, and while I may not, perhaps, produce blooms equal to the Glasgow ones, yet they are quite worthy of a note. A. S. Watt is, of the two, my favourite, but both can be recommended to admirers of "big blooms" in yellow. W. McG.

Mabie.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Tecophilæa cyanocrocus

I HAVE to thank Isabel C. Blofeld for the interesting note on Tecophilæa cyanocrocus in your issue of December 19th (p. 770). It is by such notes that we obtain valuable information about many plants, and it is a pleasure to know that T. cyanocrocus was hardy with the late Mr. T. H. Burroughes in his garden at Ketton, Rutland. The note recalls to me several visits paid to my garden by the late Mr. Burroughes, who was one of the most enthusiastic of the well-informed gardeners I have ever met, and of the numerous letters I had from him on our mutual favourites. I thank your correspondent for the information, which I hope will prove useful to many desirous of growing this lovely Chilian bulb. S. ARNOTT.

The Blue Chilian Crocus (Tecophilæa cyanocrocus)
It is a rival to the Gentians in the intensity of its blue colour

Grafted Lilacs

Those who may, at this season, be ordering Lilacs for spring planting ought to make certain that grafted plants are not sent. Of late a most reprehensible practice has arisen of grafting the Lilac upon Privet, with a result which need not be enlarged upon. Considering how easily young plants of Lilacs upon their own roots can be propagated, there is no excuse for grafting, and when an undoubtedly useful art is degraded in this way one is inclined to ask: "Can folly further go?"

A SCOTTISH GARDENER.

Creeping Rhododendrons

In your issue of November 21st is a very interesting article on Rhododendrons by F. K. Ward, in which (p. 710) he mentions "scarlet-flowered creeping species," but gives no specific names. Can you help me in the matter? In the late spring I saw growing in a garden R. repens, but understood from the gardener that it was not in commerce. Can you tell me if this is the case? So far I have not found it in any of the nurserymen's lists. W. L. S. L.

Ripley.

[So far as we know, R. repens is not on the market. The scarlet-flowered creeping Rhododendrons referred to in Mr. Kingdon Ward's article belong to the "Neriiflorum" series, and are therefore related to R. repens. K.W. 5845 (Scarlet Runner) is very similar to R. repens, but is not that species, and has not yet been named. K.W. 5846 (Scarlet Pimpernel) is another of the alliance; K.W. 5847 (Carmelita) is a third, much larger. Until these are described and named they will probably pass current under the above

634.05
GRD
v.48

cknames and numbers. When the seedngs are a couple of years old they will oubtless be on the market in very limited umbers.]

Apple Ecklinville Seedling

I am glad to notice, on page 756, December th issue, the letter of "A Galloway Garener" eulogising this fine cooking Apple. n the garden here we have a couple of old andard trees of this variety, which seldom il to produce good crops of fair-sized fruits, nd this is not a good Apple district, nor do I ink this fine Apple at all adapted to this ethod of training. I can remember, some years ago, in a Dumfriesshire garden, of me splendid low trees (or, rather, bushes, r they were not more than 7 feet high and ained in bush form) that were annually den with large shapely fruits such as one n hardly hope for from standards. These w bushes had the advantage, too, of not eing so exposed to the autumn gales. If cklinville has a fault at all it is that it keeps r only a comparatively short time, it being ell to use it all up by Christmas.

Preston House, Linlithgow. C. BLAIR.

Coal tar remedy for mealy bug

I would like to emphasise the remarks on is subject, on page 757 of GARDENING ILLUSRATED, December 12th issue, as I have seen erious trouble caused by the use of this aterial. A few years ago, happening to call n an old gardening friend, I found him in reat distress because his Vines had failed to reak after several weeks' hard firing. On oing into the vinery I found that he had een using coal tar and that, apparently, the ods were killed. I did not think that it was uite so bad as that, and hinted that, in due ourse, growth would start. I proved to be ight, but the shoots were so late and so eeble that there was no fruit that season, and nly a very small amount the year following. Vhat made the matter worse was the fact hat the bug was not entirely destroyed.

Incidentally, I had seen the same happen any years previously by the use of paraffin il. I forget now whether or not the oil was pplied neat, but, at all events, growth only tarted during the summer, and, as in the tar ase, no fruit of any consequence was had for wo years. Eventually the Vines entirely reovered and produced splendid Grapes, lthough the bug was by no means eradiated, and continued to give trouble all the ime I was acquainted with this particular ouse.

I have not tried XL All liquid insecticide n Vines, but have a very high opinion of this reparation for the destruction of various ther troublesome insects, and could readily elieve that, used as recommended in the otes referred to above, it would give a good ccount of itself. C. BLAIR.

Preston House, Linlithgow.

Dwarf Furze (Ulex nanus)

When passing recently over a track of wild, nreclaimed land I was much impressed by he beauty of this dwarf species of Furze. It s a rather local kind, though growing bundantly where it occurs. Its foliage is nuch finer than that of the common Furze, nd the plant altogether is of much smaller roportions, rarely exceeding 18 inches in eight, and in many instances forming compact little tufts not 1 foot in height, and studded with bloom. During the dull months f the year it presents a very cheerful appearance. It might be usefully employed in the wild garden, or in the half-dressed portions of he pleasure grounds. It would also be an excellent subject for covering sloping banks, or or planting in poor, stony, or sandy soil, where the generality of flowering plants would refuse to thrive. In a mild season it will continue gay throughout the winter, but in a general way it is most effective during the late autumn, early winter, and early spring months. W. B. C.

The remarkable seed-pod of Martynia proboscidea

THE accompanying illustration is of a seed-pod which one of our gardeners discovered fixed in the fibre of a Potato sack. It is obviously a good instance of Nature's provision for dissemination of the seed by woolly or hairy-coated animals. I sent the pod to the Curator of Kew Gardens and he very kindly replied as follows:—

"The seed-pod received from you this morning is that of the plant native of North America called Martynia proboscidea. It is occasionally grown in English gardens, either in a cool greenhouse or in milder districts out of doors. Its singular formation is, as you suggest, Nature's provision for disseminating the seed, the hooks of the pod attaching themselves to wool or hair of wild animals."

C. MARSH BEADNELL
(Surgeon Rear-Admiral, R.N.).

Chatham.

Seed pod of Martynia proboscidea

Rose Aspirant Marcel Rouyer

I cannot remember reading in your journal an appreciation of Rose Aspirant Marcel Rouyer, which, in my opinion, is really a grand Rose of its colour—deep apricot, tinged salmon. And I should imagine this variety has not received its just dues, and is not nearly as well known as it might be. A great fault with the majority of Roses is their weak flower stem. Los Angeles, beautiful as it is and a firm favourite, may be cited as a case in point. Aspirant M. Rouyer has a flower stem as rigid as Ophelia's, its shape a model of perfection, and although not so free as some, nearly every bloom comes so perfect that one passes over this fault. It is admirable for cut flowers and sweetly perfumed, a moderate grower having clean and healthy foliage.

The name implies a foreign origin, and I think, possibly, this may, to a certain extent, account for its being so little known or grown, as British raisers so seldom fail to boost their own productions, and many (myself included) have been enticed by the garnished fare of a catalogue.

I can also heartily endorse all that your correspondent, J. D. Pearson (GARDENING ILLUSTRATED, p. 770), has written in praise of Etoile d'Holland, and, with him, I place this Rose highly among crimsons. It has certainly never been overpraised as has been stated. R. A. GILBERT.

Amberley, Glos.

Erica carnea

This delightful little species commenced to flower about the second week of October and is now very charming on light, sandy soil. Where it is growing on cold, clayey ground scarcely a flower is open.

The Seckle Pear

Those who grow Pears for dessert should not omit this from their list, for it is a really beautiful fruit, rich in flavour and with a peculiar musky taste; but it does not produce large fruits, and size of late years has overcome all other good qualities. I am well aware that size deserves consideration, but those who grow their own fruit ought to make the edible qualities of it one of the first considerations, and one really does not require all large kinds of Pears, or of any other kind of fruit, as it is certainly preferable to have some rather below middle size than have to cut them for juvenile parties and other purposes where very large fruit would be out of place. This beautiful Pear bears well as a bush or pyramid and never fails to ripen well. It is in season during November. G.

Hants.

Eritrichium nanum

Your interesting little note (*ante* p. 790) on this most exquisite but capricious little alpine brings to my memory my first personal acquaintance with its beauty. It is many years ago, in the high Alps of Valais, when suddenly a friend and I were arrested—in an onward race after a rare insect—and brought to a standstill by a large cushion of it in full flower just in perfection, and a first experience of its loveliness such as that lasts through life. Since then I have rarely come across it till the year before last, when I was plant-hunting as well as following my other hobby. This was on Belvedere and its neighbouring mountain in the Tyrol, and I was then well able to appreciate Farrer's ecstatic description of his first finding it in that locality. In this country, as you say, it is very uncertain; some people are able to keep it going, but others fail time after time. I understand they have great difficulty with it at Kew. It seems absolutely necessary to keep it covered from possible drips, as you say, but yet to let it have air during the winter and early spring; but so beautiful a plant is worth any trouble that it may cost to try and get it to live with us. G. T. B.-B.

Some Apples worth planting

At planting time, when contemplating a selection of new trees, thoughts naturally turn first to those sorts most appreciated for dessert in their respective seasons, and also in succession those most useful in the kitchen, combining, where possible, clean, healthy growth and productiveness. There are other sorts, however, not so generally known that might always have a place allotted them if space permits; not perhaps first-class, but with many good qualities. Allington Pippin is one of my favourites, a very palatable Apple, a kindly grower, and very productive in the many different ways one may be likely to grow it, suitable, that is, alike for the orchard and the small garden. Lady Henniker is another favourite. Classed generally among the cooking Apples, it is not to be despised for dessert, albeit somewhat large for that purpose; a finely-fleshed Apple, juicy, with a slight perfume that is agreeable. Like the Allington it is, from its amenability to different stocks and its productiveness, useful both in the orchard and small garden. A Suffolk-raised Apple of comparatively recent date. The above remarks would also nearly apply to another very useful Apple, Annie Elizabeth. It is not quite up to the quality of Lady Henniker, but a decidedly palatable fruit at its best, a large and heavy fruit, a good cropper, and keeping sound with almost the latest. E. BURRELL.

649564

Gladioli Notes

A FEATURE of the "Canadian Horticulturist is "Our Gladiolus Column," and in a number which reached us recently is the following:—

"Our short but pleasant summer having come to an end, we look back on our success or failure with the new varieties in a kind of daze. They came and went so quickly one had to keep a notebook handy in order to make a record of how nearly up to the eager expectations came Henry Ford, J. T. Pirie, Phipp, Veilchenblau, Imperator, Triumph, the wonders, the glories, the high-priced, and low-priced—a multitude of brown-skinned treasures to which we looked for fairly good returns for our investment. What a revelation some of them were, and what a disappointment were some of the others!

"The new varieties that pleased us we elevate to a permanent place in the growing collection, and to the ones with the attractive names, glowing descriptions, and mediocre performance we are kind enough to extend the benefit of the doubt as to their having done their best this year, and an opportunity to be retained on the trial list for another year. Short and sweet, and abundantly interesting, the 1924 blooming season was, we hope, thoroughly enjoyed by every Gladiolus enthusiast. Perhaps to some the tail end of the season was a surprise, so suddenly did it end. The Aster-beetle and grasshoppers had left their natural feeding ground and swarmed to the Gladiolus buds and flowers, bringing them to a premature and disastrous finish.

"And now comes the digging, the real work of the year, the operation in Gladiolus culture that is dreaded most of anything. We all want to know the easiest and quickest way to get the bulbs and bulblets from the ground to the winter storage. Forking them loose, then removing the tops close to the bulb, and picking the loosened bulblets by hand seem rather slow if the quantity to be dug is large. Last fall I used a screen about 5 feet long and 3 feet wide, of a six to the inch mesh. Earth and all were shovelled into this, making a pretty good job. Much time was saved and loss of bulblets avoided. The screen also retained the small stones, getting them out of the land, which was a matter for congratulation. As the nights grow colder the stock advice to let the bulbs dry off in the open for a few days becomes dangerous to follow unless sufficient covering to protect from frost is provided."

J. H. CALLENDER.

NOTE.—During the first part of October in England this year there were many days when the open-air curing was possible, and no doubt taken advantage of, more or less, by growers. But the few remaining bulbs will have to undergo indoor treatment before finally putting away for the winter. The great thing is to free the bulbs from soil, and in a couple of days trim the roots off, transfer to clean trays, and place in position where a free circulation of air is possible. The final cleaning, sorting, etc., will be found to proceed with ease and quickness.

E. D.

The rock garden at Weald Cottage, Limpsfield Common, where Gentians thrive

Large v. small Gladiolus Bulbs

(Reprinted from the "Flower Grower")

One of the first articles the Editor remembers having read on the subject of Gladiolus-growing was with reference to the size of the bulbs. A man with much experience was relating how customers in a store would pick out the big bulbs, thinking they were getting more for their money, and he pointed out that this was a mistake, and that the small or medium size bulbs give better results.

This question comes up frequently in the experience of Gladiolus growers. The new beginner thinks when he gets big fat bulbs he is getting a prize. The man with more experience knows that the small or medium size bulbs will give best results per dollar of expenditure. While it is true that some varieties require a comparatively large bulb to produce a good flower-spike, on the other hand, there are varieties that will produce a good flower-spike from any sort of a bulb, and bulbs ½ inch to ¾ inch in diameter will produce good flower-spikes. The well-known varieties Mrs. Dr. Norton and Mrs. Frank Pendleton are examples, both producing excellent spikes from small bulbs. Then there are varieties which never make large bulbs, and these, of course, throw their best flower-spikes from medium-size bulbs.

While it is true that exhibition spikes require large bulbs, if exhibition spikes are wanted it must always be understood that the bulbs must be young. Old bulbs, which are large, are useless for producing exhibition flower-spikes. This brings up the question of what constitutes an old bulb and a young bulb, but we need not go into this now. Sufficient it is to say that a large bulb two years from bulblet will probably give the best results for growing exhibition bloom.

On the other hand, I have seen bulbs which were big and fat and tall which were practically useless for any purpose. Such bulbs have been called "corn-fed" or "overgrown" bulbs.

Therefore, all you new beginners, do not think that a Gladiolus bulb is a very definite or exact thing, but wait until you get some experience before you be sure you know what size bulbs will give you the best results. Do not say that a bulb ½ inch or ¾ inch in diameter will not produce a good flower-spike and that a larger bulb than this will. There is no such dividing line, as above explained, and do not forget that small bulbs, per dollar of cost, will give you better results, on the average, than will the larger size.

Edgings for winter and spring

The practice of edging beds and borders with plants of a permanent character is steadily increasing. In former years much thought, care, and expense were undertaken for a summer display by planting subjects of a half-hardy nature, which were consigned to the rubbish-heap at the end of the season, and though this obtains largely now, there seems to be a disposition to have something "to look green for the winter," and that will bring blossoms and beauty in spring. We have many hardy things that serve us—and serve us well—for this purpose. In the dwarf Campanulas alone we have those which begin to flower in May and remain a source of attraction for weeks and months. Preceding them, Aubrietias bring masses of flaming colours, and the rosy-purple Thyme is equally attractive. One of the commonest cushion-like plants to be met with in many country gardens is Sedum acre, with multitudes of golden-yellow blossoms that in late spring make bright the margins of paths. May, too, brings us those other cushion plants that multiply so rapidly and which are being appreciated for edging, almost as much in some quarters as about a rock garden the Saxifrages. Quite a number of my acquaintances place their faith in Tufted Pansies to afford refreshing green from November to spring, when abundance of blossoms follows. Pathways fringed with whiteness in the early days of spring may be assured wherever Arabis is planted. Another cushion plant compact to a degree is found in the Thrifts, studded with white and rosy-pink flowers. If one desires a plant quick of growth with abundance of miniature white flowers in May, one that will grow in the commonest of soils, then Asperula, the fragrant Woodruff, should be tried. The chief point needed to be watched wherever this is grown is that it should not be allowed too much latitude. One might do worse than edge a border with Pinks, the foliage being neat and attractive throughout winter and spring, and fragrant when the flowers open.

LEAHURST.

An Old Tudor Cottage and Garden in Surrey

The Weald Cottage, Limpsfield Common

THE two illustrations on this page depict the old-world garden and cottage now in possession of Mr. A. G. Weeks, who is a most enthusiastic alpine gardener. In previous issues we have drawn attention to Mr. Weeks's success in the cultivation of Gentians, and his following observations, sent in response to our request, chiefly concern the delightful old cottage which was formerly a farmhouse :—

The Weald Cottage and Garden, Limpsfield Common, Surrey

When I bought the cottage in the autumn of 1918 I was informed by an expert that the old place was early 16th century (Tudor). This, it appears, he found out by a few bricks which framed the original front-door. The beams in many places are possibly a great deal older. They are of any shape, and in many cases give one the impression that at one time they must have been part of an old ship.

As far back as we can trace, it was a farmhouse known as "Gibb's Farm"; quite a fair-sized place, more than double its present state. No doubt it was the centre of a Hop district, as within 150 yards there is an old "oast house," and there is every reason to believe it was part of the farm.

The house more or less remained intact until about 30 years back, when, it appears, one or two people built near-by, and a good portion of the cottage was then cut away to make a lane to enable them to get to their houses.

When I purchased the cottage it then consisted of four rooms and a lean-to, all full of old timber and very picturesque indeed, but without drainage or gas laid on. In the winter of 1918-19 I had the present new wing built on and parts of the interior of the old place reorganised. The timber that was taken out was worked in as much as possible in the new part, water, gas, etc., laid on to make the old cottage as modern as possible in comfort, interfering with the old look and feel of the place as little as possible.

One of the chief features is the "King Beam" in the south bedroom. It is, indeed, very fine, and possibly one of the oldest in the country. I have heard it said that the original cottage is the oldest in Surrey, but I have my doubts about that; it is, possibly, one of the oldest.

My great interest is in the garden. In 1918 I found just a small patch about 70 yards long full of weeds and four of the finest old Apple-trees I have ever seen. The soil is very black and full of humus, the result, I should say, of some centuries of cultivation. Since then I have taken a good bit of meadow in, making, in all, about 1 acre of flower garden. I might mention that its present state is the result of six years of real hard work, and I feel now that I can settle down a little and specialise in one or two things.

Gillenia trifoliata

Where well grown and not starved from shortage of moisture, Gillenias are remarkably pretty and graceful. The better and the most generally procurable from nurseries is Gillenia trifoliata. It charms us alike by the beauty of its foliage and its elegant small flowers, produced in good numbers in summer on plants from 2 feet to 2½ feet high. They are white and are produced in graceful sprays, reminding one a good deal of those of certain of the shrubby Spiræas. Gillenias like a fairly moist, good soil, are quite hardy, and may be increased by division or by seeds, when obtainable. Planting may be done in spring, choosing a partially-shaded position if the soil is light and dry, and a sunnier one if the ground is heavier and more fertile. G. stipulacea differs little in general appearance.

S. ARNOTT.

Forget-me-nots

Clustering round May-flowering Tulip quarters in my garden there are patches of Forget-me-nots that on some sunny morning in spring will reveal their royal colour and make a fitting carpet to Pride of Haarlem, Mr. Farncombe Sanders, Mrs. Potter Palmer, Inglescombe Yellow, and all the rest of Tulip treasures. Seed was sown last June and the plants pricked out in a bed a few weeks afterwards until they could be got into their final quarters in October. The packet of seed cost only a trifle, but from it sprang a number of plants, and the winter does not take its toll of many, owing to their hardy nature. Forget-me-nots are very charming, too, about crevices in the rock garden, and make a fine display at little cost.

TOWNSMAN.

Muehlenbeckia nana

Of the few Muehlenbeckias in cultivation M. nana is the best one for the small rock garden. M. complexa is only suitable for a wall or for hanging down very large rock work, but M. nana is suitable for the small rock garden and is quite attractive with its neat, prettily-tinted leaves and its compact habit. It is only a few inches high. ESS.

TREES AND SHRUBS

Hamamelis mollis

IT is strange that this Witch Hazel, undoubtedly the best of the family, should have remained in the one-time famous nursery at Coombe Wood for 20 years, being regarded as merely a superior form of H. japonica. It was first discovered and introduced in 1879 by Maries near the Yantse-Kiang river, being afterwards found by Henry and Wilson much further west. It is, without a doubt, the finest of present-day Witch Hazels, both as regards flower and foliage, and, owing to its early blooming, it deserves wide cultivation. It is easily increased by grafting on the Virginian Witch Hazel. In mild seasons flowering shoots may be gathered at the New Year.

Hardy flowers of the New Year
Hamamelis mollis, the best of the Witch Hazels

Elæagnus macrophylla

This handsome Oleaster is now (December) blooming in the wildest profusion, the delicious scent of the clusters of flowers appearing from the leaf-axils all along the shoots reminding one of Daphne Cneorum or Viburnum Carlesi. These, about ½ inch long and wide, and coated with silvery scales, resemble a Fuchsia in shape, nodding; the four segments are triangular, fruits red and scaly. This is considered the handsomest of this useful genus—at least of those which are evergreen—and it is certainly very beautiful throughout the year, especially during stormy weather, when the branches are tossed to and fro, and the underside of the leaves, with their conspicuous metallic lustre, become fully exposed. This shrub has for a long time been a great favourite here, and is grown in quantity, but never before have I seen the bushes laden with bloom as they are at the present time. Three years ago these plants were transferred from a peaty, made-up soil, where they used to flower sparsely, to their present site, which is very poor and clay-like in character. This has checked the exuberant growth so noticeable in their former position. Whether this is responsible for this great burst of bloom I cannot say. The bushes, which were reduced to half their size before transplanting, are now from 5 feet to 6 feet in height. It occurred to me that such a bushy shrub would make a distinct and extremely beautiful hedge. E. MARKHAM.

The horizontal Rockspray (Cotoneaster horizontalis)

The leaves having disappeared from most of our summer leafing trees and shrubs attention is drawn to the beauty of the above and a few others of its accommodating genus, which are now assuming gorgeous colouring. In this respect the horizontal Rockspray is perhaps the most striking. Its little leaves, thickly set upon the great spreading frond-like branches, are at this date—December 4th—of a deep glowing red, which increases in brightness with each passing day. When massed to fall over sloping ground, or planted in broad lines along the sides of carriage drives, their effect at this season, and again when breaking into leaf in spring, is noteworthy and always admired. Care, however, should be taken when planting this shrub to set the plants well back from the edges, as although horizontal in character, branches will spread out to quite large distances, and pruning back, however carefully done, rarely adds to their appearance.

Laurustinus hedges

One of the prettiest features of gardens on the south coast at this time of year is the hedges by which they are surrounded. They frequently consist of the Laurustinus, that shows dense masses of white flowers just as other blooms are getting scarce. The hedges are formed with plants put in about 1½ feet apart, and being kept trimmed into shape from the first, they soon form effective fences. The growth made is short and stubby, and consequently the flower-heads are innumerable. There is a great difference in the dates on which such hedges flower in different seasons. When cold weather sets in early and continues late, the blooms do not fully expand until spring. The Laurustinus is also freely used in mixed hedges consisting of such plants as Escallonias, hardy Fuchsias, Euonymus, and old-fashioned Cabbage Roses, all mingled together with good effect. By cutting them with a knife instead of with shears such plants as these answer all the purposes of a hedge or screen, and add considerably to our store of flowering plants, as, where gardens are limited, even their hedges may be made effective. J.

Myrtus communis var. tarentina

This, a very compact and shapely shrub, appears to be hardier here (Sussex) than the larger-leaved and better-known M. communis, which has been almost killed on several occasions when planted in the open. For those with gardens of limited size this is a charming evergreen, and one worth a choice position, as apart from its white flowers, which are borne in profusion at times, it occasionally produces a crop of attractive white fruits. E. M.

Osmanthus armatus

Admirers of shrubs with handsome leaves must not overlook this Osmanthus, because it has several conspicuous merits which entitle it to inclusion in the garden. The deep-green leaves are of leathery texture, formidably armed, and frequently 6 inches in length. In addition the fragrant flowers are carried in clusters in the axils of the leaves in the autumn, when flowering shrubs are none too abundant in our gardens.

With a Notebook on Alpine Foothills

IF the season was nearly a month late at Easter time I found myself prowling about the mountain slopes which rise above the Italian Lakes. If the higher Alpines had hardly begun to cover the footprints of the retreating snows, there were many compensations. For it is always a delight to run across even the most familiar of rock plants growing in their native sod. There is always something to learn, and to unlearn, regarding the ways and means adopted by Nature in the adornment of woodland, waterside, and cliff. Hepatica triloba, not the easiest of plants with us, was here, for example, not only covering the moist and shady woodland bottoms with a haze of blue, but it was evidently no less happy growing in chinks of limestone rocks which must get exceedingly hot and dry before midsummer day. Also in similar formation was Erica carnea, and beneath the hillside scrub, often largely composed of Laburnum, that cheerful little woodlander, Polygala Chamæbuxus, abounded. Most variable of shrublets, the variety atropurpurea of this Milkwort displayed an extraordinary number of forms, even over a comparatively small area, varying from palest rose to an intense crimson, and carrying leaves, often beautifully bronzed, which might be narrow and pointed or broad and blunt. Daphne Cneorum was cresting some of the grey rocks of Mt. Salvatore with rosy cushions, and one observed how this choice shrub, the despair of so many, seemed to enjoy having practically the whole of its branches, save the leafy and flowering extremities, swaddled-up with a mulch of dead leaves and herbage. Vinca minor, in a dozen different forms, was everywhere abundant, rivalling the Hepatica in the profusion of its gentle blue, and in some places this useful trailer was seen flourishing in the densest shade of Spruce and other Conifers—a "tip" to be noted by every woodland gardener. Yet another familiar blue was that of Pulmonaria azurea, clumps of which broke up the yellow of countless Primroses and Cowslips with admirable effect. A somewhat similar appeal was made by the pale gold of Hippocrepis comosa, the pretty Horse-shoe Vetch, and the delicate tint of a particularly large and tufty form of Viola canina. The latter was equally entrancing where it swept in a drift of smoke-blue under-colour beneath stretches of thinly distributed Coronilla Emerus, whose elegant branches were laden with their citron-yellow blossoms.

On the ledges of many of the lakeside rocks Helianthemum vulgare was opening its yellow blooms. Gean and Snowy Mespilus thrust long arms of snowy whiteness over the bottle-green waters, and here also the grey cliffs held many a bosky clump of Bay which, in fulness of flower and fragrance, and especially when in fruit, seemed very far removed from the specimens usually seen in our gardens. Though I have it naturalised and spreading freely by seed in my own woodland garden, it was none the less gladdening to come across quantities of that elfin beauty, the pink Wood Sorrel, growing in colonies among the white. Several Muscaris, including M. cœruleum, were noted along grassy banks, their somewhat sombre violet being relieved by the silvery white of Allium neapolitanum (which smelleth not of the Onion breed), and the common Narcissus poeticus of Alpine meadows, which is always somehow a little disappointing.

Viola biflora in the Tourtman Valley, altitude about 5,000 feet

At the summit of Generoso I met Gentiana acaulis—on the lunch table, it having been imported from the lower slopes—and just below the snow which still lay deep over the crown of the mountain, Crocus albiflorus was cheering the still wintry turf with its elegantly-fashioned narrow cups of opalescent white delicately-shaded with purple. Under the leafless Beeches lower down the brown earth was azured by the bright lavender-blue of Scilla bifolia, and here and there a dwarf Solomon's Seal was unfurling its emerald sprays. Quantities of dwarf Brooms sometimes shared with Erica carnea the sunny banks between which the little train passed. These I took to be Genista pilosa and G. radiata, and conspicuous as an undergrowth in the woods were dense columns of Ruscus aculeatus, still bright with large crimson berries. Very prostrate on many a hot earthy slope were some Milkworts, apparently identical with our own native Polygala vulgaris, but differing in the size of the flowers and richness of their colouring. Some of these were of the deepest violet, others a dazzling ruby-crimson, and they had in Potentilla alpestris (aurea or verna)—can any living soul tell t'other from which?—a singularly attractive companion bearing galaxies of large, brilliantly golden flowers, rivalled, but not excelled, by those of a good form of Anemone ranunculoides.

It was, as I have suggested, very delightful to ramble among these wildings, so many of which were familiar, to pick up a hint here and a warning there from headquarters. Indeed, it was sometimes almost a positive relief to turn from the opulent splendour of the sub-tropical gardens, with their sumptuous Magnolias, fragrant Mimosas, and the abounding Wistarias, which poured their cascades of colour over every terrace wall, just to see how Nature kept order in her own house, and, incidentally, to ponder over the ultimate result of that struggle which has in some places already set in between the hordes of youthful alien plants which are swarming into her preserves. Vittadenia triloba (Erigeron mucronatus), to give but one example, had taken complete possession of many a sunny wall and adorned every chink and ledge of some waterside rocks with legions of its pink and white Daisies to the total exclusion of the natives.

A. T. JOHNSON.

The two-flowered Violet (Viola biflora)

VIEWED in comparison with the many garden Violas and Pansies, the little alpine Viola biflora seems insignificant; but it, also, has its merits, modest though they are compared with those of its sister flowers. Its mission is not to render the border brilliant, or to vie with other plants in bedding arrangements. It is rather to brighten up some crevices in the rocks or to make a little gleam of gold in some shaded and quiet nook of the rock garden. In such places it comes as a welcome sight to see a few plants thriving happily between the stones and lighting up a corner at the base of some larger rocks, or flowering contentedly at the foot of a shady wall. A little gem, indeed, is this fairy Violet, and one which, though lacking in the divine gift of fragrance, is of priceless beauty. It is a plant of slender growth, growing some 6 inches high, and affording us several little rounded leaves and small stalks, each carrying well aloft two bright little yellow blossoms of the shape so familiar to us in the Violet in all its classes.

CULTIVATION.—Given a shaded or half-shaded place this Violet is not difficult to grow, but it is at times less obliging in its disposition than at others. Thus, we find that it will sometimes, almost unaccountably, die out. Probably some of our winters are too severe for it in certain districts, where, unprotected by snow, it has to run the gauntlet of all the changeful weather of our winters. Yet it will usually propagate itself from self-sown seeds, and, once well established, will appear again and again from these, even if the older plants are killed in winter. In the south and in dry districts it stands quite well. It must not be concluded, however, that it must not have moisture, and water at the root and overhead are quite different things. It likes a cool and moist place, and its bright little flowers seem brighter still when peering out from some dull, damp, and shady corner.

A. G.

THE FLOWER GARDEN

Lavatera Olbia

FOR rapidity of growth, combined with freedom of flowering over a long period, I know of no plant to equal Lavatera Olbia and the improved form of it, L. O. rosea. Its flowering season is from early summer to late autumn. Young plants some 12 inches high put out in April grow rapidly when once they have become established. Lateral branches are quickly thrown out, and within two months of the time of planting the plant has commenced to bloom. Growth continues apace and fresh flowers are evolved in the greatest profusion. At the end of the season the plant has developed into a bush some 5 feet in height and as much through. Except in exposed positions no stake or support is needed. It seems to grow quite well in any sort of soil. Early in the summer I saw several hundred plants of Lavatera Olbia rosea growing in a very gravelly medium. The plants were smothered with blossom. A large batch grown in heavy soil was also in splendid condition.

HOWARD H. CRANE.

Lavatera Olbia grouped by a woodland walk

The Bearded Hairbell (Campanula barbata)

Although the proper flowering season of the above is from May to July, it is not at all unusual for a few spikes of bloom to make their appearance during autumn, when they are welcome. It is found wild in the alpine meadows of France, Switzerland, and Northern Italy, and is easily recognised by the long beard at the mouth of its delightful pale blue, drooping flowers, each about 1¼ inches long. Several flowers are borne on stems a foot or more in height, according to soil and position. This plant flourishes in a well-drained soil exposed to sun and wind much better than when coddled in some half-shaded position on the rock garden, where we have often met with it, partly enveloped with coarser-growing plants. E. M.

Phlomis Russelliana

Phlomis Russelliana is an old garden plant. It ought to be taken up every two years at least and divided, scrapping the inner portions, and replanted. It generally attracts notice, not because of its beauty, but on account of its singular appearance compared with other flowers of the summer and autumn. It has large, rough leaves and erect stems, the upper part of which bears numerous whorls of yellow flowers of labiate form. It grows about 3 feet high in good soil. P. Russelliana is more adapted for the wild garden than the border, and big masses in the former are very effective.

S. ARNOTT.

Romneya trichocalyx

Those who find they cannot successfully cultivate the noble Romneya Coulteri, yet who desire to see this grand, though small, genus of Californian plants represented in their gardens, should secure Romneya trichocalyx, which has now been in our gardens sufficiently long to have proved its suitability for our climatic conditions. It is notorious that R. Coulteri, however carefully tended, does not always respond to cultivation, and there are many who must content themselves with R. trichocalyx, which, although less impressive, is lovely and appears to be thoroughly hardy. Its main fault is that it is inclined to invade the territories of adjacent plants by sending out runners to a considerable distance. These, however, are not too numerous to give much trouble, and we may well condone this failing in consideration of the beauty of the Romneya. It grows to a less height than R. Coulteri, being generally from 2 feet to 3 feet high. The foliage is of a beautiful glaucous hue and it bears in considerable numbers for some time large, handsome, pure white flowers. It forms a distinctly valuable plant for a small bed and is equally useful in the border. While it evidently likes a sunny place it is not too fastidious, and does well in partial shade. S. ARNOTT.

Hemerocallis flava

I wonder why this truly handsome Day Lily has not been brought to notice as a plant deserving of naturalisation. It is without doubt one of the handsomest hardy herbaceous plants known. Its large, clear yellow trumpets, something in the way of Lilium longiflorum, render it very conspicuous, and it is deliciously fragrant. It is very hardy, growing anywhere, but it is really an aquatic, growing to perfection in shallow water, and where introduced it may easily be imagined what effect masses of it would have on the margins of ditches, ponds, and such places; even its copious drooping foliage is handsome. T. W.

1926 Classification of Sweet Peas

The Floral Committee presents the following as an up-to-date selection of varieties placed in alphabetical order. The Committee wishes to draw the attention of members to the List of Too-much-alike Varieties before selections are made, because in some colour sections the varieties recommended may be so nearly alike that they cannot be exhibited together in the same competitive exhibit at the Society's exhibitions.

* The "asterisk" indicates the variety which the Floral Committee considers the best in each of the Colour Classes. † A "dagger" indicates a variety of special value for cultivation under glass.

BICOLOR (Light).
*Bonfire
Dora (A.M., 1915).
Sparkler.

BICOLOR (Dark).
Adelaide.
*†Magic.
Marks Tey.

BLUE.
*Bluebird.
Mrs. Tom Jones (A.M.).

BLUE (Light).
*Colne Valley (A.M.).
Margaret Fife (A.M., 1915).

BLUE (Dark).
*Commander Godsall.
Jack Cornwell, V.C.

BLUSH (Pink).
Dainty Maid.
Felicity.
*†Valentine.

BLUSH (Lilac).
*Elegance.

CARMINE.
Mascotts Ingman.
Renown.

CERISE (Pale).
*Lucifer.
Rosy Morn.

CERISE (Deep).
Brilliant.
*Charming.
†Coralline.

CERISE (Scarlet).
*†Grenadier.
Royal Scot.
Wonderful.

CREAM.
Daffodil.
*†Matchless.

CREAM PINK (Pale).
*Fair Lady.
Mary Pickford (A.M., 1924).
Mrs. Arnold Hitchcock.

CREAM PINK (Deep).
La France
Miss California (A.M., 1924).
*†Picture (A.M.).

CRIMSON.
*Charity (A.M.).
Crimson Glow.
Marjorie Ryder.

FANCY.
*†Angèle.
Prince George.
Skylight.

FLUSHED.
Conquest.
*†Faerie Queen.
Mrs. J. T. Wakefield (A.M.).

IVORY.
*Ivory Picture (A.M., 1924).
Mme. Sarah Grand.

LAVENDER (Rosy).
Austin Frederick Improved.
Diana.
*†R. F. Felton (A.M., 1912, S.M., 1913).

LAVENDER (Pale).
Cynthia.
Lord Lascelles (A.M., 1924).
*†Wembley (F.C.C., G.M., 1924).

LAVENDER (Lilac).
Dorothy.
*†Powerscourt (A.M., 1921).

LILAC.
Dorothy.
*†Mascotts Helio.

MARBLED & WATERED.
*Birdbrook.
May Campbell (A.M., 1911).

MAROON (Red).
Hawlmark Maroon
*Splendour

MAROON (Dark).
Ravenswing.
The Sultan (A.M., 1921).
*Warrior.

MAUVE.
King Mauve.
*†Lady Evelyn.
Shamrock.

ORANGE.
Beacon.
Royal Sovereign.
*†Tangerine Imp.

ORANGE (Deep).
Guinea Gold (A.M., 1924).
Poppy.
*†Wizard.

ORANGE (Pink).
Bunty.
*†Geo. Shawyer (A.M.).
King Alfred.

ORANGE (Scarlet).
Gloriosa (A.M., S.M., 1922).
*†Mammoth (A.M., 1924).
The President.

PICOTEE EDGED (Cream Ground).
Cherub.
*Jean Ireland (F.C.C., 1915).

PICOTEE EDGED (White Ground).
*Annie Ireland.
Elsie Herbert (A.M., 1906).
Youth.

PINK (Pale).
Daisybud (A. M.)
*†Supreme.

PINK (Deep).
*†Hawlmark Salmon-Pink.
Hebe.

PURPLE.
Grandeur.
Le Mahdi.
*Purple Perfection.

ROSE.
Empire.
Rosabelle.
*Sunset (Bolton's) (A.M., 1921).

ROSE (Old Rose).
Wild Rose.

SALMON (Orange).
*†Fordhook Orange.
Sunset (Stevenson's).

SCARLET.
*†Hawlmark Scarlet.
Mascotts Scarlet.

WHITE.
*†Edna May Imp.
Joan Ryder.
Mascotts White.

WHITE (Tinted).
Constance Hinton.

TOO-MUCH-ALIKE VARIETIES.

The following varieties have been grouped as too-much-alike. "Not more than one of the grouped varieties shall be shown on the same competitive stand at any exhibition of

the National Sweet Pea Society unless otherwise stated." The names are placed in alphabetical order.

The General Committee of the N.S.P.S. has had the list of Too-much-alike Varieties drawn up by the Floral Committee for the guidance and convenience of exhibitors, but it must be clearly understood that the varieties grouped together are not necessarily synonymous, or of equal merit.

BLUE (Light).
Bluebird.
Fordhook Blue.
Mrs. T. Jones.
Sapphire.

BLUE (Dark).
Commander Godsall.
Jack Cornwell, V.C.

BLUSH.
Dainty Maid.
Felicity.
Valentine.

CARMINE.
Mascotte Ingman.
Renown.

CERISE (Pale).
Doris.
Glory.
Hawlmark Cerise.
Hope.
Lucifer.
Rosy Morn.

CERISE (Deep).
Brilliant.
Charming.
Coralline.
Royal Salute.

CERISE (Scarlet).
Alex. Malcolm.
Grenadier.
Pimpernel.
Royal Scot.
2LO.
Wonderful.

CREAM.
Champagne.
Daffodil.
Majestic Cream.
Matchless

CREAM-PINK (Pale).
Bridesmaid.
Cecily.
Fair Lady.
Mrs. A. Hitchcock.
Radiance.
Ringdove.
Sunshine.

CREAM-PINK (Deep).
Edith Cavell.
Hawlmark Gladys.
La France.
Picture.

CRIMSON.
Charity.
Crimson Glow.
Crimson King.
Field-Marshal.
Marjorie Ryder.
Sunproof Crimson.

FLUSHED (White Ground).
Advance.
Conquest.
Mrs. C. W. J. Unwin.
Mrs. H. Richards.

FLUSHED (Cream Ground).
Faerie Queen.
Imp. Faerie Queen.

IVORY.
Ivory Picture.
Mme. Sarah Grand.

LAVENDER.
Austin Frederick Improved.
Diana.
Orchid.
R. F. Felton.
Gladys.
Powerscourt.

LAVENDER (Pale).
Cynthia.
Hawlmark Lavender.
Lavender (Unwin's).
Blue Butterfly.
Wembley.

MAROON (Dark).
King Manoel.
Raven's Wing.
Sultan.
Tom Bolton.
Warrior.

MAROON (Red).
Hawlmark Maroon.
Splendour.

MAUVE (Dark).
King Mauve.
Lady Eveline.
Mauve Beauty.
New Marquis.
Pamela.
Shamrock.

ORANGE (Pink).
Bunty.
Geo. Shawyer.
King Alfred.

ORANGE (Scarlet).
Gloriosa.
Sensation.
The President.

ORANGE (Deep).
Poppy.
Wizard.

PICOTEE EDGED (White Ground).
Annie Ireland.
Youth.

PINK (Pale).
Daisybud.
Edith.
Hebe.
Hercules.

PINK (Deep).
Hawlmark Pink.
Hawlmark Salmon Pink.
Pink (Unwin's).
Pink Perfection.

PURPLE.
Mascotte Purple.
Purple Perfection.
Royal Purple.

SCARLET.
Hawlmark Scarlet.
Mascotte Scarlet.

ROSE.
Kenneth.
Private Jack Smellie.
Rosabelle.
Sunset (Bolton's).
Verdun.

WHITE.
Edna May Improved.
Joan Ryder.
Mascotte White.
Moneymaker.
Nora Unwin.
White Perfection.

Parks and gardens of Paris and Brussels

CAPT. B. H. MACLAREN, Superintendent of the Public Parks and Gardens for the County Borough of Brighton, has prepared in book form a very interesting report of a visit to the public parks and gardens in Paris and Brussels. He describes in a very concise and practical manner the general features and peculiarities of the chief parks and gardens of these two capitals, which he had the opportunity to inspect recently. In his concluding remarks Capt. MacLaren refers to the courage and foresight of the authorities of these two beautiful cities, who are to be congratulated on having acquired so large an area for parks, gardens, boulevards, and forests, thus not only making their approaches to the cities inviting, but also attractive, and so inducing the visitors to prolong their stay. The parks of these capitals are easily accessible to the people in which they are located, and generally approached by avenues—as examples, the Avenue of the Champs Elysées, in Paris, leading to the Bois de Boulogne, and the Avenue Louise, in Brussels, which leads to the Bois de la Cambre. There is, he points out, little doubt that the landscape gardeners, Le Notre, Keelig, and others, had the entire control in the designing of parks and gardens and the beautification of the cities, whether natural or architectural. At Versailles Nature and art are combined in making an additional attraction to the locality.

The distinguishing features of the fine parks and gardens of Paris and Brussels are the broad expanses of green lawns visible between the groves of trees, shady promenades and handsome avenues with noble vistas, the grand lakes and waterways, the natural grouping of trees and shrubs, the beautiful boulevards, social centres with music and attractive restaurants, terminating in a fringe of forests. Still more interesting are the harmony of the surrounding property and the absence of mean structures.

Capt. MacLaren was obviously impressed with the small number of park-keepers required for the purpose of police duty, for thousands of visitors frequent these Continental parks, but they are generally orderly, and, like the inhabitants, help in the protection of the gardens and parks. H. C.

Catananche cœrulea

THE large Daisy order, which includes so many yellow-flowered garden plants, has very few of blue or bluish colouring. The annual Cornflower (Centaurea Cyanus), a native plant, stands out conspicuously with its pure blue bloom, and the perennial C. montana of the Alps is not far behind, but these are the only hardy plants of the order that are commonly seen in gardens and which can be truly called blue. Catananche is by no means a pure blue, though it is often so described in seed lists. The colour is a bluish-purple, rather low in tone but of a very delightful quality. It is not only good in the garden, where from the end of June onwards it produces a great quantity of bloom on stems nearly 2 feet high, but it is one of the most valuable flowers for cutting; the stalks can be cut of a good length and it lasts long in winter. When it is to be used for house decoration it is a good plan to cut it the day before it is wanted, because it is difficult to tell the blooms that are coming on from those that are going over. But stood in water overnight they can easily be sorted out the next morning. The plant is a native of Southern Europe, and does well in rather dry places. It is commonly grown as an annual, but it is a perennial and may very well be let stand for two or three years, though a young stock should be grown from seed to follow. It has the old English name of Cupidone. G. J.

Cupidone (Catananche cœrulea)
One of the most valuable flowers for cutting

Pruning Vines

REPLY TO "VINE."

VERY simple certainly does the pruning of Vines appear, and so it is in one sense, although in many instances it is very imperfectly performed. During the next few weeks thousands of Vines will be ready for pruning; in fact, except the latest ones which have Grapes hanging upon them, the majority will be pruned during the latter part of the present month or the commencement of the next. There appears to be a difference of opinion as to the time for pruning Vines, some people thinking that it should be deferred until the sap has had time to become dormant. This, I think, is a very erroneous doctrine, as the sap will have finished its allotted part by the time the leaves have fallen, or, in fact, as soon as their colour has changed. This being the case, the earlier the Vines are pruned as soon as the leaves have fallen the better, and I would not wait until they were all down, as a few here and there cannot make much difference.

In the case of badly ripened Vines the case is different, as very often a few leaves at the end of the laterals would hold on for weeks after those from the basal buds or lower part have dropped. Vines again which are pruned directly the leaves have fallen heal more quickly than those left later. Except the latest Vines which have Grapes hanging upon them until the turn of the year, when they are cut and bottled, I rarely have occasion to apply styptic or painter's knotting, which is quite as efficacious and much cheaper. I always take the precaution to dress the wounds of these late pruned Vines, well rubbing the styptic in with a cork or a small hard brush. Although some people maintain that bleeding does not injure Vines, I hold a contrary opinion, and look upon it as so much vital force wasted. Many gardeners like to see as clean and straight rods as possible, but it is of no use to sacrifice utility for the sake of appearance, and rigid precision in this respect may be carried too far with some varieties, such as Golden Champion (a variety now seldom seen), Duke of Buccleuch, Barbarossa, Buckland Sweetwater, Gros Maroc, and Alnwick Seedling. To prune the Black Hamburgh under any other system than the short spur would result in loose, straggling bunches. To a certain extent this applies to the Muscat of Alexandria, the berries of which do not set so freely. With such varieties as Black Hamburgh, Alicante, Lady Downe's, Foster's Seedling, or even Mrs. Pince, although with some growers to get size into the bunch of the latter variety the long-spur system is adopted, the cutting back to one eye produces much the best shaped and compactest bunches, the finish also being better in every way. Pruning to the best eye is adopted by some people, and I must say with success, but this need only be practised with old rods, and which are to be renewed, as obviously the spurs would quickly get to an inordinate length by pruning to three buds or more annually. I have seen Vines with old rods produce most miserable bunches by pruning back to one eye, but after pruning to the third or fourth bud the size of bunch and also finish were much improved, and no doubt many Vines would bear far better if this system were adopted.

The old rods as they become worn out through the old spurs being much gnarled will require renewal. A change will mend matters considerably, but instead of running up a young rod from the lowermost spur the best results are secured by cutting down the rod to within a foot or 18 inches of the soil, and leading up one or more young shoots as they break in the spring, and selecting the strongest. In this manner a clean and straight rod is secured.

This renovating may range over one or two years, or more as the case may be, so as not to interrupt the fruit supply. There can be no doubt that in many instances the rods are much too close to remain in good condition for any length of time or even to produce satisfactory Grapes, 3 feet 6 inches between the rods being none too far apart; indeed, another 6 inches may be left with advantage. The above being the case and where the rods are close together every alternate Vine may be safely cut out, thus allowing the young rods to come up strongly. In years gone by what is known as the long-rod system used to be practised, but it now appears to have gone out of date. This was merely having, as it were, a double set of Vines in the house, one lot being cut down one year and run up to be fruited the next, treating the alternate Vines similarly the following season. In this manner each Vine would be called upon to bear fruit every second season. Loose straggling bunches generally resulted, excepting in the case of any that this system suited.

Y.

The Peach and Morello Cherry

As a rule the latter is the first to receive attention as regards pruning and training, as such trees generally occupy northern positions and are best dealt with before the weather gets wintry. The Peach is usually the last to be dealt with. Some of the varieties retain their foliage until well into November unless a stiff frost brings them down, but there is no reason for deferring the work until February, as is sometimes done. If the wood is not well ripened by mid-October very few fruit buds will be the order on such wood. In a great many cases the wood is found trained in much too thickly, leaving but little space for next year's shoots to be fastened in until the season's fruiting wood has been cut out, which is an error of much importance, as such shoots growing at will away from the wall cannot be trained in at this date with much satisfaction to the worker if he has an eye for a perfectly trained specimen. These early summer growths need *heeling* in when some 3 inches to 4 inches long to the position they are to take throughout the season. To allow this to be done ample space must be left for the purpose at the winter's arrangement of the tree, which suggests little short of 4 inches between each fruiting branch for their reception, so that the same may have every opportunity of being well ripened throughout towards the end of summer. Points of any shoots imperfectly ripened should be shortened to a well-matured wood bud or a triple bud, which usually has a wood bud in the centre. In laying in the new wood there is no reason why bare wood of the older branches that go to form the tree should not be covered with leafage during summer if there is one here and there to spare; in fact, it cannot be too strongly advocated, as it improves the appearance of the tree and shields the bark from strong sunheat. In tying or nailing allow ample space for swelling of the wood, putting an extra piece of cloth under any cord that is likely to press unduly on any shoot or branch. Where nails are used let them be well cleansed before using afresh either by scalding or burning over a wood fire. It is wisest to discard old string and shreds. A well-balanced fan-trained tree is a credit to the grower and trainer alike.

J. MAYNE.

Planting Peach and Nectarine trees under glass and outside

Young Peach-trees in a loose medium soon make strong shoots and cast the buds in consequence. It is necessary to lift and re-plant such specimens, otherwise the crops will be poor. I know of one case where the trees did not bear fruit till seven years after planting; then few trees were more productive, and they remained so for more than a generation. Cultivators do not care to wait seven years before reaping a return from the trees, neither do they wish to see extra strong shoots that will not be of any use as fruit-bearers unless annual lifting of the trees is done.

I think much more might be done to bring the trees into a good fruiting condition at the time of planting than is usually the case. In many instances, I know, only frequent lifting will prove of real value in this respect.

Very often the trees are hastily planted and the original soil pressed firmly around the roots, but no further trouble is taken. I do not regard this as sufficient. The compost to be placed next to the roots should be mixed several weeks before it is required. Some good fibrous turves should be cut and stacked on a dry base outdoors. The turves can be easily pulled or chopped in pieces. With the latter some old mortar-rubble should be mixed. In the meantime, the borders in which the trees are to be planted, whether indoors or out, should be carefully examined. If there is a gravel sub-soil with a top loam from 2 feet to 3 feet in depth no further preparation beyond that of firming the sub-soil is necessary. If the sub-soil is clayey then it will be advisable to put in a layer of broken bricks, tiles, etc., and make them firm to form a base on which to build the bed of soil for the roots. This prepared bed need not be more than 20 inches in depth, but it must be well firmed before any trees are planted. The Grass on the turves used need not be quite dead, as all will be buried in due course by the soil covering the roots of the trees, and there will not be any danger of Grass growing through. The space so prepared should measure about 6 feet by 5 feet for each tree and the hole made refilled to within 9 inches or so of the top, this space being duly occupied by the roots and the prepared compost covering them.

When the planting is to be done the soil must be moderately dry, not moist enough to adhere to the tools. Then it can be well firmed as it is worked in round the outspread roots. The trees should be short-jointed without odd branches of extra strong growth, and well set with flower-buds. The probability will be that a number of fruits will swell on each tree, and if there is then any tendency to a too luxuriant growth the fruiting will help to stop it to a certain extent. The soil should be maintained in a medium state of moisture from the date of planting and a forced growth avoided the following spring as much as possible. GEO. GARNER.

Attention to grease banding

Undoubtedly the best remedy against the winter moth is the grease band round the fruit trees. In a great number of cases, however, the best results are not arrived at owing to many, especially amateurs, thinking that once the trees are banded nothing more is required. It should be remembered that when the grease becomes dry, or is washed off, it ceases to be a trap for the female moth crawl-

ing up the stems. Much trouble, I own, may be saved by obtaining the excellent kinds of grease now on the market which do not run or dry so quickly; but nevertheless an eye should be kept on the bands, and directly a fresh application of grease is required to put it on. If only for a day or two there is no obstacle in the way of the insects a good number may get into the branches, and once there they can lay their eggs without fear of disturbance. F. H.

INDOOR PLANTS

Storing Begonia bulbs

IF the bulbs be left in the pots considerable space is required to house them, whereas if shaken out, properly dried, and packed away in boxes of dry sand, a very small corner will be sufficient to hold even large numbers of this popular summer flower. The bulbs used for bedding are treated in the same way, and if a little care be taken in the storing very few will be lost over winter. After shaking free from the soil lay out in shallow boxes in a dry, fairly warm place to mature. It is then advisable to go over the bulbs one by one and remove all the old roots, taking care, of course, not to damage the skin. This saves time in spring. It is certain that the bulbs root more rapidly and strongly if the old roots are rubbed off before potting or boxing takes place. Having cleaned the bulbs, secure a box of convenient size and place a layer of dry sand, or even dry, finely-sifted sandy soil, in the bottom. Next put in a layer of bulbs, hollow-side down, then more sand, and so on until all bulbs are stored, finally placing a good layer of the sand on top. Place the box in a dry, moderately cool corner of a shed or cellar where frost cannot reach it. The bulbs during winter must not have a high temperature or premature growth will occur, which is undesirable. If time can be spared during the winter the bulbs can be examined, and any showing signs of rotting removed. C. BLAIR.

Preston House, Linlithgow.

Zonals for winter blooming

A few years ago, when visiting a Chrysanthemum show in mid-November, I saw a crowd of people round one of the stands, appearing deeply interested in some particular exhibit. At first I thought they were taking stock of the novelties, but it turned out to be a group of Zonal Pelargoniums in pots which one of the members had brought, and which was causing not a little comment as to "how Geraniums could be had so late." There are many who only associate the blooming of Zonals with summer and sunshine, and overlook the fact that, prepared for winter flowering, they may be had in bloom with comparatively little heat. It is well, however, to recognise that it means sacrifice of every flower-bud until the plants are housed in autumn. A start can be made by striking cuttings in spring, and by potting them finally in 5-inch pots in a compost of mellow loam, leaf-mould, and old manure. From the beginning it means the building up of the plants and ripening the wood, for which purpose it will be necessary to stand them out of doors during the summer in a sunny position. When the pots are full of roots liquid manure can be given every week, and by September, when it is time to house them, trusses then showing will soon open in the warmth of the greenhouse, which need not be kept at a higher temperature than 50 degs. It needs to be emphasised that every bud must be pinched off until autumn. One cannot have bold trusses in winter from plants that have used up their energies for summer flowering.

MIDLANDER.

Camellias

LIKE many other plants of former days, Camellias are now under a cloud, and it is but rarely that specimen plants are seen. At one time, in gardens of any pretensions, the Camellias were a feature, and their wax-like blooms were appreciated round about Christmas and the New Year. The decline in popularity of the Camellia is undoubtedly due to the fact that plants of more modern introduction provide flowers which are more serviceable in a cut state, for even the warmest partisan of the Camellia may not deny that its flowers are stiff and, as some say, "artificial" in appearance. But when grown in greenhouse or conservatory I submit that there is, even in these utilitarian days, room for the Camellia. Its dark-green, glossy, and shining foliage is in itself ornamental, and it makes a perfect foil to the blooms, whether these be red, pink, white, or pink and white. To see the Camellia at its best it ought, I think, to be planted out. Plants in pots, when well grown and furnished, are no doubt extremely handsome; but in the course of time these get leggy and become denuded of foliage. When planted out in a prepared border plants increase in stature and in effect year by year, and when such plants reach what may be termed the veteran stage they are worth going a day's journey to see. In a corridor in the houses of these gardens are several pieces in the latter stage. Planted in a narrow border against a wall, all of them are over 8 feet in height, while they cover, linearly, about 30 feet each. At the present time they are studded with buds—there are literally thousands—and it may be conceived that in late January they will be worth seeing. The corridor from which the fruit and plant houses open is practically unheated, and the cool conditions suit the specimens to a nicety. For such a position as that indicated few things are so suitable, and those who have a blank wall in a moderately heated house might very well give a thought to the Camellia. I grant that scale is troublesome, but scale, like other pests, can be eliminated, and it is worth while in the case of Camellias to devote a little extra time to sponging and syringing.

There are, of course, several varieties which are—or which were—well adapted for ordinary growers. The earliest, as a rule, is C. japonica Pomponia, which is erratic in colouring, some of the blooms being pink while others are white. C. alba plena has a full white flower. C. Donckelaari, C. conspicua, and C. Lady Hume's Blush are all good, old-fashioned sorts. C. Marchioness of Exeter has a very full rose-coloured flower, while two very charming semi-double Camellias may be named in Mars and Mercury, both of a rich crimson colour. C. Adelina Patti is a bicolor, a beautiful combination of salmon-pink and white.

A GALLOWAY GARDENER.

Single and semi-double Camellias

SIMPLE flowers appeal to the true lover of Nature more than the formal double varieties, and Camellias are certainly no exception to the rule. Considering the number of years that have elapsed since double Camellias were in fashion, it is remarkable that attention has not been directed to the single and semi-double forms ere this. The lumpy character and formal outline of the double Camellias are no doubt answerable for their being much less grown than was at one time the case. This cannot be urged against the single forms. An additional and pleasing feature in the single Camellias is the prominent cluster of yellow stamens. Among the single-flowered forms we have of typical species C. japonica (here figured, bright red) and C. cuspidata, a small-flowered white form given an Award of Merit when shown a good many years ago by Messrs. Jas. Veitch and Sons. Camellia Sasanqua, that develops its small pink flowers at Christmas, is very pretty, while its white form, which is far from common, is certainly very pleasing. Some very fine single-flowered varieties are now in commerce, including alba simplex, Apollo (red), Jupiter (a handsome form, rosy-red), Mercury (crimson), Minerva (rose), Snowflake (white), and Waltham Glory (blood-red).

Camellia japonica, flowers bright red

A Succession of Peas

IN "Questions and Answers" column of GARDENING ILLUSTRATED dated December 5th, "Sussex," like many others who have to keep up a supply of Peas during the summer and autumn, is anxious to know what varieties and when to sow to obtain the desired results. Having been responsible for the last 20 years for supplying green Peas, practically every day, to large households, the following may be useful to "Sussex" and others. In getting ready the ground for Peas, the chief item is the preparation of the soil. Peas require a deep, moisture-holding soil, which can only be obtained by trenching at least 2 feet deep and mixing some well-decayed manure with the bottom spit. An open site, where the rows can be run from north to south, is the most suitable, as this enables the Peas to obtain full sunshine on either side of the rows. If time is limited and the grower is unable to trench the whole site, isolated trenches may be dug, as in the case of Celery, allowing the required distance between the rows according to the varieties of Peas grown. Thus a Pea that grows 3 feet in height should be allowed 4 feet between the rows, and one that grows 4 feet should be allowed 5 feet. For the first early row of Peas I always rely on a trench in which Celery has been grown. This is usually in fine condition and only requires levelling, drawing the drills 3 inches deep for the first crop, and sowing the Peas fairly thick.

THE KIND TO SOW.—It should be understood that in no case should a Marrowfat Pea be sown before the month of March, so the round seeded ones must be relied upon. The Pilot is one of the best Peas to sow for a first crop, and one that I can strongly recommend both as a hardy grower and also a heavy cropper. The Peas are of splendid flavour. A sowing of this Pea may safely be made at any date after the New Year, when the soil is in a condition for treading on. The Peas sown during January should be ready to gather during the early part of June. About the middle of February another row may be sown to carry on the supply to the end of June. If the soil is in a fairly dry and workable condition about the second week in March a row of Gradus may be safely sown. This is, I think, one of the best early Marrowfats, and can be relied upon for all purposes. The crop from this sowing should be fit for gathering at the end of June and beginning of July. If a row of Daisy is sown the first week in April it will come in after Gradus, and this is a Pea that everyone should grow.

THE MAINCROP.—We come now to the time when "Sussex" is anxious to get an extra supply. That is the end of July. The Pea I am going to recommend for filling this gap is Senator. If readers sow this excellent Pea, that is seldom affected with mildew, no matter what the weather, about April 15th, they will have a crop of delicious Peas from July 20th onwards. For a standard maincrop Pea that is really reliable this is unsurpassed. For a continuation sow Admiral Beatty the last week in April. This Pea continues in bearing a long time, and one that has taken the place of that well-known Pea Alderman. This one from the sowing mentioned is at its best during the early part of August. The second week in May is the time to sow The Gladstone, which will carry one on well into September. This variety seldom fails and I always rely on it.

From this season onwards a first early and quick-growing variety should be chosen, as all depends on the climatic conditions during the month of October whether good results are obtained or no. William the First is a variety that I have had good results from a sowing made the first week in June, but in this case it is generally necessary to soak the drills previous to sowing.

All the varieties mentioned are well known and can be obtained from all leading seedsmen at reasonable prices. I am not against giving trials to most novelties, and always grow some of these each season. I always rely on the ones mentioned and strongly recommend them all for amateurs and professionals. In the foregoing list I have only mentioned one that is of dwarf habit—namely, The Daisy. In some gardens where ground is limited and stakes unavailable the dwarfs have to be grown. I consider American or English Wonder (first early), Laxtonian, possibly the heaviest cropping dwarf (second), with Daisy and Strategem (maincrop), should be given some support. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Sprouting seed Potatoes

(REPLY TO "P. S. P.")

THE sprouting of seed Potatoes is seasonable, inasmuch as the preliminary process of placing the tubers in boxes made for the purpose may best be attended to about this time. Good results may be obtained from Potatoes that have not been put into the boxes until February or March—that is, four or six weeks before planting is due. While spring boxing may be successfully resorted to, it is generally conceded that the better plan is to store the Potatoes in the boxes throughout the winter. Let alone the relative effects of winter or spring boxing upon the subsequent crop, there are other sufficient reasons for giving preference to autumn or winter boxing. In the first place, there is usually more time for the performance of work of this description in the fall than in the spring of the year, while, in the second, there is no way in which the seed Potatoes can be kept more safely, or stored in smaller compass, than in the boxes utilised for the preliminary sprouting of the tubers. A third, and very important, advantage is that the Potatoes can be examined and overhauled at convenience, should that be found necessary, and, moreover, the sprouting can be regulated to a nicety by placing the boxes in a high temperature or a low, and exposing the Potatoes to light and air, or shielding them from the latter, as circumstances may require.

The size of box recommended for general use is, length 24 inches, width 12 inches, and depth 3 inches. The corner pieces are sufficiently strong for the boxes to rest one on the top of the other when piled for storage. The handle-bar is made strong and tenoned into the end pieces, the whole forming a light, handy, yet durable utensil, which, with ordinary care, will last for years. The boxes are not expensive, and each box holds about 20 lbs. of Potatoes. The filling of the boxes involves no particular care or trouble. The boxes are filled until level with the sides, and neither earth nor water is added. When once filled, the boxes may be piled up one on the other to any height that may be found convenient. The sprouts should be about 1½ inches long at the time of planting, and the management of the boxes should be directed with a view to this length of sprout being developed as uniformly as possible. Longer sprouts are apt to get broken off in the planting unless very tenderly handled. As a rule, the sprouts are apt to exceed rather than fall short of the desired length, and the best way to check growth is to expose the boxes to light and air.

Apart from the effect upon the length of the sprout, exposure to light and air for some time before planting is necessary, in order to toughen the sprout and enable it to be handled. A few days' exposure will suffice to make the sprouts quite tough and less liable to break, and this is an important consideration in averting accident in the process of planting. In storing the boxes it is necessary that they should be placed where they are not liable to damage from frost. On the other hand, if they are stored in too warm a temperature, sprouting will be too rapid and vigorous. It is not unusual to pile the boxes on the rafters of stables and cow-sheds, where they are perfectly safe against frost, but may possibly suffer from excessive growth. As a rule, they will do very well in barns or sheds, provided they are protected from cold winds and covered over with straw or sacks when frost is severe and protracted.

It is impossible to say what quantity of seed is required to plant an acre, as the space required between the drills varies from 15 inches to 20 inches for early varieties and 24 inches to 30 inches for the strong-growing varieties. The sets may be planted from 8 inches to 12 inches apart for the early varieties, while for the late and vigorous-growing varieties a distance of from 12 inches to 18 inches must be allowed.

Forcing vegetables

With the new year the cultivator finds forcing more easy. One of the best vegetables from now till April is Asparagus. To purchase roots for a large supply is a costly process, and if these could be grown as readily as Seakale the cultivator would have a great addition to the supply of good things at command. Great strides have been made in Seakale culture of late years not only in private gardens, but the trade now grow this vegetable in such quantities that the crowns may be purchased at so reasonable a rate that there is no need to have poor supplies through the winter. Doubtless many growers have not the convenience of brick pits and hot-water pipes under the roots, but immense quantities are obtained by forcing with manure alone, the roots being placed in sunk beds. I find the Kale grown thus superior in flavour to that forced in Mushroom-houses, in which, if not well supplied with moisture, it is bitter and at times rather tough. I have seen much good material lost by too hard forcing, and in a season like the past growth was later than usual, so that it was not wise to force large quantities too early.

Many growers being unable to purchase large quantities of roots and having no space to grow them, must make the most of the stock at command, but with land to grow the roots for forcing, the culture is so simple that there need be no lack of good material. With the large quantities of glass at command, both Asparagus and Seakale are lifted and placed in these structures. Such culture is not the best to get quality, as I still prefer leaves and manure, allowing the plants to remain in their growing quarters. If quality is the object in view I would advise covering roots of Seakale in the open. Asparagus is more difficult, as many persons do not like blanched heads, but forced slowly the produce is equal to that cut from the open, and, what is so important to the grower, it continues to yield yearly and is not thrown on the rubbish heap when cut over. I have just finished making up the permanent beds for the supply from the first week in February till April. I am forcing more beds of Asparagus and leaving a greater breadth of Seakale for latest supplies, for which I only use soil for covering so that the cost of culture is small. Now is a good time to cover the roots by placing fine ashes over the crowns rather thickly to keep off slugs.

The forcing of French Beans before the advent of the new year in my opinion is very

ficult, and the produce is not worth the uble. Now there will be fair success, but produce obtained before March will not great. I find much better results follow ving in February. Those who have heated mes get better crops as the days lengthen. ail to see the necessity for sowing in large ts, small ones being preferable at this time of year, and if the pots are nearly filled with soil, top-dressing is not needed. Far better feed with liquids or fertilisers. I am obliged to grow Cucumbers during the winter months, but the cost of production does not induce me to advise this mode of culture. In the early spring, with more light, there is less difficulty. Owing to the mild winter Mushrooms have done well, and where the temperature is studied, the quality will have been good. There has been no lack of material, as the open-air beds bore well into the autumn. To get variety we have the Witloof Chicory. This is a palatable vegetable if the growths are cut when 4 inches long. Much warmth is not needed. T. C.

REMINDERS FOR THE WEEK

Southern and Midland

W. E. Wright

Preparation

Having now entered into the New Year the chief point is to prepare for the crops that are to be grown in the kitchen garden, greenhouse, and flower beds during the coming season. In the first place, all gardeners have by this date made up their minds what they are going to grow and here. If not already done, the seed list ould be made out and dispatched without lay, as generally, if left later, there is a ish on the seedsmen, and all orders cannot ceive prompt attention. In selecting seeds is wise to grow the varieties that were a ccess last season, at the same time giving trial to a few novelties, of which every -to-date seedsman has a selection.

egetables under glass

There is a good deal to gain in kitchen gar-ns, where early plants can be raised under ass during the first and second weeks in nuary. Possibly the most important is the nion. A good strain of seed sown now in warm house in boxes containing old Chrysnthemum soil will provide good plants for tting out during April. Cauliflower, early abbage, and Brussels Sprouts will pay for wing a box of seed thinly now, pricking off e plants when large enough to handle into cold frame. A good early variety of ettuce should also be sown. These will rove very useful when those grown in ames are over.

lants in frames

Where cuttings of Pentstemons, Violas, ntirrhinums, and Calceolarias are growing frames a good deal of care and attention ust be paid to them during the next few eeks. Owing to the severe weather we ave experienced of late the frames have been ept closer than if mild weather had been the rder. On all favourable occasions air must ow be given. Remove all decayed foliage nd stir the soil to prevent it becoming sour. Where the surface is becoming green a handul of fresh lime should be scattered thinly mongst the plants.

n the greenhouse

Cyclamens, Primulas, Cinerarias, and ther plants should now be in force and aking the place of the Chrysanthemums, which for most part are over. To obtain the est results from these they should be assisted with weak doses of soot-water and liquid nanure given twice a week. A good artiicial such as Clay's Fertiliser or Thomson's Plant Food is also beneficial if given alternately. More bulbs should be introduced rom the cold frame to take the place of those already in bloom.

The fruit garden

There is no doubt a good deal of planting as to be done, owing to the frosts that appeared during the last two months, so at the irst favourable opportunity no time should be lost in getting all trees into their stations. Pruning should also be finished as soon as possible, and where grafting is to be done the best scions should be selected and heeled in with the names attached. The remainder may be tied up in bundles and kept for staking many kinds of pot and other plants.

Pruning and cleaning vines

This is a good time to do this work. After the growth has been cut back to one or two buds from the base of the last year's wood all loose bark should be removed and the rods painted over with Gishurst Compound. The glass and woodwork should also have a good scrubbing with hot water containing soft-soap and paraffin. All leaks in the roof should be attended to, as drip is a source of danger to the culture of Grapes. The border should also have attention, removing the sour surface soil and replacing with new turfy loam to which bone-meal and wood-ash have been added. W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

W. McGuffog

Forcing

With the turn of the year things move more quickly, and as the Apple crop in most districts was a scanty one, Rhubarb will be in request. Batches of that and of Seakale introduced into heat at fortnightly intervals will assure a regular supply. Asparagus, when stout four-year-old crowns are available, also forces very readily now. Successive lots of bulbs ought to be brought forward as required—the "prepared" bulbs of Dutch Hyacinths are easily handled. Anything in the way of shrubs or of certain herbaceous plants which have well-matured buds will quickly respond to the temperature of the forcing-house, but such things must have been specially prepared for the purpose. A day temperature of from 60 degs. to 65 degs. will be sufficient, and on bright days use the syringe freely. Lack of moisture will inevitably result in insect pests.

Plant houses

In the ordinary houses, as distinct from the stove and the forcing-house, no attempt should be made to maintain more heat than will ensure comfort, even during very frosty weather. Driving the fire always means trouble with aphis, and the ordinary occupants of the average greenhouse or conservatory thrive best in a comparatively cool temperature. Let the watering be done early in the day, and in the case of houses which have flagged or concrete pathways all superfluous moisture must be wiped up. Late Chrysanthemums are still useful, and to keep them in good condition only limited supplies of water should be given. Primulas of the stellata type, as well as Primulas generally, are also more durable when scantily supplied with moisture. Tulips, Hyacinths, Freesias, and Narcissi from the forcing-house will aid in the display during the dull days.

Pot vines

Assuming that pot Vines have been pruned, top-dressed, and well rested, they may now be put to work. It is of great advantage if the pots can be plunged in a gentle bottom heat such as is given off by a bed of Oak leaves. I have used Cocoa-fibre with good results, but leaves, when they can be procured, are preferable. An initial heat of round about 45 degs. at night is sufficient. This may be gradually increased as progress is made. Water very carefully for a time and lower the rods to a horizontal position to ensure that the buds break evenly.

Vineries

The annual cleaning of Hamburgh and Muscat houses must not be neglected in favour of other work. Woodwork, stonework, ironwork, and glass must all be thoroughly scrubbed. The rods, of course, will be untied, the loose bark rubbed off, and the whole washed well with a soft brush and lukewarm water to which has been added a little of that sterling old specific, Gishurst Compound. Scrape off a couple of inches of the surface soil of the border and renew it with some good turfy loam well firmed down.

Peach houses

If the training of the trees in Peach-houses is not completed the work ought to be hurried on. Buds, especially in the early house, move rapidly now, and if tying be delayed they are certain to suffer. It appears to be worth while to say that, even although it may not be proposed to start the early trees for a time, the border may with advantage receive a thorough soaking of tepid water. The roots of Peach-trees are always more or less active, and it is owing to insufficient supplies of moisture that there are so many complaints of bud-dropping in spring.

Hardy fruit trees

Complete the pruning and retraining of wall trees. If it be considered necessary to spray them the present is a very suitable time for the operation, which should be done before the trees are retrained. The soil in which Gooseberries, Currants, and Raspberries are planted may be very lightly forked up after pruning, and top-dressed with manure if possible, but, if that cannot be allowed, 4 inches of half-rotted leaves make a good substitute. A light dressing of freshly-slaked lime at intervals of three years has a wonderful effect upon all kinds of hardy fruit-trees.

Vegetable garden

Many of us in the north were caught napping for once in a way by the early and severe frost which was so prolonged. Now that the thaw has come the anticipated losses are not so numerous as might have been expected. Celery has suffered slightly, more especially the white varieties, and Lettuces have practically succumbed in the open, even Hicks' Hardy White being among the casualties. Other things have, apparently, been unaffected. All the manure-wheeling having been done, digging and trenching can be easily dealt with during suitable weather.

W. McGuffog.

Gardener to Mrs. Keswick, of Mabie.
Kirkcudbrightshire.

Our Calendar Writers

In accordance with our recent custom we change our calendar writers in the New Year.

Mr. W. McGuffog

The writer of the Northern Calendar is Mr. W. McGuffog, Mabie Gardens, Dumfries, who has been a contributor to GARDENING ILLUSTRATED for many years. For the long period of 26 years he was gardener to the late Countess of Selkirk at Balmae, Kirkcudbrightshire. At one time he was a keen exhibitor, and his services are now in request as a judge. While in the Kirkcudbright district he was associated with many public and semi-public bodies. He was Member of School Management Committee, Member of Incorporated Trades of the Royal Burgh of Kirkcudbright, and Deacon-Convenor of the Six Trades. On the death of Lady Selkirk he was appointed gardener to Major C. E. Galbraith, The Barony, Dumfries, but after two years he returned to Kirkcudbrightshire on being appointed gardener to Mrs. Keswick, of Mabie. His chief hobby is collecting rare books.

Mr. W. E. Wright

Being bred and born on the land, our Calendar writer for Midland and Southern Counties had an early training on his father's farm and garden. On leaving school at 14 years of age he spent the first four years in the gardens at Shakenhurst Hall, Worcestershire, where he gained a deal of knowledge and experience. After serving for periods in other large gardens, including the King's Acre Nurseries and Llanharan House, South Wales, he was appointed head gardener to Captain Walters, R.N., Caer Llan, near Monmouth. After three years he was appointed to lay out, plant, and take charge of a large garden for Sir Oswald Bosanquet, K.C.I.E., at The Florence, St. Briavels, Glos. This garden called for a great deal of knowledge in design as it was all sloping woodland and meadowland. It included many terraces, which were made into formal gardens, Rose gardens, and herbaceous borders, all stocked with the best varieties of plants, a model orchard consisting of the best fruits, tennis lawns, croquet lawns, and other pleasure grounds in which were planted many varieties of choice shrubs, also a rock garden planted with choice alpines. A new kitchen garden was included, and some glass, with every encouragement that could be given by an employer. Here he remained for six years until joining the Army, in which he served in France. There was, he states, much to be learned from the peasant women in gardening behind the lines. Since the war he has been head gardener at Sunnyside, near Monmouth, for three years, leaving owing to the property being sold. He removed recently to his present address, Stockton House Gardens, near Rugby, from Henstaff Court, Pontyclan, South Wales, where he had charge of an up-to-date and well-kept garden after being there nearly three years. He has had experience in exhibiting and judging at flower shows, especially in fruit, Sweet Peas, and Border Carnations, of which he makes a speciality.

CATALOGUES RECEIVED

Sutton and Sons, Reading.—List of flower and vegetable seeds for 1926.

Dobbie and Co., Edinburgh.—Flower and vegetable seeds for 1926.

John Waterer, Sons, and Crisp; Ltd., Twyford, Berks.—Seeds for the vegetable and flower garden.

Edward Webb and Sons (Stourbridge, Ltd.), Wordsley, Stourbridge.—Garden catalogue for 1926.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

Alstrœmerias

(W. P. Peachey).—These are best planted in the autumn when dormant, arranging the tubers 6 inches deep at least. The best place is a south border or along the front of a wall having a warm exposure, where, if the soil is not light, it should be made so. As the season is so far advanced it would be better for you to follow the plan you suggest and keep the roots in sand and plant them in the spring.

GREENHOUSE

Solanums dropping their leaves

(W. J. H.).—These drop their leaves from various causes, including drought, insect attacks, such as red-spider and aphides, removal from a close, warm situation to a draughty one. In short, sudden checks at any time will cause the leaves to fall.

A sport of Chrysanthemum Juno

(A. T. N.).—We are not impressed by this sport for market or other purposes. The flowers have not travelled well, and, as you observe, the plant has been neglected. With better treatment it might be worth considering, but, as received, there are many better varieties.

Ventilating Violets

(L. S.).—When there is no danger from rough winds tilt the light with blocks of wood both back and front, and thus allow plenty of air to circulate over the plants. Do this in mild or even wet weather, but not in hard frost or rough winds. If severe frost should come cover up with mats, and be very careful to remove all weeds and decayed leaves.

TREES AND SHRUBS

Chimonanthus fragrans not flowering

(W. Bunbury).—This plant should be pruned in the month of February; if it is pruned after young growth has commenced the flowering wood is cut away. It should never be pruned in the summer or autumn except to cut away any long strong shoots. It is the shoots a foot or less in length that produce the flowers. Perhaps the growth on your tree is so much crowded that it does not get light and air enough to ripen the wood in the autumn. Examine your specimen and see if it is so, and, if necessary, cut away the longest shoots where they are not wanted to cover space.

Spiræas failing

(Watering Pot).—These being lovers of moisture the best place for them is the side of a stream where the roots are always moist. You cannot give them too much water, and if you have such a position as you refer to then we should advise you to move your plants there. If you have not such a place then you should dig a hole not less than, say, 2 feet deep and as wide, filling this up with loam and leaving a basin so that you can turn the hose on and thoroughly saturate every week when the plants are growing freely.

Increasing Buddleia variabilis

(L. S.).—The best way to increase this is to take cuttings of the young wood with heel attached and insert them either in boxes, pans, or pots, and when rooted in the following spring to plant them out in rows about 2 feet apart. They will, when thus treated, make vigorous growth. The following autumn cut them back to two or three eyes and plant them in a sheltered position in their permanent quarters.

Ceratonia

(A. C.).—This is the generic name of the Carob-tree (from keras, a horn; in reference to the shape of the seed-pods. Nat. ord. Leguminosæ. Allied to Gleditschia). This is believed to be the Locust-tree of Scripture. "The dry pulp in which the seeds are buried is very nutritious, and is supposed to have been the food of St. John in the wilderness, wherefore it is called the Locust-tree and St. John's Bread."—Lindley. The North American Locust-tree and the Locust-tree of the West Indies are different from each other and from the Locust-tree of Scripture. As a greenhouse tree it is hardly worth culture. It may be propagated by cuttings of ripe shoots placed in sand under a hand-glass. It flourishes in sandy loam.

The introduction of Rhododendron basilicum

(W.).—We find no trace of R. basilicum among Farrer's introductions. Has your informant confused it with arizelum? R. basilicum was introduced by Forrest, No. 8,900, August, 1910, though we do not know if seed was sent home then, and No. 12,078, June, 1913, both in Western Yunnan from the Salween Divide at 10,000 feet to 11,000 feet. See the Edinburgh notes, Vol. IX., Nos. 44 and 45. Plants in this country are, therefore, about 12 years old. Neither Farrer nor Kingdon Ward found it on the N.E. Frontier of Burma, though it does come from very similar forests only a little further east than Hpnaw. The only Falconeri Rhododendron collected by these two travellers in that district was R. arizelum.

VEGETABLES

Sprouting seed Potatoes

(Alpha).—There is a great gain in sprouting early Potatoes for forcing or early planting tubers. In many gardens one can utilise any spare boxes for the purpose. The boxes should be of sufficient depth to take the tubers on end and allow for good seed. Boxes 4 inches to 6 inches deep will answer well. These, when filled, should be placed in a cool, light place. The tubers will make a strong growth, it being an easy matter later on to reduce the sprouts to one or two of the strongest. By doing the work now there is a great saving of time. There is no danger

weak sprouts, which are often much maged when the sets are placed in baskets. e also reply to "P. S. P." *re* sprouting ed Potatoes, p. 12.

oodlice amongst Rhubarb

(South Wales).—You had better make ps to catch the woodlice that infest your ubarb. You should get nice flat roofing es, small slates, or pieces of board, and ess one piece of either into the soil firmly, en lay across it at both ends thin pieces of od. Several of the traps may be laid about ongst the Rhubarb, and then examined ery morning, the woodlice found in them ing at once swept up on to a dust-pan and rown into boiling water. So attended, ere is no reason why you should not clear ur bed of these pests in a few days.

FRUIT

ectarines

(M. E. W.).—Seeing that your Nectarine-ee has beneath it a floor of broken bricks as paving, and the soil about it is raised con-derably above the level of the surrounding il, it is very natural to infer that the roots ffer from drought, and that the fruits fall fore ripening. We advise removing the soil om the roots carefully so soon as the leaves ll, gathering up the roots and wrapping a at or sack round them, then removing all e bottom soil and paving. Well break up e bottom, then replace the soil, with some esh turfy loam added, also adding some ushed bones and wood-ashes moderately, d replanting the tree less high than before. read the soil fairly firm, and later add a ulch of long manure over the roots. Of urse, the tree must be unnailed before the ork is begun.

each-tree

(H. W.).—Peach-trees from seed are often ng in getting into bearing, and when they may be but of poor quality. Neverthe-ss, as you have a two-year-old seedling that as become strong and needs removal, you ay find that carefully lifting it and planting soon as the leaves turn yellow will help to heck coarse growth and cause to fruit. You ust, however, plant it close to a sunny uth wall, where you can nail the shoots to thinly so that the warmth may ripen them. eaches fruit in this country outdoors only n warm south walls, carefully trained.

MISCELLANEOUS

estroying Couch Grass

(L. S.).—The only way to get rid of this is y digging it up and cutting down with a hoe s fast as it appears above the ground, and hrowing it on the fire. No plant can live ng in the ground if it is not allowed to nake any growth above it. If cutting down s persisted in, giving the plants no chance to nake any growth, the whole will in time dis-ppear. Any roots that you dig up should at nce be burned, otherwise you will only have urther trouble.

SHORT REPLIES

W. Hill.—Your Rhododendrons are evi-lently Dutch-raised, and, when coming from Holland, the salt spray has been blown over hem and injured them in the way yours are.

Bb.—(1) The only thing you can do is to ersevere and root up the Sorrel Oxalis (O. Acetosella). It has, no doubt, been introduced o your garden, and it will be very difficult to et rid of it. (2) As regards your soil, the est way would be to lift the Roses and lay hem in for a time. Then clear out all the oor soil to a depth of 2 feet and fill in with oam to which has been added some rotten nanure. Then replant your Roses. Such soil as is now in the bed is valueless for Roses, and it will pay you to do as we suggest.

Amateur.—No, the sulphur, etc., will not harm the Peach. It is only when the sulphur is ignited that the damage is done, the fumes destroying all plant life.

Albert Smith.—Seeing you have failed with the Chrysanthemums your best plan would be to run a flow and return pipe through the house so that in the event of very severe frost you could safeguard your flowers. This would pay you and at the same time obviate failure.

L. S.—The sowing of the Beans was correctly done. The winter sowing is not often now followed, as there are so many risks to be run.

NAMES OF PLANTS

Gilbert Pullen.—1, Lonicera Ledebourii, native of California. It originated in hedge, no doubt, from a seed dropped by a bird.

Essex.—Probably a Maranta or Anthurium. Difficult to say without seeing a specimen.

PUBLICATION RECEIVED

Webster's Foresters' Diary and Pocket-book, 1926—the annual pocket diary for all engaged in forestry work. Published by William Rider and Son, Ltd., 8, Paternoster Row, London, E.C. 4, price 3s. 6d. net.

GARDENING APPOINTMENT

Mr. J. West, formerly gardener to A. L. Wigan, Esq., Forest Park, Windsor, now head gardener to Mrs. Lloyd, North Hall, Basingstoke.

Benn Brothers' Other Journals

The Cabinet Maker.—The After-Christmas Atmosphere; An American Thrift Cottage; Industrial Designs in 1926; Royal Society of Arts Competition.

The Chemical Age.—Chemical Trade Movement in 1925: A Review by W. G. Wilson; Monthly Metallurgical Section; "Metallurgical Aspects of Modern Boiler Practice," by L. P. Sidney.

The Electrician.—Electricity Supply in Maidstone; Diesel-Electric Railway Cars; The Coal Mining Dispute.

The Fruit Grower.—Review of 1925 in Picture and Text; Horticultural Research; Science and the Countryside.

The Gas World.—Monthly By-Product Coking Section; The Fixing and Maintenance of Gas Engines; Tar for Roads.

The Hardware Trade Journal.—A Backward Glance on the Hardware Trade of 1925; What the Future Holds; Welcome the Women Shoppers; Recent Developments in the French Iron and Steel Industry.

HORTICULTURAL SOCIETIES' NEWS

Dunfermline Horticultural Society

The annual meeting of the above Society was held on Saturday, December 19th, 1925. The principal prizes for the year were won as follows:—(1) Challenge cup (for gardeners) for six vases decorative Chrysanthemums, distinct, Jas. McKinna, Donibristle Park Gardens; (2) Challenge cup (for amateurs) for three vases decorative Chrysanthemums, James Summers, Halbrath; (3) the "Smith" gold medal for most points gained at autumn and Chrysanthemum shows during the year, Thos. Wright, gardener, Benachie, Dunfermline, 45 points; (4) Gardening Illustrated medal for most points won by an allotment holder, David Russell, Elgin Street, Dunfermline. Show in 1926, August 27th and 28th. Chrysanthemum Show, November 12th and 13th. John Hynd, Secretary.

LATE NOTES

Kew Gardens admission fee

The Ministry of Agriculture and Fisheries has decided to re-impose, as from January 1st, the admission fee of one penny—on other than Students' days—to the Royal Botanic Gardens, Kew, which was abolished in April, 1924, and which previously yielded a revenue of about £5,000 per annum. The present admission fee of 6d. on Students' days (Tuesdays and Fridays) will continue to be charged.

Immune Ashleaf Potato

Now that amateur gardeners will be making up their minds what kind of crops, and, above all, what varieties, to select, I would like to put in a good word for one of the most reliable early Potatoes that ever came under my observation. Although it is by no means new, it is just as prolific, perfect in form and quality as it was years ago, when it so soon made itself a name. It has what some may think a defect, viz., the flesh is not clear white, but of a pale lemon colour when cooked. For small gardens, the fact of its making such very short haulm, and therefore requiring but about half the space of rank top growers, makes all the difference where space is limited. As regards earliness, either under glass or on the warm outside border, few Potatoes can come up to it. It yields a heavy crop of finely-shaped tubers, the majority of which are of just the ideal size for cooking.

T.

Lonas inodora

This is a distinct and very uncommon annual which comes from the coast of North Africa, whence it was introduced to this country about 1686. It grows about 1 foot in height and branches freely, each slender growth terminated by a dense, firm cluster of peculiar yellow flowers, which possess the same desirable qualities as the Everlastings, with which it may be classed. Plants raised from seed sown in the open at the end of April will bloom early in July and continue to do so until October. I find it useful as a carpet to other taller growing plants. G. M. S.

Viburnum cassinoides

The fascinating feature of this Viburnum lies in the combination of colours which comes through the ripening of the berries. These are green at first but later turn white, change to pink, and then take on their final rich blue tint. It is not unusual to find white and pink and blue fruits, with perhaps an occasional green berry on a plant at one time. Even when, as sometimes happens, nearly all of the berries are found to be pink, the effect is delightful.

Humea elegans

After many years I am again growing a batch of this for the conservatory. Grown on till they reach 8-inch pots, the plants make pieces of specimen size and about 3 feet in height. The inflorescence, dark brown in colour, is extremely light and graceful, and helps to relieve the stiffer character of many of our spring-flowering greenhouse plants. The foliage, too, when pressed or even rubbed against, is delicately scented, the perfume being, practically, identical with that of Sandalwood. Humea elegans is of the easiest possible cultivation, and may be treated in precisely the same manner as the Cineraria.

Mabie. W. McG.

Cotoneaster adpressa

This dwarf and compact little shrub is delightful for planting by the sides of paths and flights of steps, or about the foot of low boulders, and is now gorgeous in its dress of orange-red leaves. E. M.

Club Root of Cabbage

THIS disease is a serious one for many gardeners. It is caused by a fungus called Plasmodiophora brassicæ. The best method of control is an application of quicklime at the rate of 1 lb. per square yard and then not growing any member of the Cabbage family on the same ground for a number of years. Although an application of quicklime is a good method of control, it does not make very much impression on club root during the first season. Owing to this many gardeners are disappointed with the results of applying fairly heavy dressings of lime. If quicklime is applied to a soil affected with club root Cabbages should not again be planted until the lime has been in long enough to do its work; that is, long enough to remove the acidity present in the soil. On infested land, even following a very heavy dressing of lime, if Cabbages are planted the following season it is rare that club root shows any sign of being beaten.

The following facts do not seem to be clearly understood by many gardeners:—(1) The fungus causing club root flourishes and becomes epidemic only when introduced into an acid soil which is carrying a crop of brassicas or some allied crop. The fungus never makes much headway in an alkaline soil. (2) Although lime in some form or the other is the only practical remedy for soil acidity it does not have the desired effect very quickly, even when applied as quicklime. Once a gardener allows his soil to become acid it is several years before an application of lime will entirely remove the acid effect.

The above is, I am afraid, poor comfort for the man who has club root present in his land and who still wishes to grow Cabbages It will, however, help to explain to many why it is they do not see much reduction in the amount of club root in their land following a dressing of lime. The best remedy for club root is never to get it at all, or, in other words, prevention is better than cure. Those who have gardens free from club root should make sure that their land does not become short of lime. As long as land has a fair percentage of lime present club root can never be a serious pest.

A good fertile soil ought to be kept up to pitch with a dressing of quicklime or ground lime at the rate of ½ lb. per square yard every third year. If readers are using chalk or ground limestone 1 lb. per square yard will be required during the same period. As I have tried to point out before in the columns of GARDENING ILLUSTRATED, quicklime or ground lime is best for heavy land. The forms such as chalk or ground limestone answer best for light soils. Club root attacks any member of the natural order cruciferæ. All members of the Cabbage tribe, Turnips, Swedes, Radish, Seakale, and Wallflowers are plants commonly attacked, while such weeds as Shepherd's Purse often fall a prey to this pest. J.

—— Finger-and-toe, known also as anbury, club root, and "grub," attacks most, if not all, crops belonging to the order cruciferæ, such as Turnips, Swedes, Cabbages, Kohl-rabi, Rape, Radishes, etc., and often proves very destructive. The cause of the trouble is a fungus so small as to be perceptible only by the aid of a strong microscope. This minute organism is capable of existing for years in a quiescent condition in the soil, but when a crop that it can attack is sown upon the ground it enters the fine roots, multiplies rapidly in the tissues, and induces malformation and decay.

Like many other fungoid diseases this is extremely infectious, as may be readily proved by taking some portions of diseased root, or soil from a diseased field, and spreading such material on ground on which cruciferous plants are to be grown. In the great majority of cases such treatment will be followed by an attack of the disease, which, however, in the first year, will be sharply confined to the area thus artificially infected. This shows that finger-and-toe does not spread from plant to plant through the air, as is the case with many other diseases, such, for example, as Potato disease. It does, however, readily spread from the first point of attack in various ways; for instance, it may be borne in soil which sticks to the plough, to the wheels of carts or other agricultural implements, or to the feet of workers, horses, or sheep. Suppose that a small patch of Turnips in a large field is affected by finger-and-toe, a certain amount of soil will be borne from this patch and dropped elsewhere on the field every time a plough, harrow, cultivator, or scuffler crosses it, and wherever such soil is dropped a new centre of infection is established. Or the crop may be folded on the land with sheep, and the animals crossing and recrossing the diseased patch will soon bring about infection on a wider area. Under other circumstances the crop may be lifted and carted to the homestead and some of the diseased Turnips may get amongst the dung which in the succeeding season may be used to manure a Turnip crop on another field, and so the disease may appear where it was never seen before. Or diseased roots may be spread on a Grass field to be consumed by stock, and a year or two later this field may be under Turnips, when serious infection may be revealed. The refuse of the root-house is a fruitful source of infection on a small scale, and such material should never be put either amongst the dung or on a tillage field.

PREVENTION AND CURE.—Although this disease is widespread and destructive much may be done to limit its ravages. It is practically unknown on soils naturally containing a high percentage of lime. The artificial application of burned lime has long been practised as a preventive, and this substance is still the most effective agent that is known. The usual custom is to apply 5 tons to 7 tons per acre, the dressing being given in the autumn either six months or 18 months before a Turnip crop is to be grown. On the whole, the better of these two systems would appear to be that of applying the lime 18 months ahead of the Turnip crop. Under either the four or five course shift, this will mean spreading the lime on the ley before it is broken up for a Corn crop.

Another system is to put on a small dressing, say 1 ton to 2 tons, directly after a Turnip crop is removed. To spread such a small quantity evenly over the land it is necessary first to slake it, and afterwards to fill it into carts, spreading by means of shovels directly from the carts. If a considerable amount of disease is present the dose of lime may be somewhat increased, whereas if the field is sound, or nearly sound, the dressing need not exceed 1 ton to 1½ tons. In this case the treatment is to be regarded purely as a preventive measure. Although lime applied directly a Turnip crop is removed will have no visible effect on finger-and-toe till the next Turnip crop comes to occupy the ground, it may be of material advantage to the intervening crops.

One manifest advantage of applying lime immediately after a Turnip crop has been grown is that one can readily see where the disease, if any, has been most destructive, and increase the dressing accordingly. The use of ground lime in small quantities (5 cwts. to 10 cwts. per acre) has been extensively tested, but the results do not show that lime in this form is more effective than slaked lime, while it is more costly, and often less pure. Moreover, such a small dressing has but little effect on the disease, though it may have a considerable influence in other ways.

Other forms of lime are more or less effective, though none is so powerful as common burned limestone, which is subsequently slaked before spreading. If gas lime be used it should not be put on later than 18 months ahead. Used in this way at the rate of 3 tons to 4 tons per acre, it has, first of all, the opportunity of increasing the yield of the Corn crop, and in the following year it gets the chance to act on finger-and-toe. Chalk has also a preventive influence, though its effects are weaker than those of other forms of lime.

Although many farmers appear to think that this disease can only be influenced by the use of lime, there is no doubt that its spread and virulence can be greatly affected in other ways. Attention has already been called to the extraordinarily infectious character of the disease, and this fact should always be borne in mind by those who have to deal with affected land. It often happens that, to begin with, the disease appears only in certain small portions of a field, frequently the headlands, and while it is still on a circumscribed area no trouble or expense should be spared to stamp it out. If this be neglected it will soon spread all over the field, and, with careless management, all over the farm. Working the land while out of condition is a fruitful predisposing cause of an outbreak. Land that is soured by want of drainage, or in consequence of a burst drain, frequently exhibits the disease.

Neglecting to keep the land clear of Charlock and other cruciferous weeds must contribute to the spread of the disease, for it is in such plants that the fungus lives when a field is not under Turnips.

A method of suppressing the disease that is generally successful is to arrange the rotation in such a way that a Turnip or similar crop does not occupy the land oftener than once in eight years. In the four-course shift, for instance, it may be possible to put half the fallow break under Potatoes or Mangolds, and if this is done intelligently Turnips will not come on the same land oftener than once in eight years, and this should effectively banish finger-and-toe. A similar result will be got by keeping land in Grass for three or four years. Needless to say, no such method of prevention will have much effect unless farmers also take care to avoid carting diseased Turnips or tainted dung on to such fields.

Experiments have shown that acid manures encourage finger-and-toe, and this fact should be borne in mind in the cultivation of land that exhibits a tendency to this disease. Phosphatic manures to use, under these circumstances, are basic slag, bone-meal, or precipitated phosphate.—*Leaflet No. 77 of the Ministry of Agriculture and Fisheries.*

TRADE NOTE

Bargains at Burberrys

Burberrys' slogan for their January sale is "Great value for little money," and it is certainly lived up to in the multitude of bargains they are offering this month. Anyone thinking of new clothes, Burberry Weatherproof, for example, and anxious to save their pockets, will be well advised to write Burberrys, Haymarket, S.W. 1, mentioning GARDENING ILLUSTRATED, for a copy of their sale catalogue illustrating hundreds of bargains for men, women, and children.

GARDENING ILLUSTRATED

o. 2444—Vol. XLVIII. JANUARY 9, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

ble Allington Pippin 19
meria Vindictive ... 27
rberis vulgaris ... 23
RAMBLE, THE ROCKY MOUNTAIN RUBUS DELICIOSUS) 24
ddleia nanhoensis... 27
rns in winter, ritish 25
rns, repotting 25
wers on December 31, outside 18
Fruit trees and Roses, planting 18
Furze, the dwarf, or Petty Whin 18
GARDEN, A YEAR IN A SCOTTISH 20
Gas tar v. mealy bug 19
Gladiolus prices 20
Gooseberries for flavour 18
Hippeastrums, autumn flowering 22
HOP, THE JAPANESE (ORIGANUM HYBRIDUM) 22
Iris, the Snake's Head (Iris tuberosa) 21
Lawn, manure for ... 30
Madrona (Arbutus Menziesii) 24
ONCIDIUM PAPILIO 25
Pæonies 20
Peas, culinary 29
PLANTS, STEPPING-STONE 27
Plants in bloom at Christchurch on Christmas Day 19
Potatoes: Their cultivation in 1926 28
Potentilla fruticosa Farreri 27
Raspberry damaged ... 30
Rhododendron hirsutum stand lime, can? 18
RHODODENDRON SOCIETY'S FIRST SHOW 17
Rose Etoile de Hollande 19
Rose growing, profitable 21
Roses, manuring newly-planted 30
SEDUM SPECTABILE 19
SISYRINCHIUMS, OR SATIN FLOWERS... 18
Solanums... 22
Sundials 19
Sweet Briars, etc., growing... 29
Tomatoes failing 30
TREES AND SHRUBS, FRAGRANT 23
Tropæolum (T. tricolor), the three-coloured ... 22
Vegetable seeds to sow now, or shortly 29
Vines at rest 28
Vines, pruning 18
White fly, a plague of 30
Wisley, forthcoming trials at 18

Rhododendron Society's First Show

RHODODENDRONS, it may be said almost without fear of dispute, are by far the most beautiful of all evergreen wering trees or shrubs. Anyone who has en the Rhododendron Dell at Kew in early ne, or paid a visit to any of the great hododendron gardens in the districts of orsham, Ascot, Bournemouth, or in Cornll and in other favoured places, cannot il to have been carried away by the extreme auty of Rhododendrons when in full wer. The interest taken in the cultivation Rhododendrons is no w thing, it probably arted over 150 years ago, hen Rhododendron ponum was introduced to ese Isles. It is a native Spain and Portugal, it more especially of at portion of Armenia hown to the ancients as ontus.

Of Rhododendron pontim there are many arieties; it is this Rhodondron and its varieties at have been used as ung plants in hundreds thousands every year as ocks on which the garn varieties are grafted, id to this practice, no oubt, the great drifts of is shrub in many garns are due.

Many of the old hardy ybrids continue to hold eir own for woodland anting. Sappho is still e of the best blotched arieties, Broughtoni is a od rose-pink, Old Port still one of the best rples, and Caractacus ch purple-crimson. ther old varieties still ell worth planting are Charles Dickens ark scarlet), Lady Grey Egerton (blushnk), Helen Waterer (white, edged crimson), me. Carvallo (white and yellow), Lady eanor Cathcart (pale rose), Mrs. John utton (white), and the more recently-troduced George Hardy (white), Doncaster ed), and Alice (rosy-pink).

The old varieties are to be recommended r border and woodland planting, and they ay be obtained on *their own roots*, which is great service, especially for woodland anting.

The introduction of Pink Pearl marked a eat advance in the cultivation of Rhododendrons for garden effect. This variety, the most popular of recent introductions, is derived from the Indian species Rhododendron Griffithianum. Other garden forms of exquisite beauty have been raised from the same species, notably, R. Kewense, R. Loderi, and R. Manglesii.

The true species from the Himalayas, viz., Griffithianum, arboreum, Fortunei, and Thomsoni, magnificent as they undoubtedly are, have been superseded in gardens by varieties of hybrid origin.

Rhododendron Sappho

One of the best of the blotched varieties and one of the hardiest

Of the new and scarce varieties much in demand special mention should be made of Loder's White, Queen Wilhelmina, Bernard Crisp, J. G. Millais, Hugo de Vries, Britannia, and Unknown Warrior.

Unfortunately, the magnificent Indian species, as R. Nuttallii (the king of Rhododendrons), R. argenteum, R. Falconeri, and R. Griffithianum, are too tender for outdoor cultivation, except in the most favoured parts of the country. A really severe winter might end in disaster for these and other tender species.

Within the last 10 or 20 years the interest in Rhododendrons has increased by leaps and bounds. This is largely due to the work of intrepid plant hunters in Western China and Tibet. Farrer, Purdom, Wilson, Kingdon Ward, and Forrest have all been plant-hunting in the Far East in recent years, and Mr. Kingdon Ward, who is contributing an interesting series of articles to this journal, contemplates another trip to Tibet this year.

The introduction of new and hardy species, together with the efforts of the hybridist, have led to the wonderful progress in the cultivation of Rhododendrons.

A few years ago the Rhododendron Society was founded by some of the leading enthusiasts. It is a very exclusive Society, with membership limited to 25 only. The Society issues publications of interest which, unfortunately, are not at present available to the public.

This year the Rhododendron Society is to hold its first show. To Mr. Lionel N. de Rothschild we are indebted for the proof of the schedule, which states that the show will be held at the Royal Horticultural Society's Hall, Vincent Square, Westminster, S.W. 1, on Tuesday, April 27th.

The members of the Committee are: — The Hon. H. D. McLaren, Lionel N. de Rothschild, J. B. Stevenson, E. H. Wilding, and P. D. Williams, and entries for competition must reach the Secretary of the Royal Horticultural Society by 10 a.m. on April 21st. Awards of Merit may be given by the Floral Committee of the Royal Horticultural Society, who hold a Committee Meeting on that day, but all flowers submitted for award must be separately entered with the Secretary of the Floral Committee.

A good show is contemplated, and the early date should suit the Cornish growers. Intending competitors are advised to study the schedule closely. There are 48 classes, and all exhibits except in Classes 1, 2, 33, 34, 43, and 44 must have been grown in the open, but blooms may be cut in bud and opened under glass. Specimens shown must have

been in the possession of the exhibitor for at least three months prior to the date of the show, and all exhibits should be carefully and accurately named. The regulations make clear the difference between a "spray" and a "truss." The former means a single stem or branch and the latter means a single rachis; a group of flower-heads would, therefore, be disqualified if shown as a truss. Another regulation states that any exhibitor showing a hybrid in a species class or a species in a hybrid class will be disqualified. All of the classes are open, except Class 1 for the best group shown by a trade exhibitor, and Class 2 for the best group shown by an amateur. These are both challenge cup classes.

It is often urged that the objections which Rhododendrons have to lime limit their general cultivation, but some of the newly introduced species from China (like R. hirsutum of the Alps) are said to occur naturally on limestone ranges. Rhododendrons, as a whole, abhor lime, and it yet remains to be seen whether any of them really succeed in lime in this country. Be this as it may, they are provided for in the schedule we have before us, and all lovers of the Rhododendron will look forward to an interesting though very early show.

HERBERT COWLEY.

NOTES OF THE WEEK

Planting fruit trees and Roses

FOR nurserymen this has been one of the most difficult planting seasons on record. The severe weather of last month put a stop to all lifting and transplanting operations. Happily there is still plenty of time to plant successfully. It is difficult to understand why so many people are under the impression that planting must be done before Christmas. In point of fact outdoor planting may be done at any time during the winter up to the middle of March provided the weather is open. This applies not only to fruit trees and Roses but to most other subjects, with the exception of small plants like Strawberries, which are best planted early.

Gooseberries for flavour

Those about to plant Gooseberries for dessert may welcome a short list of varieties of the choicest flavour, and which do not require any more attention than those grown for preserving. First I place Early Sulphur, which in Scotland has few equals and no superior. Ironmonger, a red sort, when dead ripe, is, if not the best, at least one of the best of the reds. Topgallant (a white or whitish-green Gooseberry), to my mind rather large for a dessert berry, is of excellent flavour. It is among the green varieties that the choicest-flavoured Gooseberries are found, and no one can go astray among the following:—Glenton Green, Green Gage, Aston Hepburn, Green Globe, Rosebery, or Gretna Green. I have been told that the late Mr. Barron—an undoubted judge—considered Gretna Green the most delicately-flavoured Gooseberry in cultivation. Unfortunately the variety does not nowadays appear to be much grown, larger and coarser berries of poor flavour having largely supplanted it and others of the older sorts. W. McG.

Mabie.

Forthcoming trials at Wisley

The Royal Horticultural Society invites entries for the following trials to be carried out the coming season in the experimental gardens at Wisley, viz., culinary Peas (mid-season varieties only), Kohl-Rabi, Cabbages for spring sowing, Savoys, Celeriac, main-crop Potatoes, Aubrietias, and the following annuals:—Calandrinia, Cosmea, Everlasting Flowers, Linum, Nemesia, Lavatera, Nigella, Nemophila, Portulaca, Sweet Sultan, and Viscaria. Seeds, tubers, and plants for these trials should be sent so as to reach Wisley by January 31, 1926. They should be addressed to The Director, R.H.S. Gardens, Wisley, Ripley, Surrey. (Goods via Horsley Station, Southern Railway. Each article entered must be accompanied by an entry form duly filled up. Copies of the entry forms can be obtained from the Director.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Sisyrinchiums, or Satin Flowers

THESE interesting but rather uncommon perennials are members of the Iris family, and they are excellent subjects for dry, sunny borders or for warm positions in the rockery. They thrive best in a light, sandy soil in which has been incorporated a liberal quantity of peat or leaf-mould. The Grass-like foliage of Sisyrinchiums is elegant in form and of a pleasing shade of green. S. grandiflorum is the species most generally grown. The flowering time is spring, and the slender flower-stalks rise to a height of about 1 foot, and are enclosed in glaucous green sheathing leaves. The blossoms are of a rich purple with yellow anthers. There is also a white variety. S. Bermudianum is depicted in the illustration on this page. The flowers appear in early summer and are of a fine violet-blue. S. angustifolium is not so tall in growth and flowers about the same time. It has pretty Grass-like foliage and light blue flowers. S. striatum is known as the Striped Satin Flower. The flower-stems grow to a height of 2½ feet or more and bear small yellow blossoms striped with brown. It requires a somewhat sheltered situation. All the Satin Flowers may be raised from seeds sown under shaded hand-glasses during the summer, or they may be increased by division of the roots in spring or autumn.

H. G. B.

Sisyrinchiums or Satin Flowers

Outside flowers on December 31.

Noticing a Daisy in flower on December 31st, I was tempted to tour the garden in search of others. Going first to the rock garden, I found several Primroses of the blue variety and two open flowers of Gentiana acaulis, passing on to the Heather garden where I knew Erica carnea was simply a mass of pink. Here also was E. codonodes open, a perfect picture, its lovely light green foliage contrasting beautifully with E. vagans, the latter still carrying russet heads of dead flowers. Even E. mediterranea had a few sprays open.

Continuing, this time to the south side of the house, Choisya ternata was even in bloom; farther on those wonderful winter flowering Honeysuckles, Lonicera fragrantissima and L. Standishii, were growing side by side. These two should be in every garden where a wall is available to shelter them.

On the shrub border, Viburnum fragrans was a wealth of flowers, each little twig carrying a truss, and not far away was Veronica Autumn Glory. Add to the above Iris stylosa, a few stray Violets, and Polyanthi, they complete the feast of flowers found on the last day of the year.

R. MOORE.

Thorpe Hall Gardens, Essex.

Can Rhododendron hirsutum stand lime?

I was told it could, but it always dies when I plant it. R. racemosum has not died yet. Would R. ferrugineum and R. Wilsoni live on lime? It is all very well to say these things do not mind lime because they are found on limestone rocks, but limestone rocks are one thing and Cotswold limestone is quite another. An old gardener of Lord Sherborne's used to declare that the rain here was limy. F. G. D.

The dwarf Furze or Petty Whin

It is pleasant to see a correspondent "W. B. C." (p. 3), speaking so highly of the Dwarf Furze, or Petty Whin (Ulex nanus). It is not a common plant in a wild state, and from many localities where the common Furze is abundant it is absent. The situations suggested by your contributor for its place in the garden are just where it would be most useful—*i.e.*, the wild garden or the half-dressed portions of the pleasure grounds and for planting in poor soil where other plants would not thrive. It has been suggested by some that it would be an excellent rock garden plant, but it would be a mistake to plant it in the rock garden unless it was a rough one, constructed more for screening something than for the cultivation of good plants. It has the failing of the common Furze of spreading too much, although not to the same degree as its taller sister. It is a neat little plant, however, and its spiny foliage and bright flowers on such an attractive little plant combine to form a small shrub of considerable merit. Ess.

Pruning vines

In pruning Vines it is, of course, advisable to avoid the gradual formation of long spurs, yet in the case of some varieties it is difficult to avoid doing so and yet obtain the best bunches. No doubt many Grape growers have observed that the bud nearest to the spur, and on the current season's growth, is less plump than another which is further up the shoot, and which is more likely to result in a strong shoot which will throw a better bunch. In such cases it is quite correct

ine to such a bud, rubbing out the weaker es, even at the expense of spurs which, in course of time, may become rather long. stances of varieties in which this treatment ay be found profitable are White Tokay, hite Sweetwater, Grizzly Frontignan, and nnon Hall Muscat. Muscats, however, as a neral rule, throw good bunches from any oot, but the Cannon Hall variety is an exption. That prolific but not very choice riety, Golden Queen, may produce the est bunch from a bud well up the shoot.

A SCOTTISH GARDENER.

Plants in bloom at Christchurch on Christmas Day

The following plants and shrubs were noted full bloom in the open ground on Christmas ay at Messrs. Prichard's Hardy Plant urseries, Christchurch :—

hillea tomentosa.
abis aubrietioides.
ibrietia Studland.
Bridge Seedling.
ematis balearica (climber).
lchicum brachyphyllum.
lletia spinosa.
phne Mezereon alba.
ica carnea.
c. King George.
c. James Backhouse.
codonodes.
mediterranea glauca.
m. hybrida (syn. E. Darleyensis).
ntiana Sino-ornata.
um montanum luteum.
lleborus corsicus.
Distinction.
niger maximus.
is stylosa.
Jasminum nudiflorum.
Lonicera fragrantissima.
Polyanthus (yellow varieties).
Primula altaica (the mauve single Primrose).
P. capitata.
P. Juliæ hybrid.
P. Juliana.
Rosa Rowletti.
Sarcococca ruscifolia.
Saxifraga apiculata.
S. White hybrid (encrusted).
Sedum spathulatum rubrum (the foliage of this is particularly effective at this time of year being red, chocolate, and green).
Sobolewskia clavata (a white Crucifer).
Viola rothomagensis.

I think that this should be of interest to u.

A REGULAR READER.

Gas tar v. mealy bug

Seeing a controversy in GARDENING LUSTRATED lately on gas tar as a remedy r mealy-bug I venture to give my exrience of its use on Vines infested with that st. About nine years ago, on taking arge of a garden, I found four vineries insted with bug, two very badly, the fruit en hanging being literally full of the pest d quite unfit for table. As soon as I could ear all the fruit off I had the houses well eaned, working turpentine into all the evices of the woodwork and trellis; the ines were washed and scrubbed and then inted with the usual clay mixture; but the emy showed itself in force again next sean. I then tried the following recipe for its struction, viz., petroleum and spirits of ine. This was used on the Vines in one ouse and killed them nearly to the ground vel. They, however, broke strongly from low and soon made headway. Now, I ought I had at least got rid of the pest, but t so. It showed itself again in numbers. hen first I heard of the gas tar cure I was raid to use it, bearing in mind my former isfortune; but after seeing a friend use it ccessfully I determined on taking my prent charge, and finding one of the vineries ell stocked with my old enemy, to give it a ir trial. I merely removed the loose bark, d did not wash the rods in any way. I en applied the tar at the rate of one part six of clay, working it well into all crevices ith a stiff brush, over the eyes as well as e canes. The result is no injury to the ines, but an almost entire annihilation of e enemy, only one here and there having en seen last summer. It is, however, a sperate battle when none escape, and I feel nfident by following the dressing up this inter I shall see the last of the pest. I might ld that except where mealy-bug is present I ever dress Vines with any mixture whatver. I prefer to give the rods a good washg with soap and water, cleanliness in my opinion being more conducive to good health and robust growth than stopping the pores up with clay, soot, and other unsightly mixtures.

S. I. Y.

Sedum spectabile

THE Stonecrops as we commonly know them are small, or quite low-growing plants, so that the few kinds of larger habit are all the more welcome. This fine plant, of Japanese origin, makes one of the most showy masses of bloom in our September flower borders. The day was overcast when the group was photographed. If it had been sunny there would have been many butterflies on it, for it appears to be to them the most attractive of our late summer flowers. It is curious that this species, from the Far East, should be almost identical in habit and form of flower with our native Sedum Telephium, of which the best garden form has chocolate-red bloom, for if a bit of this gets mixed with a patch of S. spectabile we have to be careful to remove it while it is in flower, for in leaf only it is impossible to distinguish it. Another useful kind of large Stonecrop is S. Anacampseros, but in this the growth is more elongated, and though the purplish bloom is not showy it is useful as a quiet setting for brighter flowers.

The cool pink of S. spectabile is not the best of pinks, though it is pleasant in the mass. There is a deeper coloured variety called in nurseries "improved." In this the less-pleasing quality of the colour is accentuated; distinctly a case of "progressing backward."

G. J.

A robust and noble Orpine

Sedum spectabile, the source of great attraction to bees and butterflies

Apple Allington Pippin

For a dessert Apple which turns in after the New Year I consider Allington Pippin is unsurpassed. Admittedly Cox's Orange is a fine Apple, yet were I asked to decide between the two my vote would be cast for Allington. It is not unlike Cox's Orange, but it is more conical, deeper in colour, and at least the equal of that variety in flavour, while it is, most decidedly, a better bearer, and young trees fruit sooner than do young trees of Cox's Orange. The latter, too, does not succeed in every district, but Allington Pippin appears to be indifferent to position so long as the soil is moderately good. Young bushes put out 12 feet apart very soon begin to "pay a rent." In respect of keeping qualities, Allington Pippin is one of the best.

A SCOTTISH GARDENER.

Sundials

The interesting notes on "Sundials, Old and New," in your issue of December 26th, remind one of the wonderful variety of sundials collected by the late Sir Frank Crisp, some of which formed what he called "the Sundial Garden" at Friar Park, Henley. I do not know what has become of these, but everyone interested in sundials must have acquired fresh ideas on the subject from seeing those of Sir Frank Crisp. Many of them were charming, and others were quite grotesque. I am always interested in sundials, and no garden of any size appears to be complete without a good one. The day of the elaborate new sundial seems past on account of the prohibitive cost, but one frequently comes across some charming old dials, some of wonderful construction, and with added interest from having the comparative times in other countries shown also. As you remark in parenthesis, all sundials are not true, and those who have them should endeavour to see that they are giving true solar time by having them properly placed. Many of the modern sundials are far too commonplace for a good garden, their only real merits being that they are cheap and generally true when properly set.

Ess.

Rose Etoile de Hollande

I was astonished to see in a recent issue that "E. M." has discarded this Rose. Surely something must be wrong. Having had considerable experience, and seeing it grown in bulk, I unhesitatingly say it is the finest red Rose we have. Grand colour, good habit, and a glorious scent; for these alone it is worth growing. During the past hot summer it was THE Rose to keep its colour. Others turned blue, purple, and every objectionable colour, but Etoile de Hollande revelled in the glorious sunshine.

VICTORIA.

Pæonies

THE old-fashioned Pæonies as grown and exhibited some 40 or so years ago are fast falling into obscurity, and are met with only in botanic gardens. Such old favourites as albiflora, anomalá, decora, Pallasii, Sabini, tenuifolia, and others are being superseded by those known as Chinese Pæonies (P. albiflora) in variety. Perhaps this is not to be wondered at, as at our exhibitions such well-known firms as the Messrs. Amos Perry, Enfield, the Messrs. Kelway, Langport, Messrs. Bath, Wisbech, etc., make such glorious displays. The displays of cut flowers in our florist shops in London and other large centres are evidence of the great popularity these flowers have assumed for home decoration and festivals. Having stout, rigid stems and prettily-tinted foliage, Pæonies are very suitable for decoration. Market growers have found a very remunerative investment in the culture of Pæonies as cut flowers, and are now growing them in large quantities.

The herbaceous Pæonies are most decorative in the garden and are great favourites wherever grown, notably from their showy flowers, their great hardiness, and their simple culture. They have all the essential qualities for the adornment of large or small gardens. The tubers may be planted at any time from October to March or April in a sunny or partially-shaded position, and in practically any kind of soil, provided there are good drainage and depth. When planted on the banks of streams with Daffodils, etc., their large flowers produce a most charming effect. To do Pæonies well it is necessary to select a position where they escape the glare of midday sun, and to plant in clumps of three or in regular masses of one colour, or even when blended in similar shades of colour they are effective. The ground should be deeply trenched—2 feet to 3 feet is not too much—as this ensures good drainage and admits of plenty of root-action. During the operation work in a good supply of well-rotted manure, keeping the manure well down and allowing 18 inches of fibrous loam and coarse sand to receive the plants. The roots must not be too deeply planted, just under the surface is quite sufficient, and planted 2 feet to 3 feet apart each way. Top-dress annually and lightly fork in during winter. On naturally dry soils a mulch during April is very beneficial. During a spell of drought abundance of water must be given during the growing season. Keep free from weeds at all times, as it is very necessary that the crowns should have all the sun possible after flowering. In well-prepared ground it is not necessary to transplant more than once in four or five years.

Pæonies are now so numerous that it would occupy too much space to give a list of all the good varieties. W. L.

Enfield.

A Year in a Scottish Garden

A continuous blaze of Roses, bird visitors, and the winter aspect of the trees

GARDENING in Scotland is very different from the greater part of England inasmuch as we have a more rigorous climate to contend with and the winter is often prolonged. Notwithstanding these drawbacks we are able to have a fine show in our borders, both herbaceous and annual. In no year within most memories has this been so to a greater extent than in the year that has gone. We had, to be sure, a very trying spring—wet and raw to begin with—and reaching a climax in a sudden snowstorm which played havoc amongst the trees, especially the Coniferæ, because of the large surface presented to the falling snowflakes. Here, in Newpark, we are still using logs from timber broken down in that snowstorm. But the summer made up for the unkindly spring, and for all the months of summer, and well over into the autumn, the garden was a pleasure to the eye.

Autumn at Newpark, Midlothian—a few days previous to the arrival of severe weather

We have many Roses at Newpark, and in July, August, and September they afforded a continuous blaze of colour. The favourites thrive with us—Caroline Testout, Mme. Edouard Herriot, the Dicksons, La Tosca, Frau Karl Druschki, and many others. We have one or two of the bronze type which came from Holland and which we are watching. I rather like them.

At the beginning of November there were ominous signs that the long garden summer was over and, indeed, the winter arrived then in such a hurry that in one week or so the woods were practically denuded of foliage. The cold snap seemed to attack the Sycamores first, and down came the leaves in showers, blocking the paths everywhere. But the debacle became general in a few days, and in the shortest time on record the woods were denuded of their splendour. Since then we have been getting the frames well stocked and attending to the manuring of the borders. The Roses have special treatment in the shape of a good heavy dose of well-rotted pig manure, and we hope to get that back next summer. I think it is the best manure for Roses, but if some bone-meal is sprinkled over, say, twice in the spring, it helps. A dash of kainit is also useful. One of the things that Roses seem to crave for is potash, and, of course, they get it in kainit.

As I write we are in the midst of winter desolation. The Roses are under 14 inches of snow, and the whole garden is merely a mantle of white, with a few excrescences in the shape of leafless trees, to all appearance dead to the world.

We had quite a lot of bird visitors during the year, but for the most part they have left us, and we will be charmed to see them return in the spring. The migrants have gone long ago, but we have some tits, of which species three varieties pay us an annual visit. Those that are with us now take shelter in the nesting boxes fixed on the trees. The other birds daily dispute with the poultry and the pigeons the ownership of the food. There are many chaffinches, starlings, robins, and blackbirds, all very hungry when the food is put out in the snow, and they will almost take the food from your hand, such is the force of hunger. A little robin a day or two ago came hopping round about me, evidently begging for food. It finally landed on the stick under my arm, and I was able to give it something to eat, which it picked from my fingers.

The winter aspect of the trees when mantled with snow is of great interest. Some of these, such as the Cypresses and Cedars take on quite a dejected attitude. They keep hold of the snow longer than other trees, but their branches are responsive to the unusual load, and their graceful summer manner is only slightly altered to suit the conditions of winter. LOUDON MACQUEEN DOUGLAS.

Newpark, West Calder, Midlothian.

Gladiolus prices

Writing in a recent number of the "Canadian Horticulturist," Mr. J. N. Collander remarks :—" Judging by the quotations given in the first Gladiolus circulars to arrive there are some surprises in store for the fanciers, some that will be pleasant and some that will cause a degree of chagrin to a few enthusiastic collectors. This will principally lie in the much-reduced prices and the varieties that were sold at fat figures last spring.

" For example, W. H. Phipps retailed at $10.00 a bulb up to planting time, the writer obtaining a small corm as a special favour with quite a large order, for $5.00. It is now offered in number one size for considerably less than $2.00, and one extra special offer named a figure under $1.00 for number three size corms. Los Angeles, that sold at $5.00 each, is to drop to 75c. America Beauty, which retailed at $1.00, is offered at $12.00 per 100, and Mrs. Leon Douglas drops from $1.00 each to $25.00 per 100.

" This supports the claim that unless one can afford to pay fancy prices just to be a year ahead with a new variety it pays to wa

season before investing in a coveted new roduction.

"It is just as interesting to watch a 50c. 'Glad.' unfold its beauty as a $10.00 one hen both are new. You see, you expect 10.00 worth from the one and only 50c. orth from the other. If they turn out to be irly equal performers the lower-priced one ins out in actual returns for money exended."

The Snake's Head Iris (Iris tuberosa)

Although I have found Iris tuberosa perectly hardy when planted at the base of a vall, yet it is one of those plants which are f doubtful hardiness in some districts. It oes not, however, call for any elaborate proection. A few Spruce branches or some priggy pieces of Laurel stuck through the order will prove sufficient. I. tuberosa is, erhaps, the least showy of the early Irises, ts blooms being rather sombre; but if an ndividual flower be picked and closely crutinised its beauty, though quiet, is undeniable. The variety is more telling when nassed in goodly numbers. Forty or 50 plants in a mass are highly effective.

W. McG.

Winter at Newpark

The three trees in the centre of the picture from left to right are Cupressus Lawsoniana, Cedrus Deodora, and Cupressus Lawsoniana. The heavy fall of snow, measuring 14 inches at the time this picture was taken, put quite a new aspect on the appearance of the Cypresses and Cedar

Profitable Rose growing

THE demand for Rose buds during winter and early spring in London and other great centres of population is a growing and almost inexhaustible one. Of course in order to have Roses at a time when they are in the greatest demand and fetch the best prices it is necessary that they should be grown under glass, and to do them well they must have a house to themselves. Any kind of house may be used, but, like other things, the best is best, and for pot Roses there should be beds in which the pots may be plunged in a gentle bottom-heat; a bed of leaves with pipes under them is a good arrangement. If we were about to commence operations, we should have a quantity of strong plants of suitable sorts potted up from the ground at once; they should be put into 8-inch pots, and plunged in leaves or other material giving a very gentle heat, and the plants should be protected from rain, but otherwise open to the air. In this position they would make roots without top growth. By the end of January they might be pruned and moved into the forcing house, plunged in a bottom heat not exceeding 80 degrees Fahr., and a top temperature not exceeding 60 degrees for the first three or four weeks; afterwards it may be raised to 70 degrees with abundance of moisture, and in this way a good crop of blooms might be cut in April, but where plants are already at hand established in pots, they may be had in bloom much sooner. Growing in pots is, however, after all a troublesome affair, and requires skill, patience, and a good stock of plants to draw from. A slower, but surer, plan is to

PLANT OUT. Suppose you have a low span-roofed house, say about 15 feet wide with a path down the centre; make up the border on each side with good soil, as for Vines. Plant firmly, support them with neat stakes as they grow, give no artificial heat the first year, but plenty of air, plenty of moisture, plenty of manure, and they will grow and astonish you with their vigour. There will be some Roses the first season. The second season, if the planting has been done well, there will be Roses in March, more in April, and more and more in May—in fact a grand feast of Roses. But it is only from October to June that Roses will pay; it is therefore from June to October that the plants should be made to rest by giving them a sort of artificial winter. If it can be conveniently done, the lights should be removed from the house and the plants exposed to the full sun and air, and no more water given them than they obtain from the rain that falls during the time they are exposed. In September they should be pruned, cleaned, and manured, and soon afterwards the lights should be put on and the process of forcing gently commenced. By this mode of proceeding there will be plenty of buds to cut before Christmas, and the plants will continue to produce them for several months in succession, but to keep up a full supply during the eight or nine months they are required it will be necessary to have two or three houses planted and started into growth at different times—say, one in October, one at Christmas, and one in February. In this way, with plants out of doors in beds and trained on walls with various aspects, a supply may be had to send to market every week in the year, and thus a connection would be kept together and the best prices obtained at all times. Insects, of course, must be guarded against; the most troublesome to the Rose grower are green and black fly and red-spider. Tobacco smoke will make short work of the fly, but the spider is a dreadful pest if it once gets hold; therefore, it must be guarded against by providing plenty of atmospheric moisture and sufficient air. Never allow the plants to become dry at the roots during their growing season, nor the pipes too hot; let the heat be a moderate one, and give the plants time to grow. Having no other plants in the house, the Roses may be kept in the most perfect health, and in that state insects will not trouble them much.

Winter at Newpark

The Wild Cherry or Gean tree (Prunus Avium) shown in the picture is usually in early summer one blaze of white with a pinkish tinge. In winter the snow gives it quite a different aspect—the whiteness is there, but happily of a more fleeting nature than the blossom

INDOOR PLANTS

The Japanese Hop (Origanum hybridum)

CONSIDERABLE interest has lately been taken in this very attractive pot plant, specimens of which have been sent to this office from many parts of the country for the purpose of identification. Origanum is an ancient Greek name said to mean delight of mountains. The genus includes several plants known as Marjoram. Botanically they are closely allied to the Thyme, but the flowers of Origanum are borne in heads surrounded by an involucre. This is clearly seen in the Hop-like inflorescences of Origanum hybridum. The bracts surround small pink flowers of pleasing fragrance. The plant grows about 1 foot in height and usually flowers in late summer and autumn. According to Johnson's "Dictionary of Gardening," it was introduced in 1770 from Asia Minor. H. C.

Origanum hybridum, an excellent pot plant

Solanums

I find these indispensable for Christmas decoration, and yet how far from general is their use. For next winter's plants seed should be sown in autumn in shallow pans in a mixture of loam, leaf-mould, and sand; if placed in a temperature of 55 degs. they will soon vegetate. When the young plants are sufficiently large pot them off singly into 2½-inch pots, keeping them in a growing temperature, syringing them slightly every afternoon, and watering carefully until the pots are full of roots. They should then be shifted into 4-inch pots, syringed twice a day, and kept close to the glass in order to induce stocky growth. About the middle of June I plant half my plants out on a south border, where they give no trouble, and are ready for lifting and potting into 6-inch and 8-inch pots by the end of September. These make the best plants for Christmas, as the berries do not colour so early as those on plants kept in pots. The latter are shifted into 6-inch pots in a compost consisting of two parts turfy loam mixed with one part well-decayed cow manure and a little sharp sand; they are then placed in a cool frame on a bed of coal-ashes and regularly syringed and watered. They should have plenty of air and be shut up early in the afternoon to economise the sun-heat. Everything depends on keeping the plants clean, as they are subject to aphides, thrips, and red-spider. Fumigate on the first appearance of aphides and thrips, and, for the spider, shut up, so as to secure a moist, close atmosphere in the afternoon. During the hottest part of summer the plants will require to be slightly shaded. This is best done by giving the glass a thin coat of whitewash. Once the pots are quite full of roots manure-water should be given twice a week, which greatly increases the size of the berries. When the latter are coloured, the plants are ready for placing in jardinières and vases in the house, or in the conservatory or greenhouse, as may be desired. S. C.

The three-coloured Tropæolum (T. tricolor)

This is one of the prettiest of the Tropæolums, but it is not adapted for decorating large spaces; for balloons, trellises, or a potful of Birch twigs, however, it makes an excellent covering. The foliage is small and neat, of a verdant green colour, and the flowers, which are of a rich orange-scarlet, are borne in such profusion as to make the plant appear a complete mass of colour. When well grown and flowered—an easy matter—few greenhouse plants match it for brilliancy. The tubers, which are not unlike a Potato in appearance, should be potted in November in light, rich soil, and in well-drained pots; 8-inch or 9-inch pots are a suitable size for them, and if they are small, like marbles, perhaps several may occupy a pot. They may be wintered in the greenhouse, where they only require to be kept from getting dust-dry. About April, or sooner, if the temperature has been kept much above 45 degs., the slender young shoots will appear, and whatever kind of trellis or support they are to have should be fixed in the pot then; there is nothing better than branching Birch twigs, about 2 feet high, stuck round the edges of the pot in a symmetrical form; to these the young shoots should be led till they take hold themselves, which they will do quickly. After this the plants want little attention, except directing the leading shoots occasionally, so as to cover the branches and prevent the shoots from running into knots and bundles, which it is hopeless to unravel. They grow rapidly, and soon drape their supports from top to bottom with their beautiful foliage and flowers. Water freely while growth continues, and keep the plants in a good light, but shade from bright sunshine will prolong their beauty. About midsummer the leaves will begin to fade, and water must be given more sparingly until the plants go to rest, in which condition they remain till potting time again comes round in November.

Autumn-flowering Hippeastrums

Most of the Hippeastrums, both original species and garden varieties, flower during the spring months, but there are a few that bloom in the autumn. One that blooms, as a rule, during late summer and early autumn is Hippeastrum reticulatum, readily distinguished by the dark green, strap-shaped leaves, having an ivory-white midrib. The flowers, which are borne on slender scapes, are each about 3 inches in diameter, and in colour soft pink to rose, with darker-tinted veins. It is not often met with, being far less vigorous than the ordinary garden forms, and the same remarks apply to a few hybrids in whose production it has played a part. A second species, which blooms generally in autumn and early winter, is Hippeastrum aulicum. The flower-scape of this is very stout, while the blossoms are large and of a bright crimson colour. It is a very showy species, but has not been much used by the hybridist, as the flower segments are much pointed and there is a considerable space between the upper and the lower ones, so that its influence does not tend towards a symmetrically-shaped flower.

Fragrant Trees and Shrubs

VE might with advantage pay more attention to the many and varied fragrant shrubs. Upon the turf or in "wilderness," by stream or woodland k, we might have fragrant shrubs in sses, and they would pour out odours as and variable as the subjects which emit m. The Lavender is one of the sweetest dwarf hardy shrubs, but hardly anyone nks of planting it when making a shrub-y. It is beautiful when in bloom, as

French Lavender, and a hedge of Rose Zephirin Drouhin behind, in the gardens at Red Roses, Tonbridge, Kent

eryone knows, and also when out of flower, the eye finds repose in, and never tires of oking upon, its soft-cushioned masses of ver-grey foliage. This is one of the things at might be boldly used in the foreground the shrubbery, between the taller shrubs d the turf; and, moreover, planting shrub-ry margins with such things as these would nder digging unnecessary. Another sweet ing of the same grey colour is the Lavender otton (Santolina). Then there is the Rose-ary, which no garden should be without. always looks fresh in its dark green dress richly-scented leaves. Probably these ree things are the most accommodating of l the scented shrubs, for they will flourish on hot dry stony soils, where little else ould grow. Equally as sweet and hardy e the different forms of the Southernwood rtemisia); in fact, this is quite a large enus, of which it is rare to see a single ember in gardens. A. maritima, which vers dry banks with a fragrant down in aside districts, might be put to the same se in gardens. A. tanacetifolia has finely-it foliage as light and graceful as a Fern, hile the green-leaved A. Abrotanum is, per-aps, the sweetest of them all. A. anethi-olia is a vigorous herbaceous perennial, rowing up often as high as 5 feet a woody ranched stem, which is clothed with sweet read-like greyish-green leaves. Upon the ockery this family may be represented by ich kinds as A. alpina and A. frigida. The ormer forms dense silvery tufts, but the latter is a pretty trailing plant which rambles over the ground, rooting as it goes, and forming a dense hoary carpet. Both have yellow flowers. Comptonia asplenifolia is a hardy spreading bushy shrub with elegant Fern-like leaves, which give off a delightful odour when touched. It is called the Fern-leaved Gale. Then there is the Bog Myrtle or Sweet Gale (Myrica), so suitable for wet situations.

Many of the herbs might be used, especially such things as Marjoram, Camomile, etc.

The Sweet Bay is one of the finest of scented shrubs, and a valuable Evergreen, too. Upon warm soils it forms quite a tree as much as 40 feet high. The Sweet Verbena (Aloysia citriodora) has a perfume which all appreciate. It is one of the most useful scented shrubs for cutting. Although considered and usually treated as a greenhouse plant, it will live out of doors in many southern gardens, especially if planted against a warm wall. Even raised from cuttings in spring and planted out, it rapidly grows into a bush, with plenty of young shoots for cutting. It strikes very easily. The Balm of Gilead (Cedronella triphylla), which is often confused with Monarda and other plants, has a delightful odour. It is a half-hardy shrub in most situations, but is hardy in favoured spots in the west and south of England. It forms a spreading bush about 4 feet high, and the shoots are terminated by a little spike of pale flowers, but they are dull and ineffective. The merit of the plant is its fragrance, and as it can be readily struck from cuttings and grows freely upon warm soils, it should be treated as half-hardy, and young stock be raised and planted out every year. In the Rose family there is a variety of delicate odours in the leaves as well as the flowers, the best known and most appreciated being the Sweet Briar, which should be found in every garden.

Berberis vulgaris

A well-grown bush of this familiar native, some 8 feet in height, its gracefully-drooping branches laden with their pendulous clusters of berries, a vivid coral-scarlet against the snowy landscape, is a most arresting object. It was in a cottage garden, as these things often are, and I decided, not for the first time, that there is no other Berberis to eclipse this well-known shrub in the late autumn and winter. That may be rather a sweeping statement to make, and I am willing to be corrected, but I know of none whose fruits give such a magnificent effect at this season. Instead of acquiring after frost a sort of boiled appearance, as do those of so many other kinds with red or coral clusters, the fruits of B. vulgaris respond to the first touch of winter by flushing into an even brighter, healthier glow of colour. Birds do not seem to touch these berries, probably owing to their acidity, and it is by no means unusual to see the leafless branches carrying much of their crop until March. I can well remember the time when we made an annual event of regularly gathering these berries just after the first frost for pickling and as a substitute for capers! Their tartness is refreshing rather than unpalatable—in moderation. B. vulgaris has, in addition, no small claim to popularity as a flowering shrub. The form with plum-purple leaves (var. purpurea) is perhaps the handsomest of the many varieties known of the species, but if it excels in foliage and at flowering time it is not in my opinion so effective in berry as the type. A. T. J.

The Rocky Mountain Bramble (Rubus deliciosus)

THIS is quite unlike an ordinary Bramble, being without spines or prickles. It forms a rounded spreading bush about 4 feet high, and in June bears snow-white flowers, each about the size of a Dog Rose and like it in form. It is quite hardy in most soils when these are light. In cold districts it may be grown against a wall, which it will quickly cover with a beautiful growth and flower more freely than when grown as a bush. When planting, always select the sunniest and warmest place in the garden. It is somewhat difficult to increase unless from seeds or layers. Seeds should be sown in light soil when ripe, while layers should be put down in March.

Madrona (Arbutus Menziesii)

There are few more attractive objects in the winter garden than A. Menziesii, which was first sent over from California by Douglas in 1827—nearly 100 years ago. The smooth cinnamon-coloured stems and branches, the large, bright green leaves, and (if you are fortunate) the orange-scarlet fruit clusters, together make a most charming combination. Though not absolutely hardy, it takes about 20 degs. of frost here to affect this Arbutus, and then it is only the tender leaves of the extremities which are injured, and from that such a robust and rapid grower soon recovers.

"Seen at its best in the moist, rich valleys of N. California, A. Menziesii," writes Mr. W. J. Bean ("Trees and Shrubs"), "is by far the noblest of all the Heath family." That is saying much, but not too muc Albeit, magnificent as the Madroña is in th warmer and more sheltered parts of th Pacific slope, it is a singularly arrestin spectacle when seen, as it often is, on rocl promontories and islands still further nor and into British Columbia. Some of the trees, undoubtedly of great age, have trunl of massive appearance. The latter are oft gnarled and twisted into extraordinary form and, not infrequently, they bear, like the c Sequoia gigantea, a comparatively small he of branches. These branches, often ve densely foliaged owing to exposure, som times assume such strange forms—bein mop-headed, or streaming this way or that if blown by an unceasing wind—that the tre make an unforgettable impression on one mind. Yet, instead of being grotesque, th

The Rocky Mountain Bramble (Rubus deliciosus)

e singularly artistic and, seen darkly gainst the light of sea or sky, they remind ne of the classical trees of some old master's nvas. A. T. JOHNSON.
N. Wales.

ORCHIDS

Oncidium Papilio

NATURE, for her own special purposes, has devised some curious forms of plant life that imitate in a remarkable degree heir counterparts in the insect world. Of hese, Oncidium Papilio, the Butterfly Orchid, s one of the most realistic. On the topmost branches of tall trees a tuft of leaves is ttached, from which proceeds a thin, very lexible stem about 18 inches in length. At he apex a single bloom of bright yellow and rown is produced, which mimics in a remarkable fashion the outstretched wings and ntennæ of a beautiful exotic butterfly. In he slightest breeze this waves about freely, nd aided by the bright tropical sun resembles n a lifelike manner the real butterflies that ssociate with it.

Coming from a sub-tropical climate it is est grown in a temperature suitable to Denrobium and stove plants. It is sometimes laced on blocks of wood with a small quanity of fibre, and attached by copper wire, but small pan will be found convenient for suspending. A very moderate quantity of fine 'ı fibre and one-third Moss forms a suitable ompost, and the plants should be retained in he same house during the resting period.

The single flower on fading will be succeeded by another, but after about three have een produced it is advisable to remove the tem as the plant may become exhausted.

It may serve to show the possibility of keeping Orchids in health and vigour during a lengthened period by stating that I collected the plant from which the photograph was aken this autumn, growing wild in the West Indies, not far from Port of Spain, in the sland of Trinidad, some 25 years ago. The negro who climbed the tree threw down the plant with the long flexible stem attached. This I retained, and on returning to England it produced several blooms in succession.

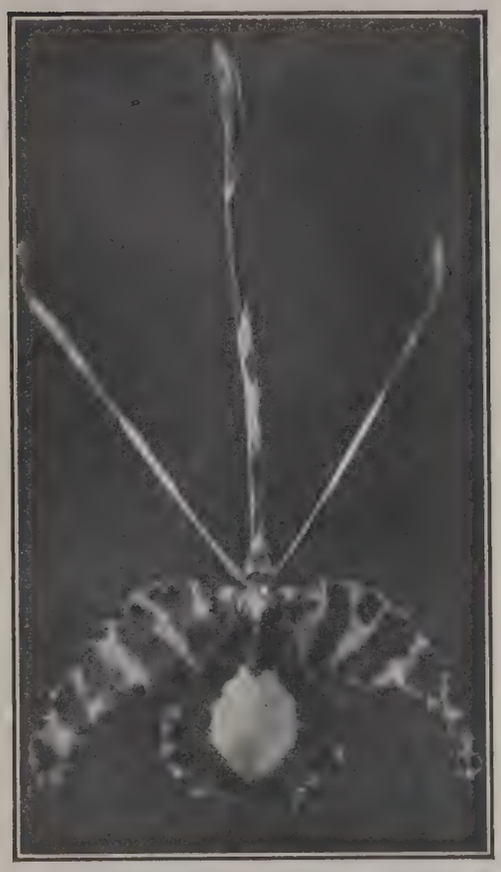
A somewhat similar form, Oncidium Kramerianum is equally remarkable, but the rather rounded flowers, of greater substance, are produced on a stem thicker and shorter than the preceding, and to that extent less realistic. It can be distinguished from O. Papilio by its round stem and short internodes, as contrasted with the longer intervals and flattened stem of the former.

E. R. ASHTON.

FERNS

British Ferns in winter

THE first mistake generally made at this time of year and during the next three or four months is that of giving hardy Ferns rather too much rest. Many more plants are lost through the four or five winter months than during the rest of the year, however hot and dry the summer may have been. The reason is that out of every ten would-be Fern growers, eight allow their plants to get thoroughly dry at the roots, a condition from which they never completely recover. This principally applies to British Ferns kept during winter under cover out-of-doors; exotic kinds, being under glass, are not so likely to be allowed to become too dry, more especially as most of the kinds, if not all, belonging to this latter class are evergreen; whereas the majority of British species are either deciduous or partly so, and it is on account of that deciduous character that irreparable harm is generally done. Being in



Oncidium Papilio, the Butterfly Orchid
Flowers pale golden-yellow, barred with chestnut-brown

what appears to be a dormant state, many unwisely treat them year after year like bulbs or tubers. Such treatment causes the crowns to grow annually weaker and weaker, and accounts for their getting thoroughly exhausted instead of increasing in size and vigour. Instead of our native Ferns being dried up in winter, it is just the time of year during which they are provided naturally with a greater abundance of water at the roots than at any other. Many of them, such as Osmundas, Scolopendriums, and some Lastreas, growing wild in low-lying districts, are for weeks, even for months, kept totally under water through the annual overflow of some river or an excessive quantity of rain. Again, in the case of those growing on hillsides, amongst underwood, by the roadside, etc., such as Polypodiums, Blechnums, Athyriums, Asplenium Adiantum nigrum, and others, the rain, which during winter is much more plentiful than in summer, reaches them also more easily and in much greater abundance, as the trees which during summer shade them are then deprived of their foliage, and consequently do not offer any obstacle to the ground under them being completely saturated for about five months of the year with water. It will therefore be seen how pernicious the dry resting of hardy Ferns in winter must be, and what fatal consequences must be expected from its repeated practice.

COVERING WHEN RESTING is another source of evil. If the plants are growing in the open ground they will take care of themselves and give but little trouble. A small quantity of dead leaves spread over them for protection in case of a hard and snowless winter is all that is required. The difficulty of winter management lies with plants in pots—choice varieties or pet kinds that one does not care to trust to open border culture, although that would be safest. If Ferns in pots are to be kept outside they must have a certain amount of covering—more for the pots, which during severe frost are apt to crack, than for the plants. For that purpose either Cocoa-nut fibre or old tan is resorted to, and that generally with most unsatisfactory results, for if a thin layer only is used the protection proves insufficient for the pots, and if, on the other hand, a thick covering is employed, then the closeness of the material is such that any small-growing kinds, such as the Cystopteris, Aspleniums, and Woodsias, invariably perish through the moisture remaining stagnant, and being essentially different from that which under natural circumstances is so highly beneficial to them during winter.

THE MOST SUCCESSFUL WAY by which hardy Ferns may be kept through the resting period when grown in pots is to have them put into a cold frame and liberally treated with water at the roots, so as not to allow the crowns to become shrivelled in the least, taking care to be more liberal still towards species and varieties not thoroughly deciduous, such as Polystichum, Blechnum, Scolopendrium, Polypodium, etc., whose roots are always active all through the year. I saw, only a couple of years ago, a striking illustration of the benefit to be derived from the treatment here recommended. Two window-boxes had in spring to be filled with hardy Ferns, which after growing luxuriantly during the summer and autumn months gradually lost their foliage and went to rest; these were mostly dwarf crested forms of Athyrium Filix-fœmina, and also of Lastrea Filix-mas, sorts entirely deciduous. Having no foliage whatever left on them, one box was allowed to get very dry without being noticed, which, doubtless, they would have been had the boxes contained any Scolopendriums or Polypodiums. The other box would undoubtedly have suffered the same fate but for a leak in the gutter above, which all through the winter allowed a quantity of rain water to penetrate to the dormant crowns which remained firm and plump, whereas those in the first box were discovered in spring to be shrivelled up and nearly exhausted; their next growth was weak, whereas that of those contained in the box and kept constantly moist was luxuriant and healthy. C. P.

Repotting Ferns

ONE of the most important points in potting Ferns is to wait until they are just moving into new growth again. We want the roots in such a state that they will take to the new soil at once. Without this we get a stale compost very early, and it is seldom advisable to water them until their roots are well into the new soil. Too large a shift is also less beneficial than a slighter one; and the annual repotting of these favourite plants is responsible for many indifferent results. A plant which is rootbound may be improved by repotting, but when barely filled with roots it does not appreciate disturbance, provided the soil is well drained and suitable. Of the vast number of Ferns now in cultivation, the Maiden-hair (Adiantum cuneatum) is far more popular and numerous than any other. I find it an excellent plan to cut down the whole body of fronds from a few of the shabbiest-looking plants, stand them in a warmer temperature until new fronds are moving freely, repot those needing it, and keep them in the warmer quarters until the new fronds are almost developed. If a small stock of plants is looked over and treated thus in two or three batches, we shall soon have a nice show of healthy and well-furnished stuff. Some Ferns, the Maiden-hair among them, may be divided when potting, but I like all Ferns best when raised from spores. The fibrous turfy loam so generally recommended for all pot

work is the best soil you can have for these plants; but it is difficult to get in many localities. In that case get the nearest approach to it you can. I know an amateur who cuts up turf by the roadside and stacks it for his small collection. Not many years ago it was considered necessary to have peat for Ferns, but less than a quarter of this is used for the same purpose at the present day. Still, we do not want to forego peat entirely. Turfy-loam, peat, and leaf-soil in equal proportions, with a dash of sharp sand, will do for almost any species of Ferns. Mix these thoroughly, and have the whole just moist enough to allow of firm potting. Never pot into soil of a lower temperature than the Ferns are growing in. Non-attendance to this has caused many disappointments, nor can this be wondered at when the roots of a plant just pushing into fresh activity are immersed in a compost some 10 degs. to 20 degs. colder than it already occupies. To make the soil firm around the ball of a plant which has recently been occupying a pot almost as large needs care. Add a small portion of soil at a time, and ram this down fairly firm with a stout label or potting-stick. Unless this be done properly water will percolate through the new soil too freely to allow of any moisture reaching the old ball without an undue amount being supplied, and there are few things in the culture of Ferns more injurious than this. Drainage is another item which needs attention. As a class, amateurs look upon Ferns as needing a good quantity of water; this is often overdone. With a few exceptions we do not find Ferns growing in wet soil while in their natural state. If we pass over the Osmunda we do not find any of our own varieties growing in wet soil; they are in sandy loam, and generally upon a bank. A dry, arid soil does not suit them any more than a wet one. What we want is a quick drainage with a soil of that medium moistness spoken of as cool. One or two crocks fitted over the drainage hole with care, and then a small quantity of cinders on top of these, will provide safe drainage. Shake away a good bit of the old compost, use clean pots, and avoid exposing the roots for any length of time.

REMINDERS FOR THE WEEK

Southern and Midland

Early Carrots

To obtain roots of these a hotbed should be made up of littery manure fresh from the stable and leaves. These should be well mixed together and placed in the pits, or if for frames the bed should be made 2 feet wider than the frame on either side. The material should be made firm by treading, and, when the rank steam has disappeared, 9 inches of fine soil should be placed on top, and when this has become warm the seed of an early Short Horn variety should be sown thinly over the bed, keeping the frame close until the young plants appear, when air should be given gradually.

Seakale

It is important to keep up a supply of this vegetable when outdoor supplies are scarce. The crowns should be placed in large pots several inches apart and covered with an inverted pot of the same size, keeping in a warm dark position. Beneath the greenhouse stage is suitable, where no Mushroom-house is available. The plants require little water while being forced, and when cutting, the heads should be severed close to the stem, when these will shoot and produce a second crop.

Tomatoes

To produce early plants that will fruit from May onwards seed should be sown in pots or pans in a compost of light sandy soil that has been passed through a fine-meshed sieve. Cover the seeds lightly and stand in a temperature of 60 degs. The receptacles should be covered with glass or paper, which should be removed so soon as the seedlings appear. Close to the roof glass is the best place to grow these on until fit for pricking off into small pots. Keeping the young plants sturdy and not overwatering are essential at this season.

Chrysanthemum cuttings

It is now time that the main cuttings of the greenhouse varieties were taken and a good part rooted. Care must be taken not to keep the surroundings too moist or many will damp off. The glass should be wiped each day, and if water is necessary the pots should be removed from the case for the purpose. When well rooted they should be removed to a shelf as near the glass as possible.

Perpetual Carnations

Where good plants are needed for next winter it is essential to get cuttings struck early. There should be now plenty of young shoots from the base of the plant to supply material for the purpose. These should be about 3 inches in length, and after severing at a joint they should be dibbled either into a shallow bed or pots filled with three parts sand and one of fine loam. They must be kept close until rooted, in a temperature of 60 degs. to 65 degs.

Streptocarpi, Begonias, and Gloxinias

These can be easily raised from seed sown now in a warm house. Pans should be well drained and filled with a mixture of finely-sifted loam, leaf-mould, and sand in equal parts to within an inch of the top. The pans should be watered with a fine-rosed can and allowed to drain before sowing the seed on the surface. A dusting of sand is sufficient to cover the seed, and the pans should be shaded until germination takes place, when this should be removed and the pans kept well up to the roof glass.

The rock garden

After the recent frosts it is important to keep a watch amongst the alpine plants or many of the shallow-rooted ones will be lost. Those that appear loose in the soil should be made firm and a few handfuls of sandy soil placed around the stems of any that show roots above the surface. Plants that show signs of early growth may be protected in some manner, and where the coarser plants are liable to encroach on their smaller neighbours they should be cut well back.

W. E. Wright.

Stockton House Gardens, Near Rugby.

Scotland

For spring flowering

There are many things which, if potted up now, will be very useful in greenhouse or conservatory at a later date and which will afford relief to the late bulbs. Among these are Spiræas, of which S. rubens, S. Philadelphia, S. Peach Blossom, and S. astilboides floribunda are good sorts. After potting, place in a cool house or in a frame for a time, and introduce into heat as required. Dielytra spectabilis and Solomon's Seal may be treated in a similar manner. Among shrubs the value of the Deutzia is well known, and plants can be advanced or retarded at will. Pernettyas are less known for this purpose, P. speciosa and the Hillsborough hybrids being most adaptable and very ornamental.

Stove

During frosty weather let the thermometer in the stove bear a relation to that out of doors. It is foolish to aim at a temperature of 65 degs. in this house when the temperature outside is 15 degs. Nevertheless, the heat must be such as will keep the ordinary run of stove plants comfortable. While frost holds, or during snowy weather, the cleaning of structure and plants may profitably be undertaken. There are few places which are free from insect pests, and if mealy bug has secured a footing nothing ought to be left undone until it is exterminated—and it can be done. It appears to be partial to certain plants—Stephanotis, for example, and the Gardenia; but perseverance will ultimately result in its extinction. Keep Crotons and Ixoras in the warmest corner of the house, and give the coloured Dracænas as much light as possible.

Fernery

Adiantums which were grown chiefly for cutting, and from which most of the fronds have been taken, may now be getting rather shabby. The plants can safely be dried off for a time, cut over, and rested for a month or six weeks. When the young fronds appear potting may be done, and if it be desirable to increase the stock this can be done by division of young and healthy specimens. In most ferneries, however, there is generally abundance of self-sown seedlings, these, if grown on, soon making useful stuff.

Hardy fruit trees

When the wall trees are finished the pruning of fruit-trees in the garden and in the orchard ought to be pushed forward as rapidly as possible. Spraying the trees to keep insect pests under control will be a good investment. Those who yet like to do a little grafting should select the right kind of wood for scions, and lay them in under a north wall until they are required. It is not much trouble to watch for good wood as the pruning goes on.

Flower beds and borders

Recurring frosts and thaws always tend to loosen the roots of plants in bed and border, therefore when a period of settled weather occurs a look round ought to be given so that plants which have become loose may be firmed up. Wallflowers, Forget-me-nots, Polyanthi, and similar things, while quite hardy, will certainly suffer if they are allowed to remain loose in the soil. If sprigs of evergreens have been stuck through beds of Tulips or of Hyacinths to protect the bulbs, these may be now removed.

Kitchen garden

In manuring the kitchen garden a thought should be given to the crop which is to be taken from any particular quarter. For Carrots, Beet, or Parsnips no fresh manure ought to be given unless it be placed very deeply. The safest course is to grow these long-rooted subjects in soil which was well manured for a previous crop. Plenty of manure, combined with deep working, is essential in the case of Onions and of Asparagus. Broccoli which may, at this time, be turning in, should be regularly inspected, and if more heads appear than can, at the moment, be used, all the plants may be uprooted and hung, head downward, in a cool shed, where they will keep until required.

W. McGuffog.

Mabie Gardens, Kirkcudbrightshire.

ALPINES

Armeria Vindictive

ARMERIA Vindictive is a variety of our native Thrift or Sea Pink (Armeria maritima), common on certain parts of the a coast, and as it has now definitely—and, think, permanently—taken a place in our ardens I would like to put on record what I now of its origin. I discovered it growing a cottage garden in a Wiltshire village in ither 1915 or 1916, I am not sure which, and ven to a casual passing glance it struck me s very superior to any form of Armeria aritima I had hitherto seen. I was unable stop to inquire about it then, but I got my ister, who was living in the neighbourhood, promise to secure me a root. This she id, and when I grew it here at Stevenage nd compared it with Armeria laucheana, the ld improved A. maritima and hitherto the est red form, I found that my first imression of the plant was well justified. It is arger in flower than A. laucheana, much nore continuous in bloom, often giving two r three crops of blossom, and the colour is ar deeper and richer in tone. It is a fine lant for the rock or the wall garden, and it s one of the finest of all border edging plants, s it makes a dense evergreen mat of foliage, mothered with its rich, handsome, crimson lower-heads at the end of May and again at rregular intervals during summer. I regret hat I can only carry the history of this plant ack to my discovery of it in the Wiltshire ottage garden. It would have been interestng to know if the cottager collected it wild r if it was a garden seedling.

Armeria maritima is a lovely thing when growing profusely by the coast. I have only nce got among it thus. That was on the Dorset coast, and it flushed the short sheepcropped turf by the acre with lovely waves and washes of varying pink. The colour varied a good deal, but never widely. There were paler varieties and slightly darker forms, and here and there an albino, but though I searched over many acres and millions of plants I found nothing startling, nothing as deep as A. laucheana even. Just a slightly varying average of loveliness by the mile.

In the rock garden one can obtain a pretty effect by planting Armeria maritima in all its varieties mixed, pink type, white, laucheana, and Vindictive. I saw this a good many years ago at Friar Park, made a mental note of it, and have repeated it often in other gardens. In such a mixture the paler type should predominate, whilst the white and the crimson, even if they are not planted with exactly the moderation with which they occur in Nature, should be used with a restraint to suggest that idea.

I acquired sometimes a gold variegated form of Armeria maritima, but it is not a particularly desirable plant. The leaves are gold in winter, become green in spring, and the flowers are a pallid pink. I should miss this plant very little if it "died on me," but it shows no inclination to do so.

Stevenage. CLARENCE ELLIOTT.

Potentilla fruticosa Farreri

For positions in rock gardens and borders suitable to shrubs of spreading habit of growth this form of the well-known Potentilla fruticosa should enjoy considerable popularity. It will thrive in most soils and situations that are reasonably drained. From the early months of spring to the late months of autumn its pure yellow flowers are freely borne.

Buddleia nanhoensis

In many rock gardens there is room for trailing shrubs of moderate growth, and Buddleia nanhœnsis, of recent introduction, is gradually making its way where such shrubs are in request. It appears to be quite hardy. I saw it in Messrs. Oliver and Hunter's nursery at Moniaive, Dumfries, the other day, and found that it was hardy there. It ought to be appreciated for the sake of its neat, prostrate, or trailing growth, its characteristic Buddleia foliage, and its racemes of violet flowers. S. ARNOTT.

Stepping-stone Plants

IF stepping stones are being used in a lawn it is necessary for convenience sake to have them set low enough so that a lawn mower can be run over them. If, on the other hand, they are used to make a garden walk, they may stand somewhat higher, the crevices being filled with low growing plants. When the right plants are chosen, they require but little attention, but there must be good soil into which they can send their roots.

Stepping stones in the rock garden

The best walk of this kind is made of natural smooth flat stones of a harmonious colour. If such stones are not to be obtained, special flagging well adapted to the purpose can be purchased, or thin cement blocks may be employed. The irregular character and the rougher surface of the stones and flags make them more acceptable, although the cement blocks look very well if not laid in too regular a fashion.

Whatever material is used, the stones or blocks must be set on a good foundation of cinders if they are not to be heaved out of position in winter. A foot of cinders under each stone will carry off the surplus water and prevent heaving. [We have found a 4-inch layer of cinders sufficient.—ED.] Care must be taken when this plan is followed to have good earth in the pockets between the stones.

There are some of the native mosses which can be transplanted from the woods or fields, and which give an appearance of age to the rocks the first year.

The Alpine Rock Cress (Arabis alpina) is a good plant to grow among the stones in a garden path. It flowers early in the spring, but keeps in good condition throughout the season. Then there is the Purple Rock Cress (Aubrietia deltoides) which is a good companion.

The Ground Ivy (Nepeta Glechoma) will grow over the rocks, but slowly enough so that it can be kept in bounds without difficulty. It has good colour, and is a very satisfactory plant for such a situation. The Creeping Phlox and the Phlox known as Moss Pink are very attractive in the spring, but must be pruned hard at intervals to keep them from occupying too much space.

The Flowering Moss (Pyxidanthera barbulata) is an attractive little plant to use in crevices between stepping stones if it can be obtained. Still another plant of value and one which flowers well into the summer is

Sedum acre, sometimes called the Mossy Stonecrop. Its yellow flowers are very pretty.

Periwinkle or Vinca minor is one of the easiest of the trailing plants to care for, while the Rock Speedwell (Veronica rupestris) also makes a good appearance in summer although growing somewhat taller.

The small-leaved Japanese Evergreen Euonymus radicans minima is an especially desirable plant when foliage alone is considered. It grows close to the ground, has delicate and refined leaves, and will keep green through the winter in most parts of the country. It will grow in partial shade. Perhaps the best plant to use in a walk which is in shade most of the day is the Sweet Woodruff (Asperula odorata).—*Horticulture.*

[Other plants suitable for the purpose are Mentha Requieni, Acæna microphylla, Arenaria balearica (beside steps), Campanula pusilla, Dianthus squarrosus, Linaria pilosa, Erinus alpinus (in steps), Helxine Solierolii, Saxifraga muscoides in variety, Thymus Serpyllum and T. lanuginosus.—Ed.]

Vines at Rest

THE Grape-grower will now be able to form a correct estimate of the health and fruit-bearing capacity of his Vines. It is when the berries have come to the colouring stage that any constitutional defect can be perceived. If there is little or no tendency to shanking, or mildew and red-spider have not been disturbing factors in the growing season, the path of the Grape-grower is an easy one. He has only to prune his Vines and provide for manurial treatment by laying in a stock of what he may deem most useful for the purpose. Here I may remark that the best Grape-growers, especially those who grow for profit, are very catholic in their use of stimulants. They do not reject anything that is likely to put fruit-bearing force into their Vines, and they rarely use the same kind of manure two years in succession. Those who can obtain dung use it, if possible, every third year, otherwise they employ some of the concentrated manures that are so popular, but making a change every season. I mention this as it is a very important cultural item the consideration of which should never be delayed, as is not infrequently the case, until the growing time arrives and the pressure of work begins to make itself felt. The first thing to do is, of course, to see to the pruning, which should be undertaken as soon as the last bunch is cut. The Hambro crop is practically over by the middle of November. In former years some growers managed to keep Hambros until Christmas. I have done so myself, but there was invariably a considerable amount of waste. The Hambro is thin-skinned, and acutely feels the effect of prolonged damp weather, and, if kept for a couple of months after ripening, loses weight. I grow this Grape, but am fortunate in having a retail trade, which enables me to cut as soon as ripe, and I finish by November, by which time some of the forwardest of the Alicantes are ready. In one respect this season has been a surprise to me. The Alicante began to colour quite a fortnight before its usual time, and was ripe by the middle of October. The berries were of full size, well coloured, and, what was much to the purpose, they weighed up well. I can only surmise that the roots are in a very healthy condition and well provided with fibres. They have been planted over 30 years. Finding, some seven years ago, that the roots had struck downwards into the subsoil, I took advantage of a period of hard frost to thoroughly overhaul them, which, owing to all the roots being inside, could be easily done. Wherever possible the roots were brought up. Some were cut through, great pains being taken to preserve every bit of fibre. Every year I make a practice of examining a portion of the border, adding new light soil, which has a stimulating effect on root formation, and although the Hambros are 50 years old they are still bearing fair crops and the Grapes colour well. In the case of Vines that have passed their best the best way is, of course, to replant with young Vines, but this means waiting three years for a full crop. For the man with one house the loss of the crop for a couple of seasons is a serious matter, and he therefore welcomes a method of restoration which will not involve any great loss and will enable him to maintain the supply. If the work is carefully done, preserving all fibrous roots, there will be a great improvement in the quantity and quality of the crop. Shanking, which is often so troublesome, is generally cured when the roots are brought up within the influence of sun and air; in fact, it is the only real and permanent remedy. If the grower does not wish to lift the Vines he may restore their health and productiveness by the means above described, and in the case of the larger roots the increase of active fibres is stimulated by notching them at intervals. In the course of the season many strong white roots will form, and the foundation will be laid for a renewal of health. Naturally, there will be some check the first year, but the following year the grower will reap the reward of his work. It is difficult to keep the roots of Gros Colman within measurable distance of the surface. They have great penetrating power and quickly find their way into the damp subsoil. Should this be of a heavy nature some difficulty will be experienced in colouring and properly ripening this Grape, which needs a longer season than do most other kinds, and is apt to be deficient of colour. It is a Grape of noble appearance when in its best form, and is such a heavy cropper that it pays for the extra amount of fuel that it needs. Unless the soil is naturally very favourable and the drainage good I do not see how this Grape can be profitable unless the grower can keep the roots within measurable distance of the surface, and this can only be accomplished by a periodical examination of the border. There is such a big difference between the price of well-finished Colman Grapes and those that are deficient of colour and size of berry that the grower is well paid for the labour necessary for keeping the roots in good condition. A man in this neighbourhood had two large vineries which had been in existence some 15 years and which had been very productive. Then the Vines began to show unmistakable signs of decadence. The bunches and berries were small, and mildew set in, a sure sign that the roots were in a sluggish condition. As he could not see his way to replanting, I advised him to deal with them as above described. This he failed to do, the consequence being that he had to sell his Alicantes and Colmans at 6d. per lb., which, of course, left little or no margin of profit. Had he dealt with a portion of the border annually when the Vines were at rest he would have more than doubled the value of the crop.

Some growers make a practice of scraping and dressing their Vines annually. I fail to see the need for this when there is no mildew, mealy bug, or fungus of any kind on them. A market grower here who produces good crops washes the rods every year. He says that if there is anything on them one gets rid of it. This is sound practice, for in gardening prevention is better than cure. If once insects or fungoid pests become firmly established it may take a couple of seasons to eradicate them. J. Cornhill.

West Surrey.

VEGETABLES

Potatoes: Their cultivation in 1926

IN probably five cases out of every hundred Potatoes are grown with all the care and attention that the cultivator is capable of bestowing upon them. The results invariably justify this interest. But it is a fact that, in the majority of cases, tubers are placed in the soil and left to grow as best they can, simply because a Potato tuber will grow when heat and moisture surround it. I have during the past 10 years been closely associated with many enthusiasts who entered into friendly competition, and the astonishing results have greatly impressed me. These competitions encouraged cultivators to grow big crops of good-sized, high-quality tubers in a given space, and not from so many tubers occupying any unreasonably large space. The latter is neither economical nor educational; it tends to waste. Our aim should be to grow heavier crops in the future, following, as nearly as possible, on the lines favoured generally by the grower for market. We ought to prepare the soil better, to study manures more, to treat the seed tubers of our maincrop Potatoes similarly to those of the early sorts, disposing them in thinner layers several weeks prior to planting, as it is during this period that new shoots grow apace, become worthless for planting, besides considerably weakening those tubers and rendering them less valuable for planting. We should carry out the planting with more care and attend to hoeing and earthing more closely; then, in our small gardens even, the extra yield will be astonishing. Potatoes will be very dear during the spring because of severe frosts in northern counties and the shortage owing to the ravages of disease. On this account fewer tubers should not be planted. If every private cultivator—those who own small gardens and have allotments—planted one peck more this year than he did last the total yield throughout the country would amount to many thousands of tons.

More than 30 years ago I was acquainted with the late Mr. James Clark, the raiser of that grand variety Magnum Bonum, Clark's Maincrop Kidney, and several others of sterling merit. I had charge, at the time, of the garden adjoining the one in which Magnum Bonum was raised. Mr. Clark took as much interest in his Potatoes during the winter as he did in the summer. All his seed tubers were exposed to view throughout the winter. Every reader of Gardening Illustrated who possesses tubers should, without delay, strengthen them by full exposure to light and air when the weather is favourable. The temperature of the store-room should not be allowed to fall below 37 degs., nor should it exceed 45 degs. for several weeks to come. Manage this store as you would a greenhouse, ventilating and closing according to weather conditions outside. As much wood-ash as possible should be collected and stored dry in every garden. It is a wonderfully good stimulant; also organic manures, dry and well rotted, should be stored ready for use. There is a good use for lime, too. Last year many tons of coloured tubers were spoiled by worms. If, before the tubers are covered with soil, a sprinkling of dust-dry lime and one of wood-ashes be applied, worm-eaten tubers would be fewer and the crop generally much heavier. Before the Potatoes are earthed up the coloured varieties should again receive a light sprinkling of dry lime. When in a dry condition retentive soils can-

t be broken up too finely. The naturally ht soils are readily prepared for the seed bers. All sprouts, with the exception of e, or at most two, should be removed from e latter now.

DISTANCE APART AND DEPTH TO PLANT.—ırly varieties should be planted 20 inches art in rows and 10 inches from tuber to ber; mid-season varieties, 24 inches apart the rows and 12 inches from tuber to tuber. ıincrop varieties, 36 inches apart in rows d 14 inches from tuber to tuber. As reırds depth a lot must depend upon the aracter of the soil. In light soil early sorts ould be planted 5 inches deep; in medium avy soil 4 inches deep. Maincrop sorts ould be planted 6 inches deep in light and nches in medium heavy soil.

EARTHING-UP.—This work should be done ıen the haulm is 6 inches to 9 inches high. ıe runners, on which the new tubers grow, rmeate the soil in the centre of the ridge, there is most moisture there, and so swell a larger size. I have followed a plough ed to earth-up Potatoes in a field many nes, when the work was unduly delayed, ıd found runners bearing tiny new tubers in eat numbers fully exposed, and others, also great numbers, cut off. Result, a light op of undersized tubers at lifting time.

Where possible, all rows should be north south, then both sides receive the maxium amount of sunshine and dry normally ter rain. The north sides of rows east to est remain in a wet state longer than the uth sides, and in wet seasons there is more sease of tubers on the north side. When e experience exceptionally dry summers ere is a little advantage in having rows east west, but we do not know beforehand what nd of weather will come. No doubt many ed tubers will be cut this year. Where this done the cultivator should cut the tubers out a fortnight before planting and sprinkle e dust portion of charcoal on them imediately they are cut.

Late or maincrop varieties should all be anted before April 10th if possible, to allow em sufficient time to grow. When planted te in the spring and a dry spell comes in ne such varieties as Rhoderick Dhu receive check to growth, rain comes soon after the eck, and a second growth is made—growg-out it is termed. Get the plants well tablished by the end of June.

GEORGE GARNER.

Culinary Peas

MOST of us who possess a garden big enough to grow vegetables in strive to get as early a picking of Peas as possie. Naturally, we should do all we can to ısten the crop. There are divers opinions nong cultivators as to the best method to llow to attain this end, some averring that sowing in November gives the earliest relts. It may be so in some localities, given sheltered garden, but in districts where the rden is much exposed and severe frosts perienced the case is different. Others ink that if they can get the seed into the ound quite early in February the seedlings, soon as through the soil, grow away with tle or no check if well attended to in the atter of protection, early moulding and aking, ere the growths get crippled, while hers avow that sowing in long narrow xes or 60 size pots early in January and ıite cool treatment under glass until the eather is seasonable, towards the end of ebruary to transfer them to open quarters the most practical method to secure good ants and an early crop. Sowing in the ıen for the earliest crop would be quite in der, provided we could rely upon the soil ing suitable at the date we like to get them in, but so early in the year this is frequently impossible. When sowing the seed in pots or boxes it is a mistake to crowd them; two or three good plants in each pot are preferable to eight or 10 weakly ones. It is only a question of a few more pots or boxes, whichever the case may be, and when carefully knocked out of each pot or taken from the boxes and carefully planted the check from disturbance should prove infinitesimal. As regards sowing thickly in the open in case of losses this may be all right if we only make sure each plant has a space of 3 inches or 4 inches from its neighbour before they commence to climb the sticks. Main and late crops should not be less than 6 inches asunder, and if the rows cannot be isolated they should not be less than 6 feet apart, intercropping with such dwarf things as Lettuce, Spinach, or Turnips.

For an early gathering I prefer one of the many dwarf varieties so accommodating on a warm, sheltered border when the rows stand from 2 feet to 3 feet apart, according to the height they reach. All of them yield much better crops when afforded twiggy branches to keep the haulm erect. Taller-growing earlies should have a 5 feet space between each row. Mice are the greatest enemy to early-sown Peas, quickly spoiling the rows just as the seed begins to sprout. The gardener has to adopt various devices to protect them, damping the seed and rolling in red lead or diluted paraffin, chopped Gorse spread over before covering with soil, and trapping them on the surface. The ground for Peas, especially maincrop and late varieties, needs to be in good heart and deeply dug, or, if sown in trenches, their width should not be less than 15 inches, and if manured just previous to sowing the seed it should be kept well down, say 18 inches. Here it will benefit the crop while podding. Seed may be sown in the open from early February to early June; some a month later than this by choosing an early variety. Here, again, my preference is for standard sorts, as Autocrat, Gladstone, Quite Content, or Ne Plus Ultra, and as regards first earlies, American Wonder, The Pilot, Little Marvel, and Gradus or Carter's Daisy are all of excellent flavour, and the last an enormous cropper. These may not meet with general approval, but they can be relied on in most soils and situations.

J. MAYNE.

Vegetable seeds to sow now, or shortly

If there is room in a warm house sow Tomatoes, to be grown in pots or boxes, or in any other manner. The seeds will soon germinate in a temperature of 60 degs. to 65 degs., and as soon as they are large enough pot them off into single pots. Cucumbers and Melons may also be sown now to plant a warm house when ready. Onions for transplanting may be sown during this month in boxes, but they will do in a lower temperature, or, at any rate, should be moved to an intermediate temperature as soon as up.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

Growing Sweet Briars, etc.

Will you kindly tell me how to grow and prune Penzance Sweet Briar Roses, Rosa Moyesi, and R. Zephirin Drouhin?

Z. W. X.

[The Roses you name are all of strong, indeed vigorous, growth, and before planting takes place the ground should be trenched to a depth of 2½ feet at least, and a quantity of old farmyard manure added to the soil as the work proceeds. This, however, should not be left in layers, but well mixed with the soil. Should the latter be of a heavy clayey character a little chalk, lime, or brick-bats may, with advantage, be added to sweeten and aerate the soil. If your soil is on the light side the manure is all that you require. When I point out to you that a good plant of Penzance Briar, also Rosa Moyesi, may be 12 feet high and the same in diameter you will understand what space is required for them. I have such plants under my care as I write. Pruning, as it is generally understood, should be left alone in the case of these free-growing Roses. All that is necessary is to carry out a little intelligent thinning of the old or declining branches, shortening back slightly in order to maintain a shapely specimen those robust growths which tend to overbalance the shrub. The long arching growths should not on any account be cut away, as these produce a gorgeous display of blooms throughout their entire length. In the case of R. Zephirin Drouhin severe pruning is not recommended, just a little thinning of the old wood and spurring back of the side shoots to about six or seven buds, whether grown as a large bush, on a column, or on a fence.—E. M.]

Manuring newly-planted Roses

(Rose-trees).—Seeing you have trenched the ground, and if the same is in good heart, there is no need to apply any manure, which should be given when the plants are growing freely and showing bloom in the coming summer. Then a mulch of rotten manure would do good, as the roots are not sufficiently vigorous at the present time to benefit from the manure.

GREENHOUSE

Aspidistras failing

(S.).—You tell us nothing as to the size of the pots, or when the plants were repotted, both of which would have helped us considerably in suggesting a cause for the failure. You have either allowed the plants to get very dry at the roots, have overwatered them, or allowed the water to stand in the saucers in which the pots are. If you turn a plant out you will probably find that the drainage is choked and that the soil is sour. If so,

clear the drainage and leave the repotting till next April, unless you can give the plants some heat, in which case repotting may be done at once.

Increasing Cannas

(L. M.).—In February cut away the tops and divide into small portions, each one having a crown and, of course, some roots. A large clump of a Canna will break up into several small crowns, each of which will make a plant. After division place the divided portions in a box, with some soil between them, and stand on a hotbed. Keep them on the dry side for a time and syringe daily with tepid water. When new growth appears pot off each divided portion into a 5-inch pot, using two parts loam, one part old cow manure, and some sand, standing them in a close frame or on the hotbed. When the leaves are about as large as one's hand remove to a cold house, and finally to a cold pit those you want to plant out at the end of May. When grown outdoors generous treatment must be given, trenching the ground well and incorporating plenty of cow manure.

FRUIT

Loganberry damaged

(Carlow, Ireland).—From the description you give of the damage done, we think it to be due to the Raspberry-stem bud caterpillar, as this injures and kills Raspberry canes in precisely the same manner. The female moth first lays its eggs in the open blossoms. The resulting maggots or larvæ remain in the fruit until full grown, and then descend to the ground and pass the winter in a cocoon from which caterpillars emerge in spring, ascend the canes, and attack the buds, which they so damage that the growth, when pushed out, ultimately dies. All such growths should be pulled off and burnt. Also be careful not only to cut out canes killed by the depredations of the caterpillars, but all old fruiting canes after the crop has been gathered, and keep the plantation in as clean a condition as possible, removing bits of sticks, stones, and anything likely to provide hibernating quarters for the full-fed larvæ. During late winter you might try the effect of spraying the canes with a caustic alkali solution at weaker strength than is used for fruit-trees.

Walnut failing

(Juglans).—From what you say the cause of the Walnut failing is due to root disturbance, as you have evidently destroyed a great many of the roots and thus weakened the growth. We should advise you to go carefully over the tree and remove all the dead wood. Then clear away all the inert soil down to the roots and fill in with some good loam to which have been added some rotten manure, and if your soil is clay a good sprinkling of lime. The soil is evidently quite exhausted and wants renewing. Walnuts like a carbonaceous soil, a chalk base suiting them admirably. A dressing of kainit, potash, and soot given in June and forked in should do great good.

VEGETABLES

Tomatoes failing

(Constant Reader, Forres).—It is very difficult to say what may be wrong with your Tomatoes, as you give us no clue as to how and where you are growing them. Judging from the leaves you send us, you are keeping them too close and warm, as they seem very much drawn. Tomato culture in the chill days requires great care. Watering must be very carefully done, and attention to airing so as to get the plants sturdy must be given. If you could send us further particulars we may be able to help you further.

MISCELLANEOUS

A plague of white fly

(Elizabeth Northcott).—This is a troublesome pest and is very difficult to get rid of. Vaporising frequently with XL All white-fly vapour is the only way to keep it down. This can be had from G. H. Richards, Ltd., Borough High Street, London, S.E.

Manure for lawn

(W. Ray).—A dressing of soil made up of garden refuse, roadside trimmings, old potting soil, leaf soil, soot, wood ashes, and rotted manure is a good mixture for poor lawns. Before using it run it through a sieve to remove all stones. Over the lawn strew this mixture, which should have been well mixed at the rate of 1 bushel per rod. Failing this apply basic slag at the rate of 5 lb. per rod. This is a slow-acting manure and is liable to produce a lot of white clover. Give a dressing of soot in February and one of sulphate of ammonia, 3 lbs. per rod, in April or May. If you do as above suggested the Grass should grow freely and a fine lawn result. We remember the then superintendent of the Embankment Gardens dressing the Grass with old Mushroom-bed manure to the thickness of 2 inches or 3 inches. This was broken down during the winter and the improvement in the Grass the following spring was wonderful.

SHORT REPLIES

Mother W.—(1) You give us no clue as to where you are growing the Scillas, but our experience is that they must be grown quite cold. (2) Seeds of the Antirrhinum are easily raised in a greenhouse. Of course, germination is furthered if slight heat can be given.

Withypool, West Somerset.—The Violet specialist in question is Mr. J. J. Kettle, Corfe Mullen, Dorset. Your letter was unsigned.

Carlow, Ireland.—The Primula leaves were in such a dry condition that it is hard to say definitely what is the cause of the trouble complained of. They should have been packed so that they reached us in a fresh condition.

NAMES OF PLANTS

Tunbridge Wells.—1, Aloe arborescens; 2, Aloe arborescens frutescens; 3, Sempervivum Haworthii.

NAME OF FRUIT

G. F. K., Hants.—Apple Wellington, undoubtedly the best cooker for your purpose. Keeps till April.

CATALOGUES RECEIVED

F. Street, Heathermead Nurseries, West Chobham, Surrey.—Rhododendrons, Azaleas, Kalmias, trees and shrubs.

Robert Veitch and Son, 54, High Street, Exeter.—List of garden seeds.

Dobbie and Co., Ltd., Edinburgh.—Catalogue of plants for spring, 1926.

W. Smith and Son, Exchange Street, Aberdeen.—List of vegetable and flower seeds.

Carl Beck and Co., Quedlinburg.—List of seeds.

Barnham Nurseries, Ltd.—Select list of trees and shrubs.

Toogood and Sons, Ltd., Southampton.—Guaranteed garden seeds.

J. R. Pearson and Sons, Ltd., Lowdham, Notts.—List of reliable seeds.

Dickson and Robinson, Manchester.—List of seeds.

John E. Knight and Son, Wolverhampton.—Guide to garden success.

W. J. Unwin, Histon, Cambs.—Sweet Peas, garden seeds, Gladioli, etc.

Fidler and Sons, Reading.—List of seeds.

Torrance and Hopkins, Meadow Nursery, Busby, near Glasgow.—Chrysanthemums an Dahlias.

Alexander and Brown, Methven Stree Perth.—My Garden Book, 1926.

Barr and Sons, King Street, Covent Ga den.—Seed guide for 1926.

The Leicester Lime Co., Ltd., Wells, No folk.

Wisley trials 1925

The following awards have been made t Turnips by the Council of the Royal Horticul tural Society after trial at Wisley:

HIGHLY COMMENDED.

Alike	Early Red Milan	sent by Messrs.		Kelway
	,, ,, ,,	,,	,,	Webb.
	Red Top Milan	,,	,,	Carter.
Alike	Snowball	,,	,,	Wiboltt.
	,, ...	,,	,,	Nutting.
	Model or Snowball	,,	,,	R. Veitch.
	Covent Garden Snowball ..	,,	,,	Barr.
	Snowball Improved	,,	,,	Olsen.
	Model	,,	,,	Watkins an Simpson.
	,, ...	,,	,,	W. H. Simpso
	Model White ..	,,	,,	Cullen.
	,, ,, ..	,,	,,	Dobbie.
Alike	Early Red Top Globe	,,	,,	Cooper, Taber
	Red Garden Globe	,,	,,	R. Veitch.
	Red Globe	,,	,,	Cullen.
	,, ,, ...	,,	,,	W. H. Simpso
	Red Globe Selected	,,	,,	Dobbie.
Alike	Chirk Castle ..	,,	,,	Cullen.
	,, ,, ..	,,	,,	W. H. Simpso
	,, ,, ..	,,	,,	Carter.
	Chirk Castle Black Stone ..	,,	,,	Barr.
	Chirk Castle Black Stone ..	,,	,,	Dickson an Robinson.

COMMENDED.

	Extra Early Milan	sent by Messrs.		R. Veitch.
Alike	Early Milan ..	,,	,,	W. H. Simpso
	,, ,, ..	,,	,,	Dobbie.
	White Milan ..	,,	,,	Cooper, Taber
Alike	Early White Dutch	,,	,,	Dobbie.
	White Flat Dutch	,,	,,	Daehnfeldt.
	Early White Globe Strap-leaved ..	,,	,,	Cooper, Taber.
Alike	Green Top Stone	,,	,,	Barr.
	,, ,, ,,	,,	,,	W. H. Simpso
	,, ,, ,,	,,	,,	Cullen.
	Stone Green Top	,,	,,	Kelway.
	Yellow Maltese Improved ..	,,	,,	J. Carter.
	Sunrise	,,	,,	J. Carter.
Alike	Golden Ball ..	,,	,,	Cooper, Taber
	,, ,, ..	,,	,,	Kelway.
	,, ,, ..	,,	,,	Cullen.
	,, ,, ..	,,	,,	Daehnfeldt.
	,, ,, ..	,,	,,	W. H. Simpson
	,, ,, ..	,,	,,	Watkins & Simpson.
	,, ,, ..	,,	,,	Dobbie.
	,, ,, ..	,,	,,	Wiboltt.
	Orange Jelly or Golden Ball ..	,,	,,	Webb.
	Orange Jelly selected	,,	,,	Barr.
	Golden Ball Improved	,,	,,	Olsen.
	Golden Rose ..	,,	,,	Carter.

Benn Brothers' Other Journals

The Cabinet Maker.—Retail Booklets an Leaflets; "Interior and Window Display," by H. E. Coombes; The Inside of a Mattress

The Chemical Age.—Chemical Engineering Conference; Hydrogenation Problems Monthly Dyestuffs Supplement; "A Critica Review of the Dyestuffs Situation," by H Sutcliffe Smith (Chairman of the Colou Users' Association); The Dyestuffs "Who' Who"—(1) Colonel Sir Edward Brotherton.

The Electrician.—"A New Method o Directional Control," by Paul D. Tyers "Notes on Wireless Matters," by L. B Turner; The Physical Society Exhibition.

The Fruit Grower.—"Science and th Countryside," by Sir John Russell; "Tar Oi Winter Washes," by E. M. Bear; Evesham Asparagus Problems.

The Gas World.—Internal Corrosion of Gas Pipes; Methods of Selling Gas; Efficiency o Gas Appliances.

The Hardware Trade Journal.—The Hardware Trade Outlook in Ireland; Tools Used by Metalworkers—Files; Facts About Roofing Materials; Opening of Enamelled Hollowware "Safeguarding" Inquiry.

GARDENING ILLUSTRATED

2445—Vol. XLVIII. JANUARY 16, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

sas... 35
Allen's Ever-ing 42
Allington Pippin 33
a very late... ... 33
ES, DESSERT, R BEGINNERS... 31
sanctum (the ck Arum) 43
istra starved ... 43
French 41
sowing Broad, ors 41
Berberis dictyophylla 39
Border, planting 44
CLEMATIS - COVERED PORCH, THE ... 39
Clerodendron trichotomum 32
ERICA CARNEA... ... 36
ERICA LUSITANICA 36
EUCALYPTUS, THE COSMOPOLITAN ... 33
Euonymus radicans var. Kewensis 39
Fern notes 44
Flowers, sweet-scented annual 35
Fruit trees, pruning ... 42
Garden at Friar Park, sundial... 33
Gladioli, scented 35
Gooseberries for flavour 33
HEATHS, HARDY, PLANTING... 36
Heaths, the Prickly (Pernettya mucronata) 36
Hotbeds, making 41
HOLIDAY ON A SYSTEM, A... 34
Hyacinths, exhibition 43
Hyacinths for Christmas, prepared 33
Isatis Glauca... 33
Lapagerias in Cornwall... 33
Lawyer Vine (Rubus australis), the 39
Lilacs grafted 32
Lily, African (Agapanthus), growing the 43
Lilium candidum ... 44
Limnanthes, the genus 34
Peaches and Nectarines... 42
Propagating-house, the 43
Propagator, a home-made 43
Plants, room, treatment of 42
Potatoes, early 41
Primula obconica poisonous 44
Rhubarb 41
Roses, climbing, in cold house, pruning 44
Roses for fence 44
Scabiosa columbaria var. rosea 35
Shrubs, some winter-flowering 38
Strawberry Trees (Arbutus), the 39
Vinery, early 42
Vinery, mealy bug in the 42

Dessert Apples for Beginners

Although the usual planting season is well advanced, there is still plenty of time to plant Apple trees with every chance of success. Indeed, owing to the variable weather experienced so far, little, if anything, has been lost by delaying the operation

ONSIDERING the confusing number of varieties in existence, beginners must often find it extremely difficult to make a able selection for the garden, particularly ey attempt to choose from the varieties on the exhibition table. A knowledge e characters and fruiting qualities of the rent kinds is essential to success, and aps a little guidance may be helpful to ding planters. I have often been d to name the best n dessert varieties the garden, but one tates to attempt as it is largely a tion of individual and opinion; there however, many ts to consider apart m flavour and ity, and I believe a tion from the following varieties would rally give satision.

he old Devonshire rrenden is still thy of a place in ry garden. Its cipal qualification of course, its exme earliness, as yone appreciates a Apple during ust. The wonder-colour and pleasant our also recommend It does well in most and localities, and appiest on standards alf-standards on the b stock, but gives d results as a bush Paradise if pruned tly.

eauty of Bath is other first early riety of excellent our and appearance. It must, however, gathered and eaten straight away, as it loses its quality. Trained trees on the adise stock produce particularly hande fruits of this variety.

or those who like a soft, mild Apple early he season, Lady Sudeley may be recomded. It is a beautiful Apple of brilliant uring, and if eaten at the right time—August or early September—is aromatic refreshing, but it quickly loses its our, and becomes soft and mealy. This variety bears on the tips of the shoots and does best as a half-standard or free-growing bush, where pruning is reduced to a minimum. To follow these I recommend St. Everard, a lovely September Apple which, for quality and flavour, I place second only to Cox's Orange Pippin. It is a comparatively new variety, and good trees are not plentiful, but, if obtainable, it should find a place in every garden, except on heavy and wet clay soils. As an espalier or cordon it is excellent.

Apple Beauty of Bath, in season in August

Fruits very prettily striped and appreciated for early dessert

Worcester Pearmain is not often favoured by connoisseurs, but it is none the less a grand early Apple, and is probably the most profitable variety grown. Its good cropping qualities and wonderful colour and appearance usually outweigh its alleged shortcomings. The chief fault lies in the somewhat dry texture of the flesh, as it lacks the juice and melting qualities of the choicer varieties, but if eaten when just ripe the flavour is rich and aromatic, and in some gardens I have known Worcester Pearmain to be an Apple of finest all-round quality. It is a reliable cropper, and although it does well under most conditions it does not like a too free use of the knife, and gives better results if allowed to grow more or less unchecked.

James Grieve is an Apple which every amateur should plant. It is a handsome fruit, freely produced, and its rich, juicy texture and superb flavour make it the Apple *par excellence* for early autumn. If I were restricted to one early Apple it would be either James Grieve or St. Everard, I am not quite sure which. James Grieve gives excellent results as a trained tree on Paradise, and although, like most Apples, it prefers a warm, well-drained soil, it rarely fails to give satisfaction. It is not a keeper, and is best eaten as gathered, about the end of September.

This brings us into October, when we have the choice of several good varieties. First on the list I place Ellison's Orange, a variety of the finest quality from every point of view. As a trained tree it gives excellent results on most garden soils, and for superb flavour and general attractiveness must always rank with the first half-dozen.

On a light soil which is well treated Gascoigne's Scarlet is well worth a trial. It is a beautiful Apple, unique in its cherry-red colour, and of a rich, sugary flavour, although rather on the large side. In many districts it is regarded as a kitchen Apple as it cooks well, but in the opinion of many excellent judges it is one of the finest dessert varieties.

For those who study appearance and like a pretty Apple for the sideboard Wealthy and Rival may be safely recommended. They are both handsome and beautifully marked, of excellent flavour and quality, and are at their

best during October. For espalier trees beside a garden path there are few more suitable varieties. Wealthy is of American origin and likes a rather sheltered situation.

For November and December the popular favourites are Cox's Orange Pippin and Blenheim Orange, which need no description here, but the amateur should know that both these Apples have their faults, and are not always profitable to grow. Cox's Orange Pippin is exacting in its requirements and is susceptible to nearly all the ills that Apple flesh is heir to. It likes a well-drained, warm soil on the light side, such as a rich alluvial deposit overlying gravel, and is rarely successful in districts where the soil is heavy, or cold and wet. Moreover, it requires careful pruning, and must not be cut back too severely. Blenheim Orange is a fine Apple, but it is very slow to reach the bearing stage, and is often disappointing for this reason; it is quicker if grown as a bush on the Paradise stock. For late autumn and up till Christmas I would much rather advise the beginner to plant Allington Pippin. This is an excellent Apple from every point of view, perfect in form and appearance and of first-class flavour and quality.

American Mother is another fine Apple for the early winter. Of beautiful shape and colour, its flavour and keeping qualities are all that may be desired, and it is an excellent grower and cropper.

Among the Russets I would recommend Egremont Russet as the best of its class. The flavour is particularly good, and it crops well and keeps well. It is usually classed as a November Apple, but I find it still very good at Christmas.

Of the late varieties, Fearn's Pippin is a pretty fruit of fine quality and flavour. It makes an ideal tree for the small garden and keeps fresh and crisp until March.

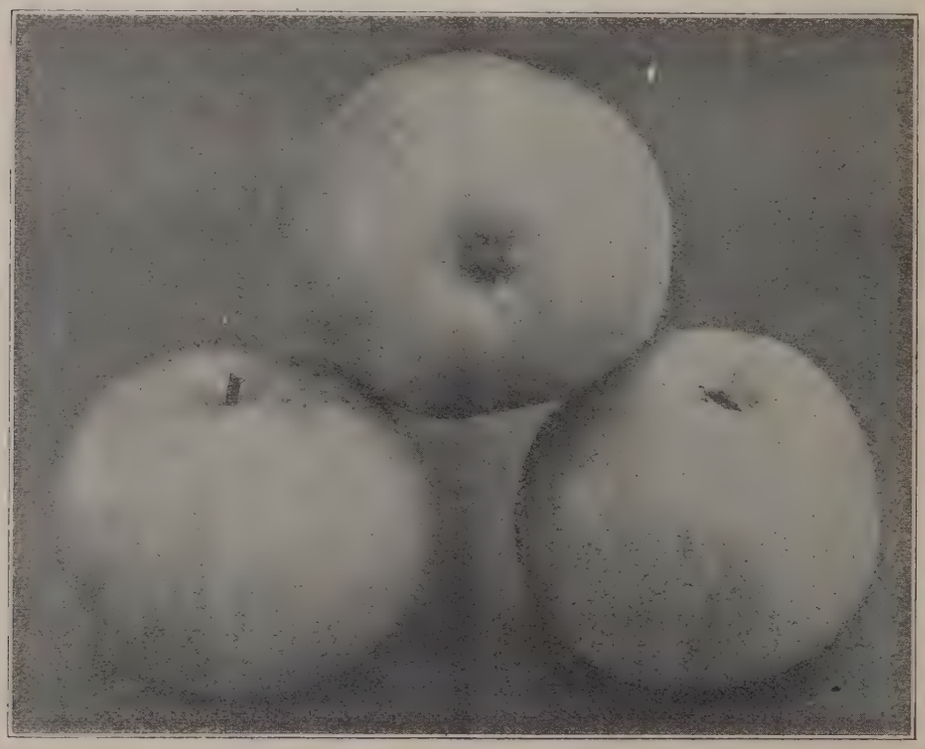
Another late Apple I never hesitate to recommend is Bess Pool. It is not commonly grown, and its many good qualities are often overlooked. It is a handsome Apple, and from January to April it is of first-rate quality, being firm and crisp, and agreeably flavoured. It is also an excellent cooker and a good reliable cropper, particularly on permanent standard trees. It flowers very late in the season, and thus escapes damage by late frost and cold winds, for which reason it is most suitable for cold and exposed situations.

Finally, as a late keeper I would choose Sturmer Pippin. It is an Apple of first-rate flavour and quality, and will keep well into the following summer. It should be left as long as possible on the tree, as, indeed, should any variety which is intended for keeping, for if gathered too early the fruits shrivel in storage. Sturmer Pippin does best in a warm, sunny situation.

To sum up, if I were asked to recomm to a beginner the six most suitable varieti would choose, for espaliers and other stricted trees, St. Everard or Beauty of Ba James Grieve, Ellison's Orange, Ri Allington Pippin, and American Mother, for standards or half-standards, Devonsh Quarrenden, Worcester Pearmain, Jar Grieve, Allington Pippin, Bess Pool, Sturmer Pippin.

C. H. MIDDLETON

Enfield, Middlesex.



James Grieve, an Apple which every amateur should plant

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Grafted Lilacs

IN your issue of January 2nd "A Scottish Gardener" refers to the reprehensible practice of grafting Lilacs on Privet. I quite agree with his remarks. I have found it impossible to obtain any of the newer varieties of Lilacs on their own roots in this country. Even our leading nurserymen can only supply the older varieties, and not always these, on their own roots. I believe that in most nurseries nowadays the common Lilac and not the Privet is used as a stock. This is, perhaps, a lesser evil, but why graft or bud at all when the Lilac can easily be propagated by means of cuttings? A grafted bush means more work for the poor gardener. He must be constantly on the look-out for the ever-growing suckers, or in a few years' time a common Lilac may be found blossoming where once a Miss Ellen Willmott or a Souvenir de Louis Spath had been planted. Possibly the real reason why nurserymen persist in budding and grafting is because saleable plants are obtained in rather less time by these means than would be the case with plants struck from cuttings. But to the lover of hardy shrubs it is a misfortune, and several amateurs of my acquaintance have been obliged to send their orders to France, where own-root Lilacs could be obtained.

Lilacs are not the only plants that are grafted needlessly. I recently sent an or for some specimens of Populus lasiocar and the reply came back, "Grafted trees o in stock."

L. B. W

Wells, Somerset.

—— Readers of GARDENING ILLUSTRAT will peruse with pleasure the remarks of Scottish Gardener" (p. 2) and his strictu upon the prevalent practice of grafting Lila One can only express the heartiest appro of these, but the question remains: Will practice be stopped by any amount of writi on the subject? I fear not, but the res may be to induce purchasers of Lilacs to a for plants on their own roots, and this m possibly have the effect of leading some p pagators to direct more of their attention this method of propagation. For how ma years have you advocated growing Roses their own roots! About two years ago I h occasion to try to secure a number of Ro on their own roots for a friend, and on quiry of a nursery where own-root Roses u to be largely propagated I was disappoin to find that only a few varieties could be s plied on their own roots. Inquiries elsewh were no more fruitful. The same may said of numerous other subjects. Take Clematis, for example, or the Pæonia, a you will meet with the same difficulty securing own-root plants. With nan Rhododendrons a similar trouble arises, w the result that the good variety becomes l in time and R. ponticum is left. The fact that the commercial side of horticulu seems to demand rapid propagation of n varieties and that the "slow and sur systems have to give place to the rapid on which are less satisfactory.

Ess.

Clerodendron trichotomum

I agree with Sir Herbert Maxwell about trichotomum (issue December 26th, p. 78 having grown it both in Gloucestershire a Monmouthshire. From the middle to the e of August the first buds opened, and towar the middle of September I considered it w at its best, and there were generally so decent blooms at the end of October. T plants were grown in an ordinary shrubb and faced due west. As regards

C. FŒTIDUM, I consider this species much more conspicuous for colour, but as hardiness and compact growth I cannot ag that it exceeds C. trichotomum. It is more spreading habit, but the leaves are o beautiful dark green colour and the ste purple; the clusters of bloom, which are o rich carmine, as Sir Herbert Maxwell stat each measure from 4 inches to 6 inc across. The smell of the leaves I have ne particularly relished when crushed, but, Sir Herbert Maxwell states, they resem that of cold roast beef.

C. FARGESI.—This is a beautiful n shrub, but as it is not at its best un

middle of October it could not be recom-
nded for northern gardens. For southern
inland gardens I can recommend it as
dy. It grows about 6 feet in height,
eading in growth, leaves fairly large and
a dark colour in early growth. The
ssoms, which are white and very sweet-
lling, are followed by Wineberry-coloured
ries. In the north it would be an interest-
specimen to grow in pots for a cool green-
se or conservatory. W. E. WRIGHT.
tockton House Gardens,
Near Rugby.

The cosmopolitan Eucalyptus

WHAT is the most cosmopolitan of trees? Perhaps your readers may like to discuss the question. I will tent myself with remarking that the ndon Plane can be seen extensively nted as a street tree in a great many lely separated places about the globe, ile probably the Australian Gums have at st serious claims to be considered as front kers among arboreal invaders. Having stralian associations, an article on the ms appearing recently in your columns s, naturally, interesting to me. I think writer tended rather to magnify their diness in Great Britain. The Tasmanian cies are as hardy as any, but some 70 or 80 rs ago an unusually severe and prolonged st totally killed entire areas of gigantic m-trees in the higher altitudes here and re in Tasmania, so although I won't ue from that that the Gums cannot perly be called hardy in Tasmania, I will ert that not any single species can urately be described as truly hardy here. s only a question of time before we get a urrence of the severe winters of the early eties that will kill them sure as eggs, and s there is hardly a Gum-tree in Great tain whose life I would care to ensure e at a very high premium.

enclose a photograph of a fine Eucalyptus en in the delightful Island of Majorca. n't ask me what species it is, because I n't know, and, in my view, mighty few ple do accurately know one from another, ause they are much addicted to hybridising. used to amuse me to go out with men who w the Gums as well as anybody, and to ice how often their diagnoses would dis-ee. ARTHUR GARNETT.

In response to many recent inquiries about jorca, we have no hesitation in saying that Island is particularly interesting to ver lovers. Apart from the Eucalyptus l other subjects introduced to the Island, s the home of the beautiful deep rose-pink onia Cambessedesii and the fragrant ite-flowered Cyclamen balearicum, both of ich we have seen there in quantity along hilly coast. Helleborus lividus and a ite-flowered Primula acaulis (rare in culti-ion) also abound on the Island, but they e some finding. Any time from February May is of great interest to the plant lover. ter May the hills are too hot and dry for most interesting flowers. Good hotel commodation may be had at Palma, the pital of Majorca, and in the villages along coast and among the hills. The best way reaching Majorca is via Paris, Montauban, rt Bou, and Barcelona. By leaving Vic-ia at 10 a.m. it is possible to be in rcelona before 8 p.m. the next day, ience boat may be taken the same evening, one is fortunate, to Palma, arriving there ly the next morning. We hope to publish icles on plant hunting in Majorca in the ar future.—H. C.]

Gooseberries for flavour

With reference to your contributor's note on Gooseberries for Flavour," on page 18, ere is, I think, one variety which should

A fine Eucalyptus in Majorca

certainly be included in the first half-dozen; that is Langley Gage. This Gooseberry is of a pale green colour of medium size, but in flavour second to none. Lancer is another variety of excellent flavour, and is also one which all who appreciate a ripe Gooseberry should grow. L. B. W.

Isatis glauca

This does not appear to be so well known or so often met with as it deserves. In a hardy plant catalogue before me it is described as "One of the finest border plants, producing clouds of yellow flowers in July, good for cutting." "The English Flower Garden" describes it as "A handsome perennial of 3 feet, with grey-green furrowed stems and long narrow leaves with white midrib. The tiny bright yellow flowers come during July in large feathery heads. The plant thrives in ordinary soil if given a moist and well-drained position."

CAPTAIN E. A. SAUNDERS.
The Gardens, Carclew, Cornwall.

Apple Allington Pippin

I was pleased to see Mr. E. Burrell give such a good account of this Apple in the issue of GARDENING ILLUSTRATED, January 2nd, page 3. Having grown this Apple for 20 years in all known forms I agree with all he says about it. It is one of the most productive Apples I know, and carries its fruit on well-shaped trees. The last season Allington was of an unusually large size and beautifully coloured. Several gardeners in South Wales had the same experience. The best way to obtain flavour in this Apple is not to gather it too early, as it is very liable to shrivel, and afterwards its flavour is gone. It should certainly be included in every collection, large or small, of choice dessert sorts, and can always be relied on where Cox's Orange will not succeed. It is one of the best for the table on Christmas Day. I cannot agree with all the remarks made by Mr. Burrell on Annie Elizabeth. True it is a good keeper and an excellent cooker, but I find it bears none too freely.

W. E. WRIGHT.
Stockton House Gardens, near Rugby.

Lapagerias in Cornwall

While looking over some old issues of GARDENING ILLUSTRATED the other day my attention was drawn to a note on page 751 (December 1st, 1923) which referred to another note on Lapagerias on pages 625-626 (October 6th, 1923).

The latter note deals with Lapagerias as indoor plants only, while Mr. Arnott calls attention to the fact that L. rosea "can be successfully cultivated on a warm wall in the open." He writes from Scotland, so it may be of interest to record how these plants (L. rosea and its variety alba) are grown in the gardens here (Cornwall). We have several plants growing in the open and quite unprotected. They are on an east wall 12 feet in height, heavily shaded by tall Beeches and other overhanging trees. The root-run is an ordinary flower border filled with Daffodils. Peat has been added to the soil round the roots of each Lapageria for a distance of, say, 3 feet round and 1 foot deep, with a slight depression to hold the rainfall. The young shoots, which appear like young Asparagus shoots, are protected from slugs by a layer of sifted coal-ashes renewed annually early in the year. New plants, still in their infancy and now about 2 feet high only, have recently been planted out on the same wall to fill up bare patches and eventually replace the older plants, which were perforce neglected during the Great War and have, consequently, got badly out of hand. These young plants were, I believe, grown from layers, but I am now experimenting with several cuttings taken last August. Visitors scoffed at my efforts and said this was impossible, but the cuttings seem to be growing.

(CAPTAIN) E. A. SAUNDERS.
The Gardens, Carclew,
Perran-ar-Worthal, Cornwall.

Prepared Hyacinths for Christmas

It would be rather interesting, through the courtesy of your paper, to have the experiences of your readers this season with regard to the results of their efforts to get the above in flower for Christmas. What prompts me to ask this question on this somewhat hackneyed discussion of the past is the surprising results I have had with a bowl of prepared l'Innocence this season.

The bulbs were potted on September 25th, which is not the earliest date these may be started, and the first spike opened on December 27th. I might add that special care was bestowed on this particular bowl, but yet grown under household conditions without the aid of bottom heat. A. COWEN.
Lowdham.

Sundial garden at Friar Park

In regard to note on Sundials, on page 19, issue January 9th, I beg to say I saw "the Sundial Garden" at Friar Park, Henley-on-Thames, last July. I agree "that many of the sundials were charming and others were quite grotesque." The present proprietor has continued to open these interesting grounds to the public on Wednesday afternoons during the summer, as was the custom of the late Sir Frank Crisp. E. D.

A very late Apple

I am sending you herewith six Apples (one variety). I believe them to be a local seedling. The two marked A were gathered in October last. The two marked B were also gathered in October last, but have been exposed to the severe frosts, up to 16 degs., which prevailed here. The two marked C were gathered in October, 1924, and are now 15 months old. These Apples have been kept in a cellar. I have eaten this Apple when

21 months old, and it cooked excellently. They are, of course, somewhat shrivelled at that age, though sound. I thought, perhaps, you would like to invite the experience of your readers as to the limit of keeping Apples. GEO. R. KERRY.

Hartest, Bury St. Edmunds.

[Those marked A and B were quite green and sound. The specimens sent resemble Gloria Mundi, but it is a much later keeping sort than that. Those marked C, and said to be 15 months old, were yellow all over and quite firm. Such a late Apple is valuable at this season. It would be interesting to have the experience of growers as to the limit of keeping Apples.—ED.]

Villa D'Este, Tivoli: The Central Vista

The genus Limnanthes

Your correspondent, "W. R. J.," in your issue of December 26th, page 787, falls into a curious error when he states that Limnanthes belongs to the Cress order. This genus has usually been classed in the Geranium order, to which is also assigned the Tropæolum, sometimes known as Indian Cress, but commonly known to gardeners as "Nasturtium." The latter, however, is, of course, the generic name of the Water Cress, which belongs to the Cruciferæ, an order which includes all the other Cresses, but which has no relation to the Geraniums.

The true position of Limnanthes is not agreed, and it is by some placed in an order of its own. J. K.

A Holiday on a System

Notes on a tour of old Italian gardens

ALTHOUGH we in England have a kind of contempt for the foreigner whom we encounter in London, "seeing the sights" on a system, we cannot get away from the fact that most people who go abroad for a holiday are compelled to work on some sort of a system, even if it is nothing more than a fixed prearranged route, with certain definite stopping places. My acquaintances and friends tell me that I am not particularly systematic; yet in a fair number of foreign tours I have at least been systematic to the extent of deciding beforehand the places I wished to visit, and tying myself to the programme by getting all the travel tickets in advance. This is, of course, a very simple and unexacting form of system. If you decide, for example, to go to a few Continental towns in the course of a fortnight or three weeks, the system, if you follow it, will do nothing more than bring you to the right place at the right moment. If your system stops there and only starts again on the date when you decide to leave that place and move on to the next, it may quite easily happen that you miss most of the things that you really hoped to see. And that means that, apart from the novelty of the experience of travelling in a foreign country—in itself the best sort of change—you have to some ext wasted part of the valuable time which annual holiday offers. Certainly this quite frequently happened to me.

This year I decided to work—or rather pl —on an improved plan. In collaboration w the companion of my travels, I decided th we should go to Italy, and that each pla visited should contain something which particularly wanted to see and would whatever else we might miss. We reduc these things-to-be-seen to a common denor nator (as the mathematicians say) by a luc chance. Ernest Benn, Ltd., happened to publishing a fine book on old Italian garde and there was the idea ready made. Nothi could better answer our purpose. It mig have been pictures, sculpture, or architectu of each or all of which almost any town Italy in reason would have afforded go examples, but there seemed to be a nove about gardens that the other things lack So the gardens had it.

Interesting old gardens, dating, many them, from the sixteenth century, are to found all over Italy, and it was clearly imp sible in the four or five weeks at our dispo to visit them all. Rome and Florence a however, surrounded with them, and so th two places could be regarded as pivo points. The presence of one very famous c on Lake Maggiore indicated a line of rou to Rome; and the presence of another n Venice indicated a line for the return journ through Florence. Our first Italian resti place, then, was Strese, from which Is Bella and other gardens are easily accessib One of these, at Cicogna, near Porto Ceres on Lake Lugano, is particularly worth visit. From Strese we went to Milan a thence to Pisa, as a centre for the Lucca c trict, with Marlia at the top of the list. Th we went on to Rome, where Tivoli, with magnificent garden of the Villa D'Es Frascati with half a dozen, and Vite farther afield, with two, were the objecti of excursions. The best of the Frascati g dens can be seen in one day if you are in hurry. Anyhow, Mondragone, Aldobrandi and Torlonia, "The Grand Old Man" Italian gardens, should not be missed. T two Viterbo gardens are Lante at Bagna about a mile and a half away and Caprarc a Borghese Palace, at Capronica, which about 10 miles in the opposite direction.

We left Rome for Florence, but not bef we had seen, in addition to gardens, a go many of the monuments which all go visitors to Rome ought to see.

At Florence I must confess that the syst began to break down. We saw two very lightful gardens, including Gamberaia, of the most charming in Italy, but Flore itself, that friendly and pleasant town, k us within its streets and palaces most of time. A night at Bologna broke the jour to Venice, and here, though a garden was excuse for going there, we saw no gard at all. Anyone who has been to Venice agree that there is no place more difficult leave, even for a short excursion to the L or Murano. We ought to have gone to Villa Dona Dalle Rose, at Valzanzibio, n Padua, but when you are at Venice you that nothing can be more worth seeing th Venice itself. At Verona, however, wh we spent a couple of nights on the way hou we saw one garden, Giusti, which was not our list. That, in a way, restored balance.

The subject of Italian gardens is too bi one to deal with in a single article, and p haps I may be allowed to return to it la

'his much can be said. The attitude towards nem of the average person who has never een one is liable to pass through four tages. First there is a sense that there is omething romantic and fascinating about nem, and this will remain and increase in ntensity when you do see them. The second nd more sophisticated stage is that of doubt rising from the idea that owing to the hot limate of Italy they contain few flowers and o green grass. This fact creates in the ninds of English garden lovers a prejudice which frequently militates against any desire o visit them. The third stage comes when visit has been paid. The ingenuity of their esigners and the marvellous way in which, vith the help of architecture, water, and everreen trees, they are made to seem to belong o their surroundings, triumph over number wo, and create a reversion to number one. Number four is the analytical stage in which ne tries to probe their secret and arrives at he conclusion that many of them could be opied, whole or in part, in England, and ven improved in our more favourable limate. My companion and I came away with that impression, as the result of our syssematised but not really very systematic tour.

C. E. H.

Scented Gladioli

Would some of your correspondents kindly give the names and colours of scented Gladioli (in commerce at moderate prices), stating the most strongly and sweetest first in order? I only commenced to grow Gladioli ast year, and am astonished at the result and little trouble required. Some were grown in pots, boxes, and the open garden. Out of wo dozen dug up a few weeks ago there were over 500 little corms (Sweet Pea size and larger) in addition to the two dozen new and larger corms first planted. No doubt the little corms, if they had been left, would have taken plant food from the larger, and so "lifting" gives a better chance for the large one next year. I shall watch how the ones left undug will respond.

Sussex Coast. AMATEUR D. R. H.

[Our correspondent asks for a list of scented varieties of Gladiolus at moderate prices. Shall I say he appears to have been born too soon? The Gladiolus is described by a recent correspondent as follows:—

"Hardy, beautiful, long-lasting when cut, minus the cloying odours of so many well-known flowers, it is an admirable decoration for the sick room. Ornamental and *odourless*, brilliant and sturdy, requiring little attention, it is the one horticultural display flower that can truly be called ideal."

Yet your correspondent asks for scent. Twenty years ago Mr. Groff, the raiser of Peace and many other well-known varieties, wrote:—

"One of the causes of the popularity of the Gladiolus as a decorative flower is the fact that it has no perfume, as there are few flowers used for this purpose that are not distasteful to some one—particularly in closed rooms—either from personal preference or painful association."

That our correspondent is not alone in his desire for scent in the Gladiolus is, nevertheless, evident, for Mr. Kunderd wrote in 1911:—

"I am confident the long-wished-for sweet-scented varieties will be perfected in the hands of Lemoine, Burbank, or Van Fleet."

The last-named died a year or so ago without attaining his object. Lemoine's catalogue for 1925-26 is before me, but no mention is made of a scented variety. Of Mr. Burbank's success or otherwise I cannot speak, but it is evidently not yet, as the Bulletin of the Canadian Gladiolus Society, published November, 1923, contains in an article headed "The future Gladiolus" the following:—

"And what shall we say of the possibility of one day having a Gladiolus as exquisitely scented as a Rose? This may be too much to hope for, but we live in hope of better things."

In this connection mention must be made of that keen grower, Mr. J. L. Gibson. He also is intent on imparting scent to the Gladiolus, if my memory does not serve me false.

It may be that when the new catalogues arrive we may find that success in this direction has been gained by one or more of the world-wide raisers of new varieties.

The only scented variety listed in an English catalogue is G. tristis, which may be obtained from Messrs. Barr and Sons at 3s. per dozen.

The writer grew a very pretty blue variety received from South Africa under the name of Blue Bell, which flowered last year and had a very heavy Freesia scent. There was only one bulb about the size of a large Pea. It threw one spike with four flowers, but it failed to produce seed.—SMILAX.]

Cypress avenue leading to Florence from Poggio Imperiale, Arcetri

Sweet-scented annual flowers

There is not a long list of annuals that bear sweet-scented flowers; but such as there are are of very easy culture, and adapt themselves to a variety of soils.

MIGNONETTE will, of course, be included in everyone's selection. The sooner it is sown after the middle of March the better. The early-raised plants always grow the strongest. As soon as the plants are large enough they should be thinned out to 6 inches apart.

SWEET SULTAN.—This is a showy annual flower that is always very popular, as, besides being attractive when growing, it is exceedingly useful for cutting, especially the yellow variety, which is very striking. There are also white and purple varieties. The seed should be sown early in April where the plants are to flower.

TEN-WEEK STOCKS.—These are best raised in a cold frame, and the plants put out at the end of May where they are to flower.

NIGHT-SCENTED STOCK (Matthiola bicornis).—This is not a particularly striking plant, but it is useful for variety. It has buff-coloured flowers, and grows about 1 foot high.

MARTYNIA FRAGRANS is a decidedly pretty annual when it is sown in pretty good soil. It will then grow to the height of 2 feet, and produce a good number of purple-coloured flowers; but the plants must not be allowed to stand too thickly on the ground.

CANDYTUFT.—The sweet-scented variety of Candytuft bearing white flowers is an easily-grown and most useful plant. This and the two last mentioned may be sown early in April where they are to flower. Sow the seeds fairly thick and attend to the thinning out as soon as the plants are 2 inches high.

Scabiosa columbaria var. rosea

This African Scabious flowered remarkably well with me last year. The plants were raised from seeds sown in gentle warmth in March. In order to make quite sure of it for next season I lifted and wintered a plant or two in a cool greenhouse, as its hardiness has yet to be proved. A few cuttings will also be taken, for although these are scarcely so satisfactory as good strong seedlings they are very useful, and it is too precious a plant to lose.

M. G. M.

Anchusas

These made a brave show in many gardens last year and they are well worth extended culture where ample space permits. To show the plants to the best advantage they require quite 4 feet between for the lateral shoots to extend fully. The Dropmore Variety, with its large Gentian-blue flowers, is very marked compared with A. italica. I recently saw two large plants laden with bloom so treated growing in a very clayey garden. These Anchusas belong to the Borage family, and we know how bees visit this plant, which should be in every garden. In the lovely garden at Cranmore Place, Chislehurst, one corner of the pleasure grounds is set apart as a blue garden, and Anchusas figure prominently towards the centre. The Anchusa is easily increased either by seed or root cuttings.

J. M.

Planting Hardy Heaths

TO a large circle of people the word Erica conjures up a picture of some far-off moor, or maybe a range of hills, glowing purple in the autumn sunlight. This may be beautiful; indeed I know it to be so. But do not dwell on memories; bring Ericas into the garden. Of Calluna vulgaris, the true Heather, Kew gives no fewer than 27 varieties, including the type. Of other species and varieties 43 distinct kinds are mentioned.

Heath gardens, properly planted, are things of beauty, but here lies my point: all gardens cannot, for various reasons, have their Heath garden.

Bearing this in mind, there is no reason why some Ericas should not be planted. Even in the established garden room can be found for them. Were we restricted to one type or size plant it would perhaps be difficult, but as there are so many diverse forms, ranging in height from a few inches up to several feet, the task becomes much easier, and what is of great importance is the fact that there are varieties which will grow and flourish on limy soils, notably E. carnea.

In lime-free soils the whole range may be used, and in many ways. Most gardens of any pretensions contain a shrubbery. In the front line of shrubs should be included plants of the beautiful E. codonodes, its soft, green, evergreen foliage being literally covered with sheets of pure white blossoms from midwinter till March. Further back among taller subjects places should be found for E. arborea, the sweetly-scented flowers of which last from March until well into May, and are of a greyish-white colour. Here also should be planted E. australis, another tall grower, often reaching 6 feet in height. It is at its best from seven to eight weeks during the spring, its flowers being a rich rosy-purple and decidedly fragrant. While speaking of fragrance mention must be made of the highly-perfumed E. Veitchiana, a hybrid between E. codonodes and E. arborea. Its flowers are pure white and last several weeks in full beauty. The plant will reach quite 5 feet in a good position. Another tall or tree Heath is E. mediterranea and its varieties, which will give pleasure to those who plant them. The type, which reaches 5 feet in height, bears lovely pink blooms in spring. The white form will reach 3 feet or thereabouts, while the glaucous form will rarely reach 2 feet in height, but is hardier than the type. This also bears pink flowers in the spring months.

All the above varieties are very suitable and desirable plants for the fronts of shrubberies, but they may also be used in beds as dot plants among the dwarf-growing kinds, thereby breaking up the flatness where a bed of one variety has been planted.

In a good many gardens up and down the country there exists a dry bank, a rough slope, unsatisfactory Rose-beds, dry borders which never do any good; in fact a number of little bits of ground which can never be made what one would wish them to be. Having these little eyesores to contend with, how many planters turn to Ericas? Not one in a dozen; but in many cases Ericas are what is needed.

I will take the unsatisfactory Rose-beds. It is probable they are too shaded, too wet, or too much enclosed by nearby hedges, etc., in fact Roses will not do well in them. Why tolerate this? Trench the beds and add some very rotten manure. We will presume the beds are 8 feet in width and any length, that the ground is on the moist side and perhaps a little shaded. Plant standard Azaleas (A. mollis) in two rows, each row 18 inches from the sides of the bed, the plants being at least 3 feet apart in the rows and about the same in height. Through the centre of the bed plant groups of Lilium auratum in threes or fives, speciosum in fives or sevens, with regale round the edge in groups 3 feet apart, and three bulbs in a group 1 foot from sides of bed—*i.e.*, midway between the standard Azaleas but a little forward, every bulb being marked by a small stick. The Azaleas will make a good spring show of bloom and a fine autumn show of brilliant foliage. The Lilies will give a good show in late summer. But we want more; we want some Ericas. Our bed as it is will be bare in winter, so plant Ericas, in this case Erica carnea. This gives us an evergreen groundwork, but best of all a brilliant bed of colour (rich rosy-red) right through the dark wintry months. Plant these all over the bed at 1 foot apart, and between each plant of Erica plant the lovely Muscari (Heavenly Blue) in threes 3 inches apart. This gives us a permanently planted bed, which will only need to be kept free from weeds and receive a top-dressing of a little decayed leaf-soil and manure every late autumn. Now comes the dry bank where nothing will grow. This bank is as dry as can be, the soil is light, runs down in dry dust in summer, etc., but here again Ericas will clothe it. I am presuming there is very little herbage of any description on the bank. First obtain some pieces of slate, half-round drain pipes, large tiles, or similar material. Take out the soil to the depth of 1 foot or so and about the same in diameter. On the lower side of the hole stand in a piece of slate or whatever you have been able to get hold of for the job, placing it in a vertical position. Place 6 inches or 8 inches in depth of good soil containing a little well-rotted manure or leaf-mould into the hole, which is now ready for planting, which, by the way, should be carried out as soon as the bank becomes at all moist in autumn. Prepare sites as above all over the bank at 1 foot apart and plant with Erica cinerea. Between the Ericas may be planted Snowdrops, Narcissi, etc., for spring flowers, followed by the beautiful Calochorti, which grow nowhere as they do on sharply-drained banks in sandy soil. Here also, among the Erica roots, is the place for the gorgeous little Ixias and Sparaxis.

During the first summer after planting it may be found necessary to water the Ericas, but it will be found that the pieces of slate, etc., set vertically as they are, will retain a good deal of moisture. This mode of planting is applicable to any bank sloping at any angle which is not so steep as to require a retaining wall. In and on the fringe of woodlands more Ericas may be grown. In open woodland the tree forms will all make grand specimens, and E. carnea and its varieties (and in damp spots E. ciliaris) will flourish in or out of shade.

Calluna vulgaris offers no end of choice things, but all flower in autumn, when they are liable to be overlooked by their many and varied rivals. Here again all are evergreen, and a great point in their favour is, they will grow and flourish almost anywhere. A few of the best varieties of vulgaris are C. v. Alportii, 15 inches to 18 inches, a good crimson form; C. aurea, very dwarf, golden foliage; C. flore pleno, quite the best form, with beautifully double pink flowers, most effective in the mass; C. Hammondi, 2 feet, pure white; C. Searlii, a distinct foliaged variety 12 inches to 18 inches, pure white. Another good variety for ground work in beds is E. Watsoni, with large, rosy-crimson flowers in autumn.

The resources of the Ericas and Daboecias are almost unlimited, and I feel confident there are many dull spots that can be made very bright indeed by a liberal planting of Ericas. J. HILL.

Totnes Road, Paignton, Devon.

Erica lusitanica

This Heath is again one of the features of the garden, and as it is grown in fairly large masses the effect is very fine. Bushes ranging in height from 3 feet to 9 feet or more and of loose, elegant form are laden with handsome pink flowers, the first of which made their appearance about the second week in October. As a flowering shrub it is easily the most striking and attractive of any at this season of the year. It should also be borne in mind that it retains this beautiful state until the middle of April. The plumose branches bearing a profusion of flowers are often 2 feet in length and highly decorative both indoors and outside. Judging this Heath from every point of view, such as time and length of blooming, graceful form and colour, I do not think there is another hardy species of equal value. When planting this Portuguese form, especially in the Heath garden, it should not always be used as a background to the more lowly-growing kinds, but be put out at 5 feet apart and in groups to form an elevation to the lower-growing masses, bringing such groups well forward, creating thereby a welcome and graceful relief to what may otherwise prove a flat and monotonous picture. M.

Erica carnea

A correspondent in your issue of January 2nd states that Erica carnea began to bloom the second week in October and is now very charming on light sandy soil.

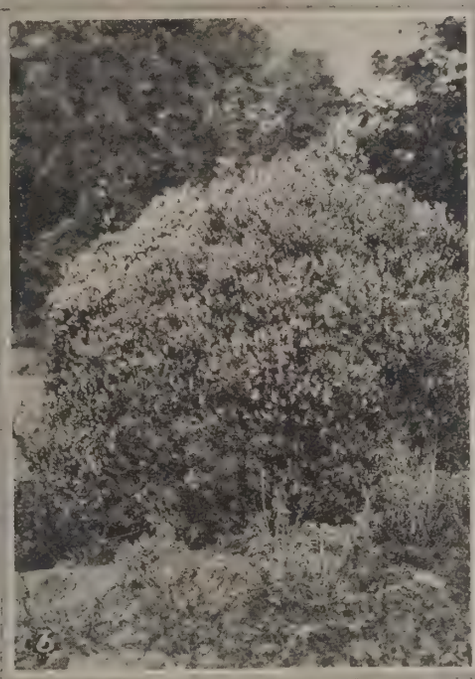
Unless your correspondent has an extraordinarily early-blooming form of which I have never heard I can hardly believe this to be the case. A few buds may begin to show colour as early as the beginning of January, but E. carnea does not really begin to bloom till the beginning of February, and continues, if the weather is not too hot and dry, until nearly the end of April.

Owing to the cold winter it appears to be unusually late this year, and it is not even showing colour here in Gloucestershire. The white form is often out by Christmas, but this year it is only now beginning to bloom. There is a fair amount of bloom on E. Darleyensis which is always the earliest Heath here, and I consider this a more valuable plant than E. carnea as it begins nearly a month earlier and continues good for some time after E. carnea is over. MARK FENWICK.

Abbotswood, Stow-on-the-Wold.

The Prickly Heaths (Pernettya mucronata)

Fruiting in the greatest profusion with me this year are these attractive shrubs, the most imposing display of fruits appearing upon bushes growing in low, moist places. The berries vary in colour from pure white to pink, lilac, crimson, and purple. These are in some instances almost as large as Cherries and so densely clustered along the growths that all leafage is obscured. Another group of these plants growing on higher and drier land is less satisfactory, and for the past few years has produced few fruits, although the shrubs are otherwise in excellent condition. Abundant sunshine with a cool moist bottom and a lime-free soil is ideal for the shrubs, which do so much to brighten the garden during the winter and provide ample material for cutting and filling vases indoors. As the plants sucker freely there is little difficulty in increasing the stock. Edgings formed around plantations of taller-growing evergreens—which do not overhang them—are always a feature of interest, and much to be preferred to many things, such as clipped Box, Ivy, and Yew, so freely used. Those possessing streams and ponds should find room along their banks for a few groups of Prickly Heaths. E. MARKHAM.



HEATHS THAT SHOULD BE IN EVERY GARDEN

1. The January-flowering Erica lusitanica (codonodes), growth like feathery Tamarisk with terminating spikes of white Heather, faintly tinted pink. A good subject for naturalising, and said to be rabbit-proof.

2. A Sussex Heath garden in sandy loam. Large masses of Erica vagans are seen encroaching over the pathway.

3. Erica arborea (the Tree Heath). In favourable localities it will grow over 30 feet high! It is usually seen as a shrub of busby habit.

4. Erica carnea produces masses of bright pink flowers from February till April, making a splendid carpet to the foreground of a rock garden.

5. Erica alpina, from the mountains of Spain and very hardy, is a medium-sized evergreen shrub, suitable for planting on a lawn; flowers white.

6. Erica darleyensis (syn. E. mediterranea hybrida), now in full bloom, is the finest of the winter Heaths, growing about 1 foot high, making neat tufts of growth and bearing masses of pink flowers from November till April.

Some Winter-flowering Shrubs

THE number of shrubs which flower in the open without protection during the winter is limited, consequently those which do bloom are very welcome.

THE WINTER SWEET (CHIMONANTHUS FRAGRANS).—This is not planted enough in gardens, considering that it blooms in the depth of winter, and was introduced from China so long ago as 1776. No doubt one reason of its scarcity in gardens may be attributed to the fact that it is somewhat difficult t propagate, a fact that induced the late Dr. Lindley to offer a guinea to anybody who could produce plants from cuttings. It is quite hardy and flourishes in the open border, but it will well repay the extra labour if planted against a wall, as its flowers are not so likely to get cut by sharp frosts. It is a fairly free-growing shrub, and forms a bush from 7 feet to 10 feet high, and when the leafless twigs are clothed with the delightfully scented flowers, the fragrance of which can be perceived for several yards around, it is of extreme interest. Its cup-shaped flowers, which are borne singly and in pairs, measure an inch in diameter, are of a peculiar shade of greenish-yellow, the interior being suffused and streaked with purple. It grows best in a warm, moderately moist soil, and should never be planted in dry, sandy soils. Pruning should be attended to in March. The object is to encourage as much young growth as possible, as this is the wood upon which the flowers are carried. As the Chimonanthus is rather difficult to increase by cuttings, layering is usually resorted to. It is also increased by seeds, which should be sown in rather light soil and placed in a warm greenhouse temperature to germinate. When the young plants are large enough they should be hardened off, and later on planted out in the open ground. There is a variety named grandiflorus which has larger flowers than those of the species, but the fragrance is not so sweet.

The male catkins of Garrya elliptica

WINTER-FLOWERING JASMINE (JASMINUM NUDIFLORUM). — The winter - flowering Jasmine is one of the most accommodating shrubs. It is a native of Northern China, and the first specimen cultivated in this country was sent to the Royal Horticultural Society's Gardens, Chiswick, by that well-known traveller, Mr. R. Fortune, in 1844. It is a free grower, and well adapted for training against walls, trellises, arbours, etc. The small golden-yellow blossoms are borne with great freedom on the leafless branches, and remain in perfection for several weeks. To be seen to advantage the long, slender growths should be allowed to hang loosely, only the main branches being secured to th wall, etc. It is not at all fastidious as re gards soil, but prefers a sunny position. mistake frequently made, especially b amateurs, is pruning at the wrong season o the year. Only a few weeks ago I saw man cutting away the very shoots that woul in a short time have been bearing a wealt of beautiful flowers. When pruning is neces sary the proper time to do it is after th flowering period—say in early spring. Thi gives the plant the full growing season t make new wood, which will, if properl ripened, bear flowers the following winter Propagation is easily effected by means o cuttings, which should be taken off i August, inserted in light soil, and plunged i a warm case for a few weeks. When rooted they should be stood in cold frames for th winter, and in spring may be planted out i a mixture of loam and leaf-mould. It is als increased by layering.

LONICERA STANDISHI.—With very few ex ceptions the Honeysuckles are summer flowering shrubs, but the one now unde notice blooms in the early part of the year and is well worth a place in every garden. I is not a showy shrub, but its flowers ar deliciously fragrant. Although perfectl hardy, its small, creamy-white flowers ar usually borne in pairs on the leafless twigs and produced with greater freedom if th plant is against a wall and in a sunny spot where the wood will get thoroughly ripened besides, its sweet-scented flowers are mor conspicuous than when grown in the open It is not at all particular as regards soil Very little pruning will suffice; only the old worn-out wood and weak growths in th centre of the plant should be removed. It i easily propagated by cuttings of half-ripene wood, which should be made about 3 inche or 4 inches long, and placed in a close case i a temperature of about 60 degs. Lonicer fragrantissima is often confounded with this It is, nevertheless, very distinct in the absenc of bristles on the young shoots, flower-stalk and corolla. The leaf, too, is shorter. Bot L. Standishi and L. fragrantissima ar distinct in their early flowering from all th other Honeysuckles.

LAURUSTINUS (VIBURNUM TINUS). — This one of the few evergreen shrubs whos flowers appear in winter, is a compact, free growing, and free-flowering shrub. It i indigenous to South Europe and Nort Africa, and is hardy in this country, but ma get cut back in very severe winters. It i not at all difficult to suit either in regard t soil or situation. It can be (and often is grown in pots and tubs for conservator decoration during the early months of th year, and when treated thus the flowers ar pure white, whereas in the open ground the are suffused with pink. If cuttings of th half-ripened wood are taken off in Augus and dibbled into a bed of light soil an covered by a handlight they will quickly emi roots, and in the following spring will b nice little stuff for planting out in nurser rows.

WITCH HAZEL (HAMAMELIS ARBOREA).— Amongst winter-flowering trees this Japanes introduction is beyond doubt one of the finest A specimen 10 feet high in full bloom, wit the sun shining upon it, is a pleasing picture It may in some localities be seen in flower i December, but more often in January an February—a time when few other things ar in bloom, consequently its value is much en hanced. The curious flowers, which ar borne on the leafless branches, are compose of four long narrow-twisted petals of a clea canary-yellow colour, while the sepals ar deep red and very conspicuous. It delight in a sunny position and soil composed o good loam and leaf-mould. This species i

creased by grafting, which operation is best erformed in the early part of March, just efore growth commences. The North merican Witch Hazel (H. virginiana) is the ock upon which it is worked. A warm, ose case is necessary, and a slight syringing verhead occasionally will help the young ions to break into growth. When a union completed they may be stood in a more ry position, and gradually hardened off for lanting out. The best of the Witch Hazels H. mollis (illustrated and described, issue anuary 2nd, page 6), first discovered and ntroduced by Maries about 1879. It was ound afterwards by Henry and Wilson. It strange that it remained in the late Coombe Wood Nursery for 20 years, being regarded nerely as a superior form of H. virginiana.

DAPHNES.—A list of winter-flowering hrubs would be incomplete that did not inlude one or more of the deciduous Daphnes. he Mezereon section is of erect bushy habit, asily managed, free blooming and fragrant, nd the flowers are produced in January and ebruary. D. Mezereum, the common kind, s a native of the woods of Northern Europe, nd is desirable to plant in masses in the ront of taller-growing shrubs. Its small red lowers are borne in clusters and almost hide he deep green branches. D. M. alba flowers week or so later than the species, and is a ery good companion for planting with it, as he flowering season is thus prolonged. D. M. grandiflora has large flowers of a soft ink colour, and is, perhaps, the freest of hem all, as it commences to flower in the utumn and continues more or less until pring. Daphnes should be planted in a noist, loamy soil, and well exposed to the un. When replanting is necessary it should e done immediately the leaves have fallen, s root-action commences much earlier than s the case with other shrubs. The stock is asily increased by seeds, which should be own as soon as ripe in light soil, and placed n a temperature of about 60 degs. If the seeds are sown in the open ground they often ake two years to germinate.

GARRYA ELLIPTICA.—This is a Californian hrub, and is very beautiful when covered with its pale green catkins, which may be ut for vases. It suffers in very sharp winers, but, as a rule, is safe in most parts of he British Isles.

Berberis dictyophylla

This is one of the most distinct Barberries we have and is unusually pretty at the present time by reason of its charming leaves and berries. The former are of a delightful red-purple, and being silvery on the underside produce a charming effect which is rare even in this large genus. The egg-shaped berries are rather large, red, and coated with a whitish bloom, another attractive feature of this fine Barberry. Its large yellow blossoms, rather sparingly produced, appear in May, and these too are of considerable beauty and most desirable for cutting. It is easily raised from seed ripened in this country, but when this is done the whitest seedlings only should be grown, as these are the best. I mention this as a precaution after having seen many plants of so-called B. dictyophylla which bear a poor resemblance to the original plant as first sent out, one of which I happen to possess. G. M. S.

Euonymus radicans var. Kewensis

This is quite distinct from any other of its genus known to me, and whether used as an edging to borders raised slightly above the ground level or to clothe a low, flattish boulder in the rock garden, it is most interesting. An instance occurs with me where it had been used to fall over a York stone edging, and this terminating at the foot of a large Cedar gave this curious little plant an opportunity of climbing up the trunk, a purpose for which I had scarcely considered it suitable. It was introduced from Japan by Professor Sargent and sent by him to Kew in 1893. Generally the plant rises no more than a couple of inches above the ground, its leaves being scarcely a ¼ inch across, of a dull green, with veins of a paler shade, the whole plant densely covered with tiny warts. It grows rather slowly at first, but quite freely once it becomes well established, and is easily increased by offshoots which root freely where they come into contact with the soil. M. S.

The Clematis-covered porch

The Clematis-covered Porch

IT is strange how few realise what, with a little care and the expenditure of a few pence in suitable plants or seeds, may be done to hide and beautify many a modern addition or ugly corner or structure! Healthy plants once planted only require a little care and training to produce a wealth of blossom and transform the stiff and hideous into a thing of beauty and a joy for ever. What can be more beautiful than this Clematis-covered porch of the old "Woodhouse Post Office," with its masses of rich purple flowers, more and more profuse as the plant gains strength and the years roll on. Situated as it is on the high road between Woodhouse Eaves and Quorn, in Leicestershire, no one can help noticing it, one of the brightest spots in the countryside, the garden either ablaze in the summer with masses of brightly-coloured Phloxes or later on with great clumps of equally healthy and luxurious Chrysanthemums, for the owners of the cottage love their flowers and take interest in their garden. It is a small garden of rich and luscious colour by the wayside, that few in passing can fail to stop and admire, and with the simple plants employed produces an effect which is within the reach of all.

The Strawberry Trees (Arbutus)

These bloomed very freely with me last year, and although many of the flowers were damaged by frosts during the second week in November they are again very lovely. The large bushes, laden with bloom and orange-red fruits at the same time, are beautiful. This is especially the case in A. Unedo var. rubra (or A. Croomei as it is sometimes called), which produces pretty pink flowers in abundance. E. MARKHAM.

The Lawyer Vine (Rubus australis)

This is a very pretty Rubus which requires a high and well-drained position on the rock garden, as coming from New Zealand it is much less hardy than R. tricolor. It is sometimes used to furnish sunny walls, but, in my opinion, is seen to the best advantage when forming a tangled mass in the rock garden. It is without true leaves and very prickly, but there is a singular elegance about its twining light brown growths which rarely fail to attract attention. G. M. S.

REMINDERS FOR THE WEEK

Southern and Midland

The weather

Owing to the severe weather during the last two months much work has been delayed. These arrears should now be taken in hand and completed during the next two or three weeks.

Pruning fruit trees

This should now be completed as soon as possible, the prunings gathered up and the borders forked over after the manure has been given. It is well to remember that lime must be given occasionally to the stone fruits, and this may be applied now at the rate of 1 lb. to each bush or wall tree. It should not be dug in deeply, but just pricked in with the fork over the surface roots.

Hollyhocks as annuals

In some gardens it is impossible to succeed with these owing to the disease. Seed sown now in gentle heat, and the resultant plants pricked off, and grown on in small pots and planted out in April, will bloom in autumn.

Pelargoniums for the flower garden

Where the cuttings were struck in boxes during autumn it is a good plan to pot these up singly into 60-size pots. An ordinary potting compost is suitable, and this should be made firm. The plants should be grown on as near the glass as possible, and as growth advances the points should be pinched to cause them to break and thus form the foundation of bushy plants.

Arum Lilies

These are now making headway, and when once the pots are full of roots the plants must never be allowed to become dry, as they are practically aquatic and cannot be overwatered. Soot-water and liquid manure given twice a week in weak doses are very beneficial when the spathes begin to appear. It is important to keep the plants free from aphis by constant fumigation when necessary. Where growing in warm houses a slight spraying each day with tepid water has a good effect. These require a light and airy position to keep the plants sturdy, as no good results are obtained from weak and spindly growth.

Cleansing room plants

Large Palms and others that are grown in corridors and rooms are always liable to become coated with dust, which is detrimental to their welfare. An opportunity should be taken at this season to give them a thorough cleansing. Lukewarm water, to which 1 oz. of soft soap and a wineglassful of paraffin have been added to each gallon are excellent for the purpose. Each leaf should be sponged carefully and any scale or other insects removed. The pots should also be scrubbed, and a little of the old soil removed, replacing with fresh compost.

Lawns

Nothing is more important to a well-kept garden than good and weedless lawns. At the present date, when open weather exists, an opportunity occurs to put these in order. All Plantains, Daisies, and other coarse weeds should be removed by hand. Any hollows or mounds should be corrected by lifting the turf. Moss should be raked out and the whole given a top-dressing of good soil that contains a fair proportion of well-rotted manure. A dressing 1 inch deep all over is none too much to apply, and this should be well worked in by frequent sweeping.

Violets in frames

At this season of the year it is difficult to produce these flowers in quantity, but with care and attention the plants can be kept in a healthy condition, when they will throw their flower-buds freely again as the days get longer and the weather warmer. Only on occasions of continuous frosts should the frames be kept closed during the day. Ample air is necessary for these hardy plants. All decaying leaves and weeds should be removed and the surface of the beds pricked over with a handfork or pointed stick. Soot should be sprinkled around the sides of the frames and amongst the plants to keep slugs and snails from destroying the buds and leaves. When growth commences again weak doses of soot-water given each week will benefit the plants considerably. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Scotland

Flowers for Easter

Easter falls at an early date this year, and those who have to supply flowers for that festival must consider ways and means. Arum Lilies are always in request, and a good batch of these can easily be forwarded, but, in the meantime, they ought to be kept fairly cool. Plenty of moisture is essential, and when the spathe can be felt, by lightly pressing the sheath, liquid-manure can be freely given. Occasional doses of soot-water act as a tonic and give colour alike to foliage and flower. The Eucharis Lily, too, is useful for Easter work, and well-rested plants should now be placed in heat. If the pots can be plunged, or given a little bottom heat in any way, so much the better, but plunging is not absolutely essential. Lily of the Valley, of course, can be forwarded at any time, and there will be no difficulty in providing plenty of white Narcissi.

Figs under glass

Where Figs are grown under cool conditions, and where only one crop of fruit is expected each year, the trees ought now to be loosened from the wires and well cleansed. Brown scale is apt to be troublesome, but tepid water, to which has been added a little Gishurst Compound, and a stiff brush will soon clear off this pest of the Fig grower. In retraining let the growths be very thinly disposed, cutting out unprofitable wood with a relentless hand. When Figs are grown under forcing conditions the house can be set to work at any time now. The temperature must be not only high, but regularly high. Fluctuations are fatal. Plenty of atmospheric moisture is indispensable, and copious supplies of stimulants are necessary; in fact, the treatment of the Fig under forcing conditions is almost exactly the opposite of the treatment under cool conditions. For a cool house Brown Turkey is undoubtedly the best; for forcing, Marseilles, Barnisotte gris, Brunswick, and Black Bourjasotte are reliable either in pots or when planted out.

Pruning

Any arrears of pruning ought to be made good without delay. There is a practice of saving the prunings of Apple-trees and Pear-trees for use as stakes for small pot plants, but in these days of pests and blight the practice ought to be discouraged. All prunings, of whatever kind, should be burned.

Peaches on south walls

The Peach-trees on south walls are, by general consent, left until all other fruit-trees have received their annual attention. Now the Peaches and Nectarines (where the latter succeed) on walls must be taken in han The entire tree ought to be unfastened, ar if necessary, washed. When retraining, it permissible to dispose the shoots mc thickly than is done in the case of trees und glass, yet overcrowding should be avoide When the training is completed let the bord be lightly—very lightly—forked up. Opinio differ as to the advisability of mulching this time. Personally, I believe in doing s and at least 4 inches of old, well-rott manure not only keeps the roots moist spring, but encourages them to spread ne the surface.

Orchard house

This house usually accommodates a bat of Chrysanthemums over winter, but as so as these lose their effect they should be clear out and the house made ready for its rightf occupants. Trees in pots which have be plunged out of doors can be lifted, the po thoroughly scrubbed and put in their place Allow them to settle down under the ne conditions for a couple of weeks, when t needful pruning and training can safely done. It is, I think, inadvisable to plun fruit-trees in pots in the orchard-house. T needful encouragement can be given by to dressings, or by stimulants, and the necessa quantity of water which individuals requi can be better gauged when the pots are vi ble. Plums, Nectarines, and Peaches are t most satisfactory fruits for pots, but Pea follow them very closely. In my experien Apricots are the least satisfactory, whi Cherries, owing to their liability to attac of black aphis, ought not to be permitted the orchard-house.

Seakale, Rhubarb, &c.

Batches of these, commensurate with poss ble requirements, should go in in order maintain an unbroken supply. Roots Mint and of Tarragon, where these are like to be needed in a short time, may be potte or boxed. They soon provide plenty of us ful material with but little trouble.

Tomatoes

Plants which have been wintered in 4-inc or 5-inch pots can now be moved on into t pots or boxes in which they are to frui Whether grown in pots or in boxes, the so ought not to be of too rich a description, ar the receptacles ought not to be more tha half-filled. Over-rich soil results in gro growth, and this is against free fruiting. is a simple matter to give nourishment t top-dressings, or by stimulants, after t first truss has set its fruits. If white-fly present every endeavour should be made keep it, at least, in check. It appears to impossible to get rid of this pest entirely.

Kitchen garden

Look over Potatoes and roots in store, r moving decayed specimens. A batch of Pe for transplanting to a south border at a lat date may go in. It is preferable to allo these to come away without heat. In li manner a couple of boxes may be sown wi Broad Beans, than which no plant lends itse more readily to transplanting. Another b of Potatoes ought to be got into 10-inch pot These will turn in usefully about Easter— earlier, according to the temperature allowe There is certain to be arrears in the way digging and trenching to be made good, an this work should claim precedence when t soil is in a fitting condition. A pinch of see of a good, quick-hearting Lettuce will giv useful seedlings for transplanting in a sho time and which will do well in a newl started vinery. W. MCGUFFOG.

Mabie Gardens, Kirkcudbrightshire.

THE KITCHEN GARDEN

Rhubarb

NOW is the time to cover up roots in permanent quarters. I am in favour of this mode of culture, as the produce is of etter flavour than that from lifted roots orced in a warm house. Any material at and will suffice for covering the roots, but, f course, Rhubarb pots are best if expense is ot studied. Needing large quantities, I reort to various means, such as empty casks, hich I like better than pots, as they are more omy. Being much deeper a finer growth is ecured, and if the heating material at the tart is at all warm the casks allow the steam escape more readily. Old cement casks nswer well, and in cases where hard forcing s not intended only a light covering is given hasten growth. Strong stakes placed ound the roots and brought to a point will uffice. In covering, it is advisable to use naterials that retain warmth and in suffiient quantities. Roots not intended for rcing early are none the worse for a coverng of light litter. These will give earlier rowths than those fully exposed. Roots ifted and placed indoors should not suffer rom want of moisture, and, if possible, hould be damped over frequently with tepid vater if the house is at all dry. F. R.

Making hotbeds

The making of hotbeds for forcing early egetables will now be general in gardens here a good supply of Potatoes, Peas, Carrots, and Radishes is expected, as a long, teady warmth is what is needed. The beds hould, where practicable, be made entirely f leaves, but where these are scarce, or where ufficient fermenting material for securing a eight of 4 feet or 5 feet at the back is not to and, a percentage of stable litter must be sed, and if a little extra is used at the sides t assists in keeping the linings together. In ny case, see that the bed has a good slope to the south in order that the soil in the frames may reap the full benefit of what sun there is at this somewhat dull period. As more failures occur through overheating than from any other cause, the bottom-heat must be allowed to subside sufficiently before either planting Potatoes or sowing Carrots or Peas takes place. The soil may be thrown into the frames as soon as these are placed on the beds, and this should have had the benefit of dry quarters so as not to be in a wet, clammy condition, as when this is the case the roots never take readily to it. It is always a good plan, both for the sake of neatness and cleanliness, to lay a good thickness of clean stable litter on the linings of the bed. Of course, where heated pits are used for early vegetables much time, labour, and anxiety are saved, although extra care is necessary in order to prevent the soil in close proximity to the hot-water pipes becoming unduly dry. In preparing Potato sets for the frames it is best to subject them to a moderate heat only, as when sprouted too hurriedly growth is weak, and the effect is seen in the small inferior crop. For the first early planting in January I like to place the sets in boxes, arranging them in an upright position close together about the middle of November, standing them tolerably close to the glass in a sunny greenhouse or early Peach-house where the night temperature does not exceed 45 degs., or at the most 48 degs. Here growth will be slow, but it will be stout and about ½ inch in length when planting time in January arrives. I have discontinued placing leaf-mould or soil in the bottoms of the boxes, as, although this when kept in a moist condition induced the formation of young rootlets, many of these were broken off in removing the sets from the box, or so mutilated as to be of little or no service. If second early forcing tubers are placed in the above quarters about the middle of the present month they will be nicely sprouted by the second week in February, which is a very good date for planting the second batch. For frames it is inadvisable to allow all the sprouts which form to remain. I usually reduce them to two or three to each tuber. H. M.

French Beans

Many do not start forcing French Beans until the New Year is in, and it is a good plan not to do so when means for their production are on a limited scale, as the crop yielded in mid-winter is poor in comparison to what can be obtained after the days lengthen and brighter weather conditions obtain. Pots answer as well as anything in which to grow them—although I have secured excellent results by making up a bed similar to that required for Potatoes in a heated pit—as, being portable, they can be moved from one house to another when the space they occupy is required for something else. These may be 6 inches or 7 inches in diameter, which will accommodate four plants in the first and five in the second instance. The pots must be well drained and two-thirds filled with a mixture of loam and spent Mushroom dung or leaf-mould, with just a dash of bone-meal added. A good plan is to stand the pots on boards laid on the hot-water pipes, where a nice brisk temperature is maintained. When the soil is warmed through sow eight or 10 seeds in each pot and reduce the plants when up to the number specified above. The remaining space in the pots should then be filled with the same kind of compost in a warm condition and place supports for the plants at the same time round the edge of and in the centre of the pots, pieces of old Birch brooms answering better than anything else for the purpose. A moist-growing temperature of 65 degs. by day is requisite, and, except when in flower, the plants need to be syringed twice daily, as the foliage is quickly preyed upon by red-spider. For the same reason watering has to be carefully and frequently attended to, as they are thirsty subjects when in bearing. C. P.

Early Potatoes

I do not advise extra early culture in low-lying gardens, or where the soil is cold and retentive, and even in gardens favourably situated special preparation of the soil is necessary. The border should be dug as early in the year as possible, and a liberal quantity of opening material, such as spent Mushroom manure, leaf-mould, wood-ashes, and burnt garden refuse worked in. This is of the utmost importance, as thereby a speedy and free root-action is secured. The border should also be well elevated, and if ridged up to the action of frost and wind for a few weeks so much the better. This exposure ensures the crumbling of hard lumps, destroys insects, and sweetens and improves the soil generally. I consider fresh or wet farmyard manure about the worst thing that can be dug into early Potato borders, as it keeps the roots cold and retards growth. A south sheltered aspect is essential, as cold, cutting winds sometimes do more harm to the tender growths than a few degrees of frost. It is important that the seed tubers be properly prepared. I am aware that some consider sprouting unnecessary, but my experience is, that tubers furnished with short sturdy growths, when planted, produce earlier, if not heavier, crops than unsprouted tubers. I am, however, opposed to placing the seed in warm vineries or Peach-houses to sprout, except when intended for frame or pot culture, as it weakens it, and the growth is so tender that it invariably receives a check when the tubers are planted in the open border.

The seed of early varieties requires careful treatment from the time it is sorted from the eatable tubers in summer. I do not advise spreading the seed out on the ground to become greened, and, as some suppose, well ripened, as it induces too early sprouting, and if the earliest sprouts are removed, secondary ones are never so strong. The seed should be spread out thinly in cool, shady quarters, or it may be placed in boxes, arranging the tubers close together on their ends. The extra early short-topped varieties of recent introduction require no forcing to form sprouts sufficiently long for early planting. Even when the produce is wanted at the earliest possible date it is not advisable to adhere to any particular date for planting. This should be determined by the general condition of the weather and ground. I strongly advocate planting in shallow drills, and drawing slight mounds over them, as the extra early sorts do not root deeply, and the crop is always lifted before the weather becomes very hot. Deep planting retards early crops. A little loamy and leafy soil scattered over the seed tubers will assist root-action. I consider three growths to each tuber sufficient, as these will produce as much foliage as can be well exposed to sun and air.

Various methods of protection will suggest themselves to the cultivator. I find troughs formed of 12-inch deal boards nailed together as good and cheap as anything. These are placed over the rows at night and between them during the day. If given a coat of tar occasionally they will last many years. They should be stored in a dry shed in summer. Some use flower-pots, and others erect a rough framework with cross rails over the border, cheap stout canvas, oiled to preserve it from the weather, forming the covering. Unless the weather is exceptionally mild, covering should never be neglected, as at this period the sharpest frosts often come on in the early morning. Early Potatoes should be earthed up but very little. C. P.

Sowing Broad Beans indoors

The earliest gatherings are always the most highly appreciated of any crop, and it is none the less true of Broad Beans. To gain only a few days growers resort to pots and boxes for sowing, giving them protection in cool structures or unheated pits, so that their progress may be steady and prepared for outdoor planting. From boxes I have found but little gain over the earliest outdoor-sown, and thus have given up the attempt. Planted from pots they do not receive the check from root disturbance, and with favourable weather their growth, on being planted on a sheltered site, proceeds without interruption. The disturbance of the roots when planted from boxes is such that the growth is arrested for several days, and when this is resumed it proceeds at a rapid pace—that is, in good soil; thus early bearing, which is the primary object, is hindered rather than accelerated. In poor ground this trouble may not arise, but the latter condition is not favourable to the extent and quality of a Bean crop, whether early or late. To those who may be anxious to forward their early Bean crop by means of indoor sowing I would advise pots, or if boxes, the seeds should be very thinly sown, so as to reduce as much as possible the consequent root disturbance. W. S.

FRUIT GARDEN

Pruning fruit trees

PROVIDED fruit trees are grown in fertile, well-drained soil of good depth, results will depend largely on judicious pruning. Given such a soil, careful pruning along well-informed lines will result in large healthy trees bearing good annual crops of fine quality fruit. Most fruit-growers buy two, three, or four year old trees with which to make a new plantation or to fill up gaps in an existing orchard. The pruning of the very young trees will have been, in the ordinary way, in the competent hands of a nurseryman. Newly-planted trees must be cut back during the first year in their permanent positions.

Winter pruning includes the cutting of all large branches, and for this reason plays an important part in the renovation of neglected orchards when the necessity arises for clearing out awkward and crowded branches of many seasons' growth. It is sometimes supposed that mature standard trees require no regular pruning other than that necessary for the removal of dead and diseased wood. This belief is responsible for the unprofitableness of many orchards. It is well founded only so far as it is true that this type of tree does not need such regular pruning as bush trees. It is the complete neglect of the operation which is the cause of loss.

SUN AND AIR.—Trees which have ceased to grow for a series of years may derive benefit from top pruning, but more usually the most effective and lasting remedy lies in the enrichment of the soil by the application of suitable fertilisers. Pruning carried out by the experienced grower can have as its object either the assistance of fruit production, where too much of the tree's energy is being absorbed in the making of wood, or the promotion of wood growth when a tree is spending itself in over-cropping. Whenever pruning is done, its effect on the general shape of the tree should be borne in mind in order to preserve, as far as possible, the shape so desirable for the access of sun and air to all the branches. The open centre, in addition to assisting the ripening of the fruit on the lower branches, is conducive to more effective spraying. The penetration of sun and air to a maximum number of branches is a most important matter, and it is helped by a continual thinning out of the upper branches. The more drastic pruning permitted when the tree is dormant may include the cutting of the main trunk, where it has, in a standard apple tree, grown more than 5 feet above its lowest branches. In a carefully-built tree the five or six main branches are of equal size and well placed out round the main trunk. They are so trained as to secure, when the tree reaches maturity, the widest possible spread.

The removal of dead and diseased wood is necessary in mature orchards in most years. Such branches should be sawn off in the angle made with the main branch. This cut, after being trimmed with a knife, must be painted over with Stockholm tar or white lead paint. Special mention may be made of the disposal of wood attacked by silver leaf disease. The law requires such wood to be removed and burnt before July 15th in each year. The wise grower will not wait until this date is near, but will deal with affected trees as soon as the disease is detected.—*Daily Telegraph.*

Peaches and Nectarines

In the earliest house such sorts as Stirling Castle and Hale's Early will have so far swollen their buds as to show the pink tint of the petals, and therefore the syringe must only be used lightly on the forenoon of sunny days. Where Alexander and Waterloo are grown, their blossoms will by this time be fully expanded, and the trees themselves, as well as the surrounding borders and walls, must be kept dry. At closing time, however, on fine afternoons, a slight sprinkling of the floors will prevent the fertilising organs of the blooms from a premature collapse. A rabbit's tail and camel's-hair brush are useful aids in securing a fair set on these capricious sorts. Presuming the house to have been fumigated before the blooms commenced to open, green-fly should not be troublesome till the fruit is set. The neglect of this operation produces no end of trouble in early Peach houses, as during the blooming period nothing can be done to stay the inroads of this insidious insect. From now onwards till the fruit is set, a night temperature of 50 degs., rising by day to 55 degs. and to 65 degs. by sun heat, will be the most suitable, and when frost is absent a chink of air may always be left on at the top of the house.

Early vinery

Black Hamburgh and Foster's Seedling which were started in November will now be moving into growth, and should be treated to a slight increase of both day and night temperatures; 55 degs. at night and from 60 degs. to 62 degs. through the day will be suitable. With solar heat the thermometer may be allowed to touch 70 degs. before air is given, and if cold winds prevail rather allow the house to run up a little beyond the fixed standard than open the ventilators. In exposed situations perforated zinc sheets should be fixed over the ventilators; these will reduce the current and save the tender buds from injury. The border may now have another moderate watering; this will suffice till the flowering period. As soon as the growths are ½ inch long syringing must be discontinued, and all moisture supplied by damping the walls and surrounding surfaces. Of course, where there is a Muscat of Alexandria or a Madresfield Court Vine in the house these must be still syringed regularly until they burst their buds.

Mealy bug in the vinery

Of all the pests in our gardens this is the most troublesome, not only because of the immense amount of harm it causes, but also because of the difficulty in keeping it within bounds. It is almost an impossibility to really eradicate this filthy insect when once it has gained a footing in a vinery.

As the present is the time for destroying as many of the pests as can be reached, a few details of how best to combat an attack may, I hope, be of some little use to the novice.

Begin by pruning the Vines in the usual way, burning every morsel as soon as possible afterwards. Next, untie the rods and loop them in such a way as is most convenient for reaching them. Each rod is then gone over carefully and every morsel of loose bark rubbed off, special care being given to the spurs. An old blunt knife may be used to augment the rubbing with the hands, but the inner bark must not be damaged. Immediately the bark-removing is finished sweep up every loose particle lying about the house and burn at once. Very often old Vines have a number of cracks in the spurs, so all these should be gone over and pressed full of Gishurst Compound. Next, a strong solution of this same insecticide should be prepared and the rods painted with this. It is often advised to keep insecticides away from the eyes of Vines, but I have never known this preparation do harm to dormant buds. The next business is to thoroughly scrub with warm water and soap every inch of wood, iron, and glass in the house and then limewash all brickwork, mixing with the wash some flowers of sulphur and working well into every crack and corner. It is even worth while to paint brickwork with paraffin oil previous to applying the whitewash. Again sweep out every corner of the house and burn the sweepings, and as a further precaution remove a couple of inches of the surface of the border and replace with fresh, rich turfy soil. The Vines should, finally, have another couple of coats of the Gishurst Compound, and then one can feel fairly secure until growth starts again, when a close watch must be kept and any of the pest that may put in an appearance touched with a feather or camel-hair brush dipped in methylated spirit.

To those who have had no experience of this filthy pest all the above may appear to be unnecessarily troublesome, but no trouble is really too great if one can keep it fairly in hand.

Should greenhouse plants be cultivated in the vinery, as not infrequently happens, they, too, must be drastically treated so as to destroy any of the bugs that may be present on them. C. BLAIR.

Preston House, Linlithgow.

Apple Allen's Everlasting

This variety should be included in the list of the best keeping dessert Apples. The colour is reddish, flesh crisp, with a distinct sugary flavour. It does well as a cordon or bush. The trees bear freely, but the fruit is on the small side, therefore thinning is an advantage so as to get larger fruits. I remember a gardener who used to store the fruits in boxes of dry sand. I find that by not harvesting till they are quite ready—which was the second week in November last year—this Apple keeps well into June.

Dorset. T. S.

ROOM AND WINDOW

Treatment of room plants

THE fact that light is needed by plants is shown when a plant is left in one position for a considerable length of time; as a result the plant becomes one-sided, all growth is towards the light; but by turning the plant frequently, so that all parts of the plant receive an equal amount of light, it may be kept symmetrical. In general, southern, western, or eastern light is best suited to the flowering plants; northern light, in particular, to the Ferns and fine-foliaged plants.

Watering is one of the most important factors in growing plants; it determines largely success or failure with house plants. Failure from this viewpoint may result from over-watering or under-watering; it is easier to drown a plant than to kill it by drought. If too much water is given the soil becomes water-logged, sour, and the plant sickens; if too little water is supplied the plant wilts, leaves burn (if in strong sunlight), or leaves turn yellow and fall from the plant. Thus it will be seen that there is a happy medium. In general we can say that the soil should be thoroughly moist. Naturally there are exceptions to this rule, such as the Cacti and desert plants, which require very little water, and other plants, such as the Cyperi or Umbrella plants, which like abundance of water.

Water should be given whenever the plant is in need of it. There are two simple tests: (1) Rub some of the soil between the fingers; if it pulverises without caking it needs water; if it cakes it requires no water. (2) Rapping the pots with the knuckles; if the soil is dry the pot will give off a hollow, ringing sound; if wet, it will give off a dull sound.

hard-and-fast rule can be given, but water often as the plant needs it.

'hen watering a plant water it thoroughly. not give it a little now, a little to-morrow, water it well to-day and not again until it ds it, which may be two or three days ing the winter. During the summer it ıld be within a shorter time. Give water 'il it runs through the drainage hole in bottom of the pot. Leave ¼ inch to 1 inch ce between surface of soil and top of pot en potting. If this is filled when water- it will usually be sufficient to moisten soil thoroughly. Use tin or zinc trays in ıdows, or saucers under individual pots, do not let the pots stand in water (except he case of Calla, Cyperus, or Astilbe). If s are placed in jardinières, remove surplus ter from the latter. If the plants get very let the pots stand in water for five ıutes, or until the soil is thoroughly ked.

t is not necessary that plants should be en water of just the same temperature as t of the room in which they are growing. may be beneficial but it is not necessary. is method is practised more with conserva- y plants than with house plants. Do not hot water on plants. However, warm ter may be used to hasten growth, ecially with the Calla.

Syringing is a fine practice when it can be lowed; it keeps the foliage clean, the mata or breathing pores open, and helps keep insect pests in check. Use a fine ay and a powerful spray. Do not syringe nts which have leaves densely covered with rs; for example, the Gloxinia. If syring- cannot be practised, then washing the nts is the next best thing.

Every plant has a definite range of tempera- e in which it makes its best growth. Most nts suitable for house culture may be own in a temperature of 60 degs. to degs. during the day, with a drop of degs. to 15 degs. during the night. Plants ich require a temperature higher than degs. are hardly considered advisable for owing in the home. Plants grown at such temperature require a moister atmosphere an can be provided under living-room con- ions.

Under ordinary living-room conditions the nosphere is too dry to suit a large number plants. If many plants are being grown one room, as in a bay-window or house- nservatory, the humidity is increased by moisture given off from the soil. But ere this is not the case, where there are ly a few plants in the room, water should evaporated in the room in one way or other—from dishes on the radiator, by raying the plants, or keeping Sphagnum oss thoroughly wet on the surface of the il. Hot air heaters usually have some ans for evaporating water into the heated , so as to give an atmosphere that is not solutely dry.

spidistra starved

(G.).—It would be well to supply the roots the plant in question with fresh soil, as ey are now evidently in exhausted material. out the middle of next month would be a od time to do so, if a comfortably warm d rather close greenhouse is available to ace it in afterwards. Turn the plant out of pot and remove as much as possible of e old soil from amongst the roots, and pot it into a good compost of turfy loam, at, and sand, using a clean and well- ained pot of a sufficiently large size. Fre- ently syringe the foliage after it has been potted, and encourage it to grow freely, adually inuring it again to a full exposure the air. When the new soil is well filled ith roots a little weak liquid-manure water casionally will be of great benefit to it.

Exhibition Hyacinths

THE points to be observed when growing for exhibition are the selection of the best bulbs, those that are of full size and well ripened, and the use of a compost that is rich and open. Early in the autumn the varieties should be selected and purchased and the potting completed by the end of October. When growing for exhibition only bulbs of the highest quality are suitable, and it is as well to bear in mind that they deteriorate if kept out of the soil for any length of time after the period named. When selecting the bulbs solidity is of far greater importance than size—that is to say, a bulb of medium size, but heavy, will produce a much finer spike than will a bulb that is larger but lighter in proportion to its diameter.

Before potting takes place see that all pots are quite clean, for the exhibitor who pots up his bulbs in dirty pots is not likely to gain much success at the show. Drainage must also be perfect. Place a layer about 1 inch thick of broken crocks in each pot and cover with a layer of moss or material of a similar nature. The best compost I find is three parts good sound loam, one part well-decayed cow manure, and one part coarse silver sand. If cow manure is not obtainable the next best is that from a well-decayed hot-bed. Care should be taken to see that the compost is in only a moderately moist state. Fot the bulbs rather firmly and just deep enough for the apex of the bulb to be seen above the soil, the surface of which should be about ½ inch below the top of the pot. Fill the pots loosely with the compost and press the bulb down into it, filling up with more soil if necessary. If properly done the bulbs will be firmly fixed, and there will be no risk of their being lifted when making their roots. After potting see they are all correctly labelled, and stand them out of doors in a sheltered position on a bed of ashes and cover all with Cocoanut fibre refuse to the depth of 10 inches. The object of this is to produce roots in advance of the foliage and flower-spikes. Let them remain in the plunging-bed for about six weeks, when they will be well rooted. They may then be removed to a pit or house where there is only just warmth enough to keep them safe from frost. For the first week they should not be exposed to too strong a light, so it is as well to spread over them a few sheets of paper. After this place them as near the glass as possible and let them enjoy a free circulation of air, which is so necessary to induce a strong and sturdy growth. This is of great importance, as the exhibitor will find when his plants are judged, for several points will be lost if the leaves and flower-spikes are at all drawn. The date of the show will in a great measure determine as to the time the bulbs are to remain in the cool house. Hard forcing must be avoided, for it will in some degree weaken the flower-spikes and leaves. If wanted in flower some time in advance of the time they bloom naturally, give them gentle heat from an early stage, but no strong heat at any time. To bring them along steadily a temperature of 60 degs. should be maintained, and if this is bringing them on too fast lower the temperature or remove them to another structure. At all times keep them well up to the glass with a free circulation of air about them. When well advanced a little shading will be necessary during bright sunshine, removing it directly it is not required.

A good supply of water is necessary from the time the bulbs commence to grow, and when the flower-spikes are 3 inches or 4 inches high liquid manure twice a week will be of great benefit. I have always found the drainings of the manure-heap well diluted with water the best, and as a change about 2 ozs. of Ichthemic guano dissolved in three gallons of water.

I strongly advise the exhibitor to have double the number of sorts required, as it is impossible to have all in the right condition by a given date. It will also be advisable to have a proportion of the different shades of each colour in every collection. The following will be found good varieties for the purpose.—La Grandesse (white); Queen of the Whites, Lady Derby (salmon-rose), Queen of the Pinks (bright pink), Gertrude (rosy-pink), General de Wet (grand exhibition pink), Cardinal Wiseman (carmine-rose), General Pelissier (deep crimson), Marconi (bright red), Garibaldi (brilliant carmine-scarlet), Mauve Queen (dark mauve), Distinction (maroon), Laura (light rosy-violet), Lord Balfour (purple-violet), Queen of the Violets (a grand violet), Grand Lilas (fine blue), Captain Boyton (lilac-blue), La Peyrouse (porcelain blue), Menelik (deep black-blue), Duke of Westminster (a grand blue), and King of the Blues. F. H.

Arum sanctum (the Black Arum)

This variety needs different treatment from that given the white Arum, or Lily of the Nile. The latter is, really, a semi-aquatic and need not, necessarily, be entirely dried off after flowering. Arum sanctum, however, requires a season of absolute rest. During the period of resting, the plants must be deprived of water entirely and placed in such a position that they receive full exposure to the sun. During late August the plants should be shaken out of their pots and repotted in a good, sound loam without any addition whatever. Little water is needed until the foliage begins to push, but then and throughout the growing period plenty of moisture is indispensable. Flowers may be expected in the early part of the year when the plants are grown in the ordinary cool greenhouse. A SCOTTISH GARDENER.

A home-made propagator

Every heated greenhouse should be fitted with a propagator, and if the staging is made in sections, as is usual, one of these can be removed and the addition, in two sections, built in. The lower division of the propagator will be no more than a plain, stout box enclosing a portion of the hot-water pipes, and it can be fixed permanently or made removable at will. It is intended as a receptacle for Cocoanut-fibre refuse. The upper division must be a glass-covered case a little higher at the back than the front, with a hinged lid. It will take the place of staging when the propagator is required for use, and will give way to staging at all other times. It will be made, of course, to fit the section surrounding the pipes. EAST ANGLIAN.

The propagating-house

All plants from which cuttings are required should be warmed up by placing them in a temperature of 60 degs. at night, as soft cuttings strike with the greatest certainty. Fuchsias, Heliotropes, Coleuses, etc., from which stock is required, if placed in heat now, will throw out young shoots that will be ready for taking off the plants in February. Pelargoniums of all kinds should have a little more warmth now to produce cuttings from the old plants lifted in the autumn.

Growing the African Lily (Agapanthus)

(L. W.).—The best time to repot Agapanthus umbellatus is in the spring just before the plants start into growth, a suitable compost being loam, peat, and leaf-soil, with a good dash of sand and rotten manure.

Fern Notes

Old plants versus young ones

WHEN one compares the small or decorative stamp of plants as grown by the trade with those of a similar character to be usually seen in private establishments, there is a great disparity in the two as it relates to the freshness of the growth, speaking in a general way. This failing, methinks, results from two distinct causes. One of these may very fairly be designated the "avoidable," whilst the other, in contradistinction, can be suitably termed the "unavoidable." I will deal with the avoidable first. Gardeners in private places often retain their plants too long. I mean by this that, instead of casting aside a plant when it has either become exhausted or is too large for its purpose, it is retained, to manifest disadvantage. If the plant from any cause has lost vigour, and is so weakened as to need considerable nursing to bring it round, then I say it is better not to waste time over it, but to look to younger stock to supply its place. Instead of doing this, however, the old plant is, even if ever so shabby, still kept on with hopes of complete recovery in due time. The room nowadays in nearly all cases is far too valuable to countenance this mode of procedure. Shabby or half-starved plants are no ornament, whilst they occupy space and time also. Thus, for instance, to grow on a young stock of the decorative species of the Pterises, the Davallias, and the Aspleniums is much better than retaining the same number when they have attained to the limit of size in any given case. Healthy growing plants are much to be preferred to starved and stunted ones. Then, too, there is the matter of room, the larger plants occupying valuable space yet oftentimes not so useful or so ornamental as smaller ones. The over-crowding in itself being injurious to all soon makes a bad matter a worse one. The moral of this is to always have a few plants of a kind coming on to supply the places of those that are losing their attractiveness. In doing this one need not fear if an old plant or two is killed at times through hard usage in a cooler house or in unsuitable positions. There is to my mind a deal more pleasure to be had in plant culture by growing on a young stock than there is in retaining such in a healthy state when the limits as to size are reached. When there only happens to be one or a few at the least of any given kind, each one has, of course, to be kept for further increase. In most cases of Fern propagation, speaking of kinds best known and most useful, the increase by means of spores, by division or offsets is comparatively easy; as it relates, however, to the increase by means of spores, sufficient advantage is not at all times taken by gardeners to keep up a stock of young plants to succeed others.

In dealing with the other aspect of the question, "the unavoidable," it must be borne in mind that plant culture of any description is rendered very much easier where such large numbers of any one given kind are grown as to lay claim to a house exclusively to one species, or to such collectively as thrive well under the same conditions. This it is hardly ever possible to do in a private garden, hence the large trade grower has always in this matter a clear advantage. One's difficulties are considerably increased in growing in one house several plants whose special needs are widely divergent. Moisture and shade on the one hand may be essential, whilst on the other quite the opposite is the case. This difficulty is furthermore added to by the construction of the houses in which the plants are grown. In this the trade grower has the decided advantage as houses are now built, the contrast between the average run of plant houses in private establishments and those devoted to trade purposes being so palpable as to convince all that have any practical knowledge of their construction. In private gardens, where the houses are old ones, their construction is oftentimes such as to render the cultivation of small or medium-sized plants almost an impossibility. It must not, then, in such cases be wondered at if gardeners cannot produce such satisfactory results as their more fortunate brethren in the trade. For instance, the beautifully compact, neat, and useful plants of the Pteris family, as grown in nurseries, could hardly be got with twice the ingenuity devoted to their culture in a private garden. The growth in the latter would be in most cases more attenuated, giving the idea that the fault lay in the treatment alone. What refers to the Pteris does also to many of the Adiantums and to the Gymnogrammas; it is next to impossible to get the same results in one case as in the other. In private gardens it will oftentimes pay to grow small Ferns in heated pits where they can be got close to the glass rather than keep them at that stage amongst other and larger plants. This I have seen done with good results in more than one case. Shelves also, where possible, might be made use of to the same end. In the case of those who grow largely to supply the market, the object is to have the plants as good as they can possibly be got in small pots. To effect this some growers feed the plants to such a degree that when they do change hands there must soon follow a decline in the healthy look of the plants. Rather than buy the most vigorous-looking plants I would prefer those which have a hardy look about them, even if they be not of such a deep green shade or with such large fronds. The more natural the treatment has been the better will be the results afterwards.

DOODIA.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

Planting border

(G. Y. W.).—You might put Delphiniums, Phloxes, Michaelmas Daisies, and other tall subjects at the back, using Polyanthuses, Tufted Pansies, and Pinks in front. The subjects suitable are so numerous and varied in their requirements that we cannot well give you a full reply. You must improve the soil with stable manure if any plants are to thrive. Plant boldly and in groups. The Berberis, Lilac, Syringa, Thorns, Roses, and any other flowering shrubs might be used to break the view. We would use the Lombardy Poplar. This grows quickly and does not spread out very wide. You must plant at once.

Roses for fence

(H. Russell).—You would find the Rambler Roses, such as Felicite Perpetuel, Bennet's Seedling, Queen Alexandra, Aglaia, and Crimson Rambler, very suitable. You might also find Gloire de Dijon, Mme. Berard, and Reve d'Or answer your purpose. Lay a good foundation in the way of good drainage and suitable soil and we do not think any of the above will disappoint you. Any one of these will answer for the arch, while one of the many Clematises would also be suitable.

Lilium candidum

(Jane Dixon).—The bulbs should be planted as soon as the stalks have died down. Any good warm soil will suit them. If it is inclined to be heavy lighten it by adding sand or road grit, being careful to use only that which is free from petrol. If the soil is poor or dry dig in turfy loam and rough leaf-soil with a hand-fork, covering the bulbs with the same mixture.

GREENHOUSE

Primula obconica poisonous

I wonder if one of your readers could speak from experience of a quick and sure remedy for Primula rash? I suffer from it so much that I fear I shall have to give up growing these beautiful flowers. I have never dared to grow P. obconica, but P. malacoides treats me as badly as P. sinensis. E. G. H.

[This Primula seems to irritate some skins but we are not aware that it is more troublesome at one season than another. The following prescription for allaying irritation has been recommended. Fifteen minims liquid carbolic acid added to 1 oz. oxide zinc ointment, applying the same frequently to affected places. We have handled this plant for years without ill-effects of any kind, but, as our correspondent says, in a few cases the result may be undesirable. In such cases it is no wise to have anything to do with P. obconica. We have known the ordinary Chinese Primula to act in a similar way. The trouble can be got over by wearing gloves when handling the plants.]

Pruning climbing Roses in cold house

Will someone kindly tell me the proper time for cutting back and pruning Roses the roots of which are outside? The house is kept rather cold. I grow Maréchal Niel, Niphetos, and Mrs. W. J. Grant. By-the-bye the foliage of these Roses invariably gets very black and dirty after, say, June, in spite of fumigating and syringing, which I find spoils pot plants, such as Zonal Pelargoniums, below them. B.

[The best time to prune such varieties as you mention is about June—after flowering is over—when it is advisable to cut away any old wood that has apparently done its work. This will cause the plant to throw up plenty of young growths for next season's flowering provided the roots are in rich soil, or are supplied with nourishment from the surface. The production of these young rods will be encouraged by keeping the house rather close and supplying plenty of moisture during early summer, gradually hardening them off in late summer and autumn by giving more air. Any further pruning that may be necessary should not be done too early or new growths will be

GOLD MEDAL
Brighton, 1925
to
CARTERS SCOTCH SEED POTATOES
All the most reliable varieties from stocks specially selected and grown in the best Seed Potato Districts of Scotland.

SEEDSMEN BY APPOINTMENT

SEASON 1926

VEGETABLES OF QUALITY

THE painstaking care in Selecting, Testing, and Raising only the best varieties of Vegetables is again confirmed in the record list of Gold Medals awarded during 1925 to Exhibits of Carters Vegetables.

It is well to remind our customers that over 12,000 individual test rows were grown to full maturity in our grounds at Raynes Park during the past season, to compare and examine the merits of each variety at every stage of growth.

This process is carried out each year so that the highest standard of quality is maintained.

We respectfully invite you to inspect our processes by paying us a visit at Raynes Park.

ILLUSTRATED **CATALOGUE** *POST FREE*

Carters TESTED SEEDS

SEEDSMEN TO H.M. THE KING
RAYNES PARK, LONDON
S.W. 20

ECKFORD'S
GIANT FRILLED
SWEET PEAS
FOR 1926

These frilly monsters are recognised.

e World's Most Charming Sweet Peas
RGEOUS FLOWERS. MAGNIFICENT STEMS

FOR A WEALTH OF CUT FLOWERS.
FOR GARDEN DECORATION.
FOR EXHIBITION.

We Supply Collections of the Finest Giant illed Sweet Peas to Suit every Garden.

THESE COLLECTIONS go to every part of the world, and give universal pleasure. The range of colour is superb, every seed is hand picked so may be relied upon.

he following are specially chosen collections of Sweet as for 1926:

e Amateur's Collection contains 50 exquisite varieties 30 seeds of each for	22/6
hibitor's "A" Collection contains 40 exquisite arieties, 30 seeds of each for	17/6
hibitor's "B" Collection contains 30 exquisite arieties, 30 seeds of each for	12/6
hibitor's "C" Collection contains 24 exquisite arieties, 30 seeds of each for	10/-
hibitor's "D" Collection contains 18 exquisite arieties, 30 seeds of each for	8/-
hibitor's "E" Collection contains 12 exquisite arieties, 30 seeds of each for	5/6
hibitor's "F" Collection contains 12 exquisite arieties, 15 seeds of each for	3/-

Each kind is separate and named.

ou may have a Booklet on Culture, Free, kindly include it in your Order.

Write for Free Catalogue of all the finest Sweet Peas of the year. Also the finest Vegetables and choicest Flowers. This Catalogue will interest every Gardener, Amateur or Professional, and is free for the asking. It will pay you to buy direct.

ENRY ECKFORD, F.R.H.S.
ept. 101) Headquarters for Sweet Peas, WEM, Shropshire

FOOD FOR YOUR GARDEN

The Glory of the Garden

will be yours in full measure this year if you feed your flowers, fruit, vegetables and turf on

NORCO
COMPLETE FERTILISERS

THE PERFECT GARDEN FOOD

Which supplies the essential constituents contained in stable manure, but in a far richer and more convenient form.

PRICES (Bags Free and Carriage Paid):—

	7 lbs.	14 lbs.	28 lbs.	56 lbs.	112 lbs.
"NORCO" Complete Garden Fertiliser (For Flowers, Fruit and Vegetables)	2/6	4/3	7/3	12/6	23/-
"NORCO" Complete Lawn & Turf Fertiliser	2/4	4/-	6/9	11/9	22/-
"NORCO" Complete Potato Fertiliser	2/6	4/3	7/3	12/6	23/-

Send for free Booklet on the use of Lime, Stable Manure and Chemical Fertilisers.

"NORCO" (Regd.) is obtainable only direct from the Sole Manufacturers:—

CHARLES NORRINGTON & CO., LTD.
Cattedown, PLYMOUTH.

Makers of High Grade Fertilisers since 1846. No. 1

forced and will probably be nipped by any severe frosts that happen to come. The beginning of February is about the best time to cut in the lateral growths, etc. To encourage early flowering every bit of sun-heat should be shut in during February and March. The dirty appearance of the leaves after June is probably caused by the presence of aphis, and it is only possible to get rid of the nuisance by spraying with an insecticide. Much of the dirty foliage would be removed if the older wood were pruned away after flowering, as recommended. It is most difficult to grow Roses successfully indoors when other plants, such as Pelargoniums, have to be placed in the same house, for Roses need special treatment which will not suit other subjects.]

TREES AND SHRUBS

Cutting back Quick

(C. F. Savage).—You may, of course, if you wish, cut back the Quick this winter, but we do not advise you to do so until it has had one year's growth where it is. The reason the cutting back should be delayed a year is easily explained. The roots not yet being established, if you cut off the growth now you will rob them of the benefit of the leaves, which would be formed upon them early in the season; and, as the more leaves the more roots, you will understand the plants will commence to grow much later than when left unpruned. Indeed, this rule applies to all kinds of trees or shrubs that have been recently planted. The plants require all the assistance they can get from the leaves to get established again. To remove the summer growth earlier would be to delay their doing so.

Planting a hedge

(G.C.).—A first-rate hedge may be formed of Cupressus Lawsoniana, or Thuja Lobbii, or T. occidentalis. These are very much more expensive than Privet, and certainly much better. A very quick-growing hedge may also be formed by Myrobalan Plum, but this is, of course, deciduous. The oval-leaf Privet certainly grows quickly, and if properly trimmed forms a thick hedge, but many people do not care for this, as it looks rather suburban. We recommend plants, say, 3 feet in height.

Sowing Mistletoe seed

Being desirous of sowing a few Mistletoe seeds on one or two Apple-trees in the garden here, I would like your advice on the matter. Could you inform me if the berries that have been used at the Christmas festivities, etc., would be all right for sowing at present, or would I require to wait till March before doing so? If I have to wait till March do you think the berries would keep fresh till then if I kept them in damp Moss, or would I do better to procure some fresh berries about March? If so, do you know where I would be likely to get them? I would be very pleased to receive any information you care to give me on the subject. SCOT.

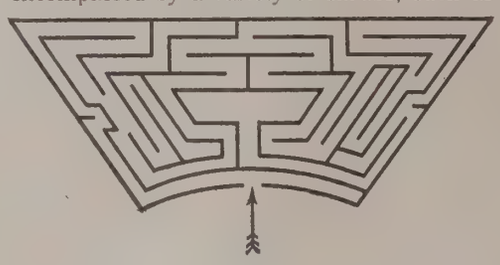
[It is waste of time to sow the berries that have been used at the Christmas festivities. You should procure fresh berries during March and sow them by merely pressing them on the underside of the branch of an Apple-tree. It is not necessary to cut the bark at the time of sowing. We do not know of any seedsman who makes a special point of supplying berries; they are generally obtained from private sources, or you might procure them from any of our leading nurserymen who specialise in fruit-trees.]

Hiding a fence

(C. C. D. Youings).—If it is urgently required to hide the fence as soon as possible you might plant Cupressus macrocarpa 3 feet apart. It grows quickly and is often used as a hedge, cut to any height desired. It will, of course, need trimming from time to time. If you could give more time a good proportion of Escallonia macrantha, in the places where the walks come near the fence, would be more interesting and would give flowers as well as good evergreen foliage; also Euonymus japonica or Laurustinus, especially the beautiful Laurustinus lucidus, or Garrya elliptica, Japan Privet, Veronica Traversii, and Ribes. Ilex, Scarlet Oak, and Larix would be too large for the proportion of the garden. Smaller trees, such as Judas-tree, Æsculus parviflora, double Thorn, and Amelanchier canadensis, would be more suitable in the back part of the wider spaces, with Guelder Rose, Lilacs, Philadelphus, Deutzia Pride of Rochester, Viburnum plicatum, Weigela, Leycesteria, and Symphoricarpus as shrubs of good size, and Rhus cotinus, Stephanandra, Deutzia gracilis, hardy Fuchsias, Cassinia, Olearia Gunni, and Hydrangea as smaller ones; not forgetting Lavender and Rosemary in the sunniest places. The division hedge at the end would be best of Yew.

Hampton Court Maze (M. A.)

THE Hampton Court Maze is first mentioned in the reign of William and Mary. It was probably made about the year 1700 by London and Wise. Hornbeam was its main constituent, but its walks are now encompassed by a variety of shrubs, such as



The Hampton Court Maze

Privet, Yew, and Laurel. The illustration in the American paper of a replica in an American garden gives the idea of a rectilinear design with circular centre. This is not correct, though the puzzle is, perhaps, similar.

VEGETABLES

An early Potato

(Carlo).—You cannot do better than try Witch Hill Early, in which the tubers are beautifully shaped, the eyes shallow, and the flesh white, while the cooking qualities are all that can be desired. It is immune to wart disease and a good keeper. Midlothian Early is also worth a trial. It is a yellow-fleshed variety, and many people object to it on this score. When cooked the quality is excellent. You should try the variety your friends grow. It may be improved by a change of soil.

Feeding Asparagus

(Anxious).—A great deal depends on the soil as to whether salt is beneficial or otherwise. If the soil is heavy and cold then salt is distinctly injurious, but if the soil is light and well drained then it will be beneficial. The best time to feed Asparagus is when cutting ceases. This can be met by occasional soakings of liquid-manure or by dressing the ground at the rate of 2 ozs. to the square yard with superphosphate and salt. Fish manure also answers well. The better the stems of Asparagus are nourished the finer will be the produce the following season. Soot, if very old, will also do good.

FRUIT

Pear tree failing to set fruit

(H. Fraser).—The best thing you can do is to have the Pear tree root pruned. Open a trench at a distance of 3 feet from the stem, operating on one side only of the tree this year. The fibrous roots should all be sav and laid out afresh, shortening back t strongest roots only. Work under the ball the tree and if any roots are found goi down into the subsoil cut these off with chisel. When you are refilling the trench is excellent practice to mix a fair quantity fibrous loam, burnt soil, and lime rubb with the soil, as this encourages the produ tion of fibrous roots, which in turn promo fruitful growth.

MISCELLANEOUS

Vine weevils in Fern pots

(Ulsterunda).—The grubs you find in yo Fern pots are those of the Vine weevil (Otio rynchus sulcatus). They are very destructi to the roots of Vines, Ferns, Cyclamer Primulas, Begonias, and other soft-root plants. The parent weevils are also very c structive as they feed on the leaves of you shoots of Vines and other plants. The be means of killing the grubs is by hand-pickin them out of the soil, no insecticide being any use as it cannot be made to reach the in sufficient strength to harm them witho injuring the roots. The weevils only feed night, hiding so carefully during the day th it is difficult to find them. They may caught if you can find on what plants th are feeding by laying a white sheet unc the plants, and then when it has been da about an hour throwing a bright light on t plant. This frightens the weevils and th fall as if dead, when they can easily be c lected and destroyed. If they do not fall gi the plant a good shake and search it w over. It is often useful to tie a small ball Moss or hay round the stems or lay a sm ball on the soil at the base, this affording snug hiding place during the day. The should be examined every morning.

SHORT REPLIES

G. A. Hopkins.—We should advise you leave it until next year—and even then l little pruning will be necessary. You v have to affix a stout stake to it.

D. S. O.—Without seeing your garden it very difficult to advise you. Your best pl will be to consult a gardener in your distri and who, on seeing what convenience y have, can tell you what best to do and plants to grow.

Hugh Russell.—Any seedsman should able to procure for you seeds of the plant y refer to. Some of the stronger-grow plants may bloom this season.

NAMES OF PLANTS

M. N.—Ranunculus bulbosus, otherw Buttercup or Crowfoot.

J. W. Browning.—Chrysanthemum Win King.

GARDENING APPOINTMENT

Mr. A. W. KIDLEY, previously at Dau-y-Br Radyr, Cardiff, as gardener to M TRUBSHAW, The Gardens, Aelybr Llanelly.

Mr. WILLIAM PRESTON, recently at De Grange, Flockton, Wakefield, Yorks, head gardener at Singleton Park, Poult le-Fylde, Lancs.

TRADE NOTE

Portable heating apparatus

An excellent portable heating apparatus greenhouses is manufactured by F. Bri and Sons, of Burlington Place, Bath. I easily fixed, with a cast-iron flue requiring brickwork, and may be placed in a sm space, with a certainty of a good draug The smallest size will burn 10 hours and larger ones from 18 to 24 hours, keeping a uniform heat. Bright and Sons hold te monials for these boilers from all over country, many having been used for 30 40 years.

GARDENING ILLUSTRATED

o. 2446—Vol. XLVIII. JANUARY 23, 1926 [Prepaid Annual Subscription to any part of the World, 13/

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

ve, treatment of ... 59
lia too tall 59
ucaria excelsa ... 59
TER SOUTHCOTE
EAUTY, SINGLE... 53
leas in bad con-tion 59
AN SEMI-DWARF
UNNER BIJOU ... 56
onias, fibrous-root- 59
GONIAS, TUBER-US, FROM SEED... 52
D TABLE, A... ... 49
BORDERS, THE GREY 48
Butterfly, the white Cabbage... 60
Charcoal burning ... 60
Conservatory, stocking a 59
Crinum amabile 59
Dahlias from seed, raising 52
Erica carnea 49
Ferns, Maiden-hair ... 60
Flowers, artificial colouring of 60
Flowers, annual, restoring the garden with... 47
FLOWERS FROM SEED, CHOICE ... 52
FLOWERS FROM SOUTH AFRICA ... 59
FLOWERS OF TIBET, SOME 50
Frost and vegetables... 48
Fruit trees, treatment of 60
Fuchsias from seed, raising 59
Fuchsias, treatment of 59
Furze, the Dwarf... ... 48
Garden in winter, the 48
Garden walks, the formation and repairing of 51
Gas tar as a remedy for mealy bug 48
Gesneras 51
Gladioli from seed, raising 60
Hyacinths for Christmas, prepared 48
Jasmine in the house, yellow 49
Lawns, making 56
Libonia floribunda not blooming 60
Michauxia campanuloides 51
Pear Seckle 60
Plants in bloom in the open on January 14th in a Cornish garden 49
Radishes 57
Rhodanthe Manglesi ... 54
Rhododendrons, about 59
Sidalcea candida ... 52
Stocks, East Lothian 53
Sweet Pea book, a new 55
Sweet Peas for exhibition 55
SWEET PEAS, NOVELTIES IN 55
Sweet Peas with large blooms, growing ... 55
Tomatoes 58
Tomatoes, outdoor ... 60
Vegetables, winter ... 56
Vine, treatment of ... 60
Viola Florairensis ... 48

Restoring the Garden with Annual Flowers

By Herbert Cowley, Editor of "Gardening Illustrated"

The cold easterly wind at the time of writing serves to remind one very forcibly of the evils of early sowing in the open. Whatever the weather may be, it does not interfere with the sowing of seeds under glass. They can be sown in pots, pans, or boxes well drained with crocks

'HERE are many reasons why we should draw special attention to the use of annuals at this season. In the first place y are not employed in gardens anything e as freely as they should be. Most uals are sown in the spring, and many y be sown under glass at the present time. recent years so many gardens have been ly neglected on the score of expense of keep. Happily there not wanting signs of toration. At all costs must have our gar-s bright with charm-flowers.

Ve know quite well n our own observa-ns, and from many ers that reach this ce, that great efforts being made to re-e gardens to their time beauty in all ts of the country. uals are as neces-for colour display in mer and autumn as ps are for the spring. ne important point ut restoring a garden annuals is that it the least expensive hod. Many annuals er magnificently on r, stony ground that urned up only to a th of 12 inches or so. he case of the Sweet , however, it is ier different. This ual pays for deep ching and liberal uring. Those who re to grow Sweet as for exhibition uld follow carefully article on page 55 by our contributor, E. Wright, and lose no time in getting ground well prepared. In getting a gar-ready for the general run of annuals deep ching and heavy manuring are not neces-. All that is required is that the surface should be reduced to as fine a tilth as sible. It is only a waste of seed to grow coarse, lumpy ground: As soon as the t is out of the ground, spade the soil and w it to weather before levelling the sur-face. And this brings us to another point, viz., the time of sowing. Seeds may be sown either under glass or in the open. So far as outdoor sowings are concerned there is no hurry, March and April being quite early enough, and even then we should select a fine spell of weather for the operation. "Sow dry and plant wet" is an old adage that has been handed down for many generations, and it is based on sound practice.

The grey borders

Pink, white, and purple flowers in a setting of silver-grey foliage

A suitable compost for sowing under glass consists of two parts of loamy soil, one part of leaf-mould, and one part of coarse sand. The soil should be passed through a fine-mesh sieve, using the rough stuff remaining in the sieve for covering the crocks for drainage. Certain annuals like Shirley Poppies, Godetias, Asters, Stocks, Dimorphothecas, Clarkias, Coreopsis, Mignonette, Phlox Drummondii, pot Marigolds, Candytuft, Gypsophila, and Eschscholtzias are indispensable in gardening. Then again there are well-known flowers not strictly annuals that might be included here among the indispensables, viz., Foxgloves, more especially white Foxgloves, Antirrhinums, Aquilegias (more especially long-spurred varieties), Canterbury Bells, and Wallflowers, all of which may be grown in quantity from seeds.

Modern Antirrhinums merit attention, and, being lime-loving plants, a liberal dressing may be applied to the ground at this season. Of the tall varieties, The King (orange - scarlet) and Yellow King are worthy of special mention; both attain a height of about 2½ feet. Of the medium varieties, Bonfire, Fire King, Afterglow, and White Queen are particularly good, while of the bedding varieties Lady Roberts, a pure primrose self, is unquestionably one of the finest of them all. Fine effects may be made with Antirrhinums alone.

Certain annuals, when once they are introduced to the garden, never fail to put in an appearance each year. We have in mind pot Marigolds (so very popular in Scottish gardens), Candytuft, and the ubiquitous Nasturtium. We should appreciate such hardy annuals all the more if they were not so familiar. It has been said, "If Nasturtium seeds were priced at a guinea an ounce they would be more highly thought of."

Some of the prettiest of the ornamental Grasses are annuals, and are excellent to use with everlasting flowers for winter decoration. Among the most beautiful of the Grasses are Tricholæna rosea (a Grass with exquisite pale rosy inflorescences), Briza minima, B. maxima, Lagurus ovatus, Eragrostis elegans, Agrostis nebulosa, and A.

pulchella, all of which are easily grown from seed.

From among hardy annuals, or those that can be raised in cold frames, we draw a large number of our Everlasting Daisies, such as the Rhodanthe, Helichrysum, and Acrolinium, while the annual forms of the Statice must not be overlooked. The Everlasting Daisies should be gathered when half-opened, as in the process of drying they expand still further.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The grey borders

WE call them the grey borders because this part of the garden, illustrated on the preceding page, which is mainly for August and September, has a general setting of grey foliage. The flowers are pink, white, and purple—Echinops, Clematis Jackmanni, Ageratum, China Asters, and some purplish Phloxes are the main of the purples; pink Hollyhocks, pink Star and other Dahlias, Godetia Double Rose, pink Snapdragons, and bushes of Lavatera Olbia are the pink flowers; the whites are Star Dahlias, white Hollyhocks, China Asters, and Snapdragons. Then there are Gladioli; the beautiful clear pink America in several patches, and the nearly white Peace; the fine purple Baron Hulot comes near the back, carefully staked, for the stem is tall and none too strong, so that the heavy heads of bloom fall if they are not well secured. Gypsophila comes in as part of the grey setting. At the back are some bushes of Sea Buckthorn. Next in height comes Artemisia ludoviciana, in growth much like the native Wormwood, but all white and downy. It is a most useful plant in the grey border, for it does well near the back grown to its full height, and it can be cut back to any height desired, even down to 6 inches. It must be replanted every year for it is what gardeners call a very rooty plant, the roots spreading far and wide. A good deal of Stachys lanata is at the front, intergrouped with dwarf Ageratum. G. J.

Frost and vegetables

I was much interested in Mr. McGuffog's remarks regarding the manner in which the winter vegetables have come through the continued frosts of November and December last. With the exception of Lettuces, he says, there is practically no complaint to be made. I have a different tale here. Varieties of Broccoli which I have grown for years always with satisfactory results are heavily hit. Varieties like Purple and White Sprouting April Queen, Leamington, Model, and Late Queen Broccoli have been disastrously dealt with. Even the Ormskirk Savoy has not proved infallible to the frost. An examination of the Spring Cabbage plot is also interesting, inasmuch as that old favourite Flower of Spring has been heavily hit, whilst a Cabbage, Kershaw's Perfection, sent out in 1925, has, up to the present, wintered remarkably well. Whilst on the subject of winter vegetables it may be worth while to note that a breadth of garden Swede Turnips has proved a great boon this winter. These are so much appreciated that no other winter Turnips are grown. The gardens are 200 feet above sea-level. The nearest point to a river is only five minutes' walk, so that local surroundings may have a very marked effect on vegetation. J. S.

North Cumberland.

The Dwarf Furze

This is certainly a pretty little species which I have not seen in cultivation. Both your correspondents speak of it as an uncommon plant. It certainly is not so in the southern counties, though it thins out northwards, but I do not know where it is to be found in flower in winter and early spring. It begins to flower about mid-July or early August and is seldom seen after mid-November, though it may persist longer in gardens. The name "Petty Whin," credited to it by "Ess," belongs to the "Needle Furze" (Genista anglica) and not to the Dwarf Furze. There is a third species, which is more likely to be mistaken for the common Gorse, namely, Planchon's Furze (Ulex Galii). It flowers at the same period as the Dwarf Furze and has about intermediate characters between that and the common Gorse, but it is a true species, not a hybrid. The period of flowering of these two, bridging over the absence of the common Gorse, gives rise to the saying "When Gorse is out of blossom kissing is out of fashion."

A. H. WOLLEY-DOD.

Viola Florairensis

I do not know if any of your readers grow a little hybrid Viola called Viola Florairensis. A friend bought the seed from M. Correvon at Floraire and gave me some seedlings, which started to bloom in July and have been a perfect joy ever since. I grew them on a sloping bank facing west where I grow semi-wild things and some alpine treasures of my own collecting, and now, though we have had 10 degrees of frost and every kind of weather, they are still blooming bravely and making quite a patch of colour. B. S. DAVIES.

Wood Green, Salisbury.

Gas tar as a remedy for mealy bug

I have been interested in the various articles appearing in GARDENING ILLUSTRATED on gas tar as a remedy for mealy-bug on Vines, including the note, issue January 2nd, page 3. I venture to give my experience.

On taking charge of my present place six years ago I found the vineries in a very bad state with mealy-bug, and I tried all the known remedies, with very little success, until last year I treated them with coal tar, with the result that I have practically cleaned the bug out. The early Vines I painted with tar right over, buds and all, and the other Vines, not being very sure of the tar, I left only one bud untouched.

The vinery in which I painted the Vines all over is absolutely cleaned and no harm is done to the Vines in any way. The Vines broke away as strong as ever. The other vineries are very nearly cleaned, and I am confident that I will clean out the pest this year with another application of tar.

If anyone troubled with this pest will try the following method I am confident they will find it a success. It will do the Vines no harm. Anyone not sure of it should try it on one spur, and watch the result.

Wash the house down with soft-soap and water, and clean all loose bark from Vines, then apply the tar, using one part of coal tar to five parts of boiling water (with clay).

Method: First add enough dry powdered clay to one part of coal tar to make a stiff paste, working clay well into tar; then add the five parts boiling water, stirring well until dissolved. Put the vessel with the mixture into another vessel with boiling water to keep the mixture soft, then apply to the Vir painting them all over, not forgetting buds. K. M

Peebles.

—— As an old reader of GARDENING ILL TRATED I have been interested in the dis sions *re* gas tar for mealy-bug on Vines. have used this remedy for over 30 years w necessary. When I came to my present pl I found two vineries literally swarming w mealy-bug. This was at the end of June, first house ready for cutting. Before tak the fruit to the house I swilled each bu through with the hose-pipe. There almost as much mealy-bug as Grapes. then employer wanted to know if I ha remedy. I said I had, but could not appl till the following winter. My remedy gas tar one part, boiling water five parts, enough pulverised clay to make the whol the consistency of paint. The Vines w painted with this mixture, and after two sons of this treatment there was not a bu be found on the Vines. I treated the br work and wood with neat paraffin finished off with limewash and two coat good paint to the woodwork. After 35 y I have not found any risk in using gas ta this manner, and I am using it this seaso a check to red-spider. I thought I w give you my experience, as my own case the worst I have ever known. I may s have not seen a bug here, in a fairly l range of houses, for the last 15 years. dealing with bug on Vines during sum months I have found methylated spirit plied with a camelhair brush the best rem

Bolton. J. T.

Prepared Hyacinths for Christm

In answer to your correspondent, Cowen, who inquires (issue January page 33) as to other readers' experiences "Prepared Hyacinths for Christmas, planted a bowl of l'Innocence Hyacinth September 5th, and the first spike opene December 27th. Ryder's Pink Queen Blue Queen, planted on September 11th, flowered on January 12th and 16th re tively. I always find the coloured Hyaci are later than the white. Roman Hyaci are by far the earliest, but have become terribly expensive. White Italian, whic in very few catalogues, are not as dear, mine were in flower by December 20th. these bulbs are grown in Moss with char and till the actual flowering spikes app were in an unheated room. This may their flowering, but seems to make stronger. Why do not British nurser keep Cervantes Narcissus? I saw it summer recommended in your paper a earliest flowering Daffodil, but searche British bulb catalogues in vain for it, obtained from Holland, and planted al Moss on September 19th. They are flowering freely (January 16th), well ahe Golden Spur, whose buds are only jus pearing. W. LOWRY COR

Enniskillen.

The garden in winter

I have read the recent contribution Louden McQueen Douglas to GARDI ILLUSTRATED (issue January 9th) with a greater interest because to me the garde always been attractive from the beginni January till the end of December, fro first Snowdrop to the final Chrysanthe and especially when I was in The N of Kirkmaiden. Mr. McQueen Dou illustrations of the beautiful gardens grounds of Newpark, under their ermin mantle, are very expressive of the m lously artistic aspect which the snow ca part, particularly when freshly fallen,

irdly interwoven branches of the trees. ›ut a month ago I was driven, on a morable Sunday morning, to preach in the ›ish church of Inch, which stands close to famous landscape scenes of Castle nnedy. Throughout the entire journey I s passing through a series of entrancing ry pictures created by the marvellous trans-ıring influence of the snow (that con-nmate, unconscious artist) upon the wood-ds and waysides, which, in serene and inless loveliness, transcended anything I ;e ever beheld. As I have written, many ırs ago, of similar phenomena in my poem Killin :—

›randeur stood on the mountains, lifting thought
nto sublime emotion; fancy found
\ glory in the sky when the still snow
Dropped like the feathers of a fairy's wing
From the dark clouds upon the slumbering earth,
Dr wavered, dream-like, in the tremulous air."

rhaps I may be permitted to add that I d Roses flowering in the open air in the ginning of December, and a specially fine d of Mrs. Tom Smith (a native of Wig-vnshire) brought in from the garden, ened out in a vase, to my intense gratifica-n, on New Year's Day. *Sic non transit ria Naturæ!* DAVID L. WILLIAMSON.

Erica carnea

In your issue of January 16th your corre-ondent, Mark Fenwick, somewhat doubts ır contributor of January 2nd as to Erica rnea commencing to flower in October. I ›uld like to add it commenced to flower the ne time here. By the middle of November ›st of the plants were flowering well. The il where they are growing is wet and reten-e, being on an island.—J. APPLETON, gar-ner to C. H. B. Whitworth, Esq.

The Gardens, Priory, Beech Hill, Near Reading, Berks.

A bird table

SIR, you lately gave an illustration of bird tables. As we may still have some severe weather and as the subject is of much terest to many people I send a sketch of a mple contrivance that is easily made and ves its purpose well. The illustration ows the arrangement. Three canes or any raight sticks about 6 feet long are tied to-ther near the top and are spread out 3½ feet art at the foot. Two feet down from the › tie three sticks are fastened together ross. It is best to bore the uprights and these with wire. The ends project and rm convenient perches. From the middle each crosspiece a strong wire is fixed to the ›posite upright, the three being wired to-ther in the middle. This forms a base for ordinary 5-inch punnet, which makes a nvenient food holder. To strengthen the nnet I put in a bit of fresh Golden Osier, hich curls tight into the inner bottom angle. ıen three short wires bent like hairpins are rust through the punnet, enclosing the sier ring, and are twisted up underneath. ıe structure is then complete. The feet of e uprights are pushed into the ground a ort distance away from some window of ›servation and it stands firm. A string with ›se ends is added to the top tie for hanging › a meaty bone or any fatty strip, and is iite as much enjoyed as what is in the food ısket below. Many kinds of birds come, ıt the tits are the most frequent visitors and ıe prettiest to watch. Sometimes there are ›ur at a time, and generally one clinging on ›side down to get at the hanging bone. I ıve also a way of slinging a swaying ocoanut that seems to be equally popular nd is even easier to put up. G. JEKYLL.

Yellow Jasmine in the house

It cannot be too widely known that the yellow Winter Jasmine opens most beautifully and perfectly if gathered in bud and brought into the house. I have recently been given a bunch of the long, graceful sprays gathered in the open air and with a few blossoms open. These, after three or four days in a vase of water, are now wreathed from end to end with dozens and dozens of the lovely golden flowers. The buds, moreover, which open in this way indoors in water are much more perfect than those which struggle and struggle open out in the garden. Yellow Jasmine is one of the easiest shrubs or climbers to grow, thriving in any reasonably decent soil, and it is one of the best of all climbers to put on a north wall. When there is such an easy and cheaply-bought climber which on even a north wall will give, year after year, winter after winter, long sprays of lovely, cheerful, golden blossom for the house during the coldest and most poisonous weather, it is surprising how many gardens there are which do not possess it.

I am ashamed to have to confess that I have not got a yellow Jasmine in my own garden, though this grave lapse is shortly to be rectified. Yellow Jasmine flowers on the shoots which it made during the previous summer, so that in the matter of pruning, the plan is to cut back in spring soon after the flowering is over to encourage a crop of flowering shoots to break from the main permanent branches. Besides being grown as a wall shrub this Jasmine may perfectly well be grown as a shrub in the open, and it is extremely effective on a bank where it can sprawl and trail about.

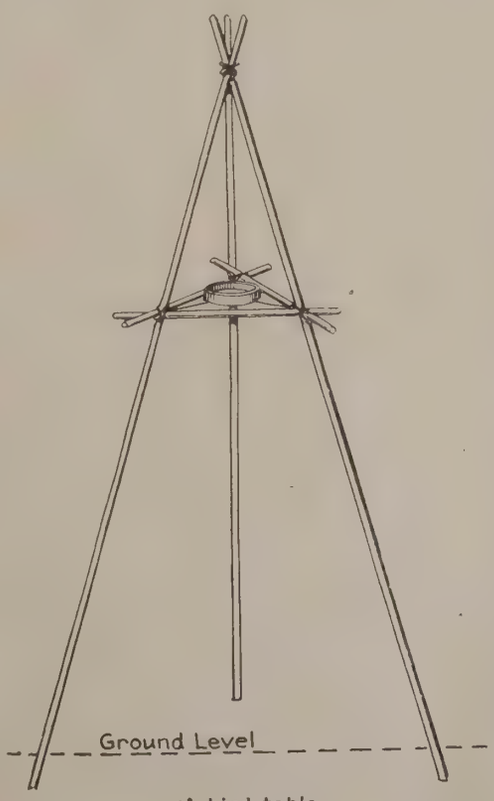
How often is yellow Jasmine grown as a pot plant for house decoration? With a little careful pruning and manipulation there is nothing one could not do with it in pots for this purpose.

I once had a pot specimen which I grew for years as a dwarf tree, rather in the Japanese manner. Each spring I cut away the shoots which had just flowered, and plunged the pot out in the open garden. It made a suitable amount of summer growth which was always well beset with buds, and then in autumn, or rather early winter, the pot was lifted and brought into the house—not the greenhouse, but the living house—and in a very short time the little tree would be smothered with its lovely golden blossoms and would remain a most lovely picture for several weeks. One could leave the plant out in the open, and, as a rule, could thus retard it until one was ready for it and in need of it; that is, until one was really short of flowers for the house, and then one could rely on its rushing into flower in a week or two in ordinary living-room temperature.

I believe it would pay any market grower to grow a batch of yellow Jasmine for the Christmas market. After a little experiment the plants might be brought into flower in unheated houses for Christmas or for almost any other winter season. My little tree was no trouble at all, for being plunged in the open the roots soon found their way through the hole of the pot, and were practically independent of all watering. But you cannot quite *entirely* depend upon this. I counted on it once too often, and one year, to my great grief, the tree died whilst I was away in the Alps. I had not left any directions for its being watered, and the little tree was by that time an old gnarled specimen well stricken in years.

My main object in this note, however, is to emphasise the fact that the yellow Jasmine opens so splendidly when picked in bud and brought into the house. Left to open in the open air the plant looks cheerful enough and brave in all conscience, but it is apt to have rather the air of a battered hero, and so somehow does not always tempt one to pick it for the house. Picked in bud, or when the first flower or two has opened, and then brought indoors to open, the flowers display a clean beauty and quality which is altogether a revelation. CLARENCE ELLIOTT.

Stevenage.



A bird table

Plants in bloom in the open on Jan. 14th in a Cornish garden

Abutilon vexillarium, Acacia riceana, Ampelopsis sempervirens, Arabis, Arbutus Unedo, Aubrietias (various), Berberis Bealii, Berberis Darwinii, Camellia japonica, Carnations (Perpetual Border, in variety), Christmas Roses (Helleborus præcox), Chrysanthemums (Rene Turner and H. W. Thorp), Doronicum plantagineum, Drimys Winteri (just opening), Eranthis hyemalis (Winter Aconites), Escallonia macrantha, Exochorda grandiflora, Genista fragrans, Hamamelis mollis, Hydrangeas (a few), Hypericum calycinum (Rose of Sharon), Iberis sempervirens (white Candytuft), Iris stylosa, Lapageria rosea, Laurustinus, Lithospernum prostratum, Lonicera fragrantissima (Winter Honeysuckle), Lonicera periclymenum (Common Honeysuckle), Lunaria biennis (crimson and white Honesty), Narcissi, Omphalodes verna, Periwinkles (three kinds), Petasites fragrans (Winter Heliotrope), Polyanthuses and Primroses (in variety), Rhododendrons, Roses (various), Sarcoccocas (S. humila and S. ruscifolia), Shasta Daisies (a few), Snowdrops (various), Solanum jasminoides, Sweet Rocket (Hesperis matronalis), Sweet Williams (in variety), Vaccinium pensylvanicum, Valerian (two kinds), Veronica salicifolia, Violets (Kaiser and Princess of Wales, in abundance), Wallflowers (in variety).

The Magnolia buds referred to on page 756 (December 12th, 1925) were destroyed by December frosts, but fresh buds are now appearing and may be in bloom almost any day if frost holds off. E. A. S.

The Gardens, Carclew, Perran-ar-Worthal, Cornwall.

Some Flowers of Tibet

III.

By F. Kingdon Ward

Including new Loniceras, Rose species, Berberises, Cotoneasters, Viburnums, and other shrubby plants

ALTHOUGH we found far more species of Rhododendron in Tibet than of any other genus, only Primula approaching it in variety and profusion, it must not be imagined that there was nothing else. As a matter of fact, this small corner—small, that is, compared with the size of Tibet, being about one-twentieth of the whole—is extraordinarily rich in species, though we were unable to penetrate far into the interior. As one travels eastwards the flora grows more and more varied, and we ourselves hardly got beyond the fringe of the new discoveries which await future explorers, though we did, I think, skim the cream from the country we explored.

Of shrubby plants mention must be made of the Loniceras or Honeysuckles. None of these were of the familiar twining variety, most being erect bushes and shrubs; one attains the dimensions of a small tree, several are under-shrubs, found growing amongst the broom-like Lapponicum Rhododendrons on the alpine moorland, and one is a creeping plant from high altitudes. With two or three exceptions they are chiefly remarkable for their fruits, which are orange, scarlet, or plum-purple, and bushes covered with berries in early winter are often a wonderful sight. At present I can only refer to them under their numbers.

Lonicera K.W. 5775 is a forest shrub with small yellow flowers, but translucent cherry-red fruits dangling on long thread-like stems; more notable in fruit than in flower.

K.W. 5822 is the tree species mentioned above, found in the depths of the forest. It has large glossy leaves, inconspicuous flowers maroon in colour, but particularly fine fruits as large as wild Cherries, of the same colour, and borne at the ends of 2-inch pedicels.

K.W. 5872 is the most striking species of all, for it has rich purple flowers, violet shoots bearing rather glaucous or sea-green leaves, followed in the autumn by large blue berries. It grows into a stout bush. Three species, K.W. 5776, 5918, and 5988, are obviously related, all having the flowers rather large, funnel-shaped, and pale yellow, protruding in pairs from a large papery skirt composed of connate bracts, and egg-shaped berries; but their habits are quite different. The first is a small bushy shrub growing in open thickets by streams; the berries are orange. The second is a twiggy under-shrub growing tangled up with the dwarf Rhododendron carpet on the alpine moorland, and it has large blue-black berries. The third is a prostrate creeping plant growing on steep gravel screes, and it also has orange berries. All three are very floriferous, and handsome in fruit as well as in flower.

Three species of Rose were met with, a white-flowered, sweet-scented Briar, with smooth reddish-orange fruits; a big climber (not seen in flower) with ample bunches of smooth bright yellow fruits recalling those of R. bracteata; and a bush which in fruit recalls the flask-shaped bristly hips of R. Moyesii, though the flowers are much more rosy-red than in that species.

We also found several species of Berberis, though only one or two were of outstanding merit. There are so many species of Barberry, and they are so very much alike and cross so freely to give intermediate forms, that one is chary of booming the claims of new ones. However, one with jet black stems (when wet) and glaucous foliage, which turns a medley of glowing colours in the autumn, might be worth the attention of growers; and a dwarf species with translucent red berries and scarlet autumn foliage may also be mentioned. The most free-flowering bush species was spoilt by having small black fruits, while a rather similar-looking bush with scarlet fruits did not bloom so freely.

No doubt we shall gradually weed out from our gardens all the second-rate Barberries, keeping only the best—plants like B. Wilsonæ, B. Darwini, B. stenophylla, and others; until we do, it seems a pity to go on introducing species, however "good" botanically, which differ only in technical details from plants already in our possession. The Barberries are chiefly useful for autumn decoration, either for the colour of their foliage or for a lavish display of vivid berries. So far as flowers are concerned, we can never hope to vie with that remarkable Chilian plant, B. Darwinii, which is, surely, the last word in flowering shrubs. That being so, it is as well to bear in mind what we want before introducing a new Barberry, and to aim definitely at those requirements, such as, for instance, a species which shall ripen its fruit later than anything we now possess, or one with orange berries, or one whose berries are not touched by birds.

What applies to Barberry applies also to Cotoneaster. Our gardens are already overloaded and undermanned, and woe betide the collector who introduces a new Cotoneaster without first counting the cost! As a matter of fact, Tibet is not rich in the genus, but we noticed two species. One, a sprawling rock plant after the style of C. horizontalis, but larger, made such a gorgeous display of Holly-red berries against the bare, dun-coloured hillsides as late as January, that I could not resist the temptation to bring back seed. The other was a small tree gay with pendent umbels of red berries; but this we did not see in flower, and I brought back seed on the strength of the bunched berries. Two species of Viburnum found their way into the bag, one by reason of its lurid winter foliage, which indulges in tropical sunset effects. This plant recalls the lamented V. Wardii from the north-east frontier of Burma, a glorious plant of which no seed has ever been sent home; and it comes, indeed, from a very similar region, alpine thickets on the wettest of wet mountain ranges. The other species is a small tree, and though we did not see it in flower, I collected it because the natives eat the scarlet berries, which hang in large bunches very like those of the Cotoneaster mentioned above. I ate some myself, but cannot say I liked them, the flavour being distinctly tart; they would probably make a palatable jam or wine, like Elderberries.

There are two distinct shrub formations on the borders of the Tibetan forest country, the wet and the dry; both get much the same sort of treatment in the summer, that is to say, perpetual rain; but the conditions in winter are very different. In the dry region the winters are long and rigorous, with little snow, biting winds, and very low temperatures. In the wet region the winters are also long, lasting, in fact, for seven months out of the twelve; but so far as the vegetation is concerned, they are not nearly so rigorous, all plants, from 11,000 feet upwards, being buried under fathoms of snow from November till May. Needless to point out, this is a

Alder and other forest trees in the wet zone of Tibet

poor consolation to the traveller, who cat it both ways, and, on the whole, prefers "dry cold" region to both wind *and* sn Amongst plants the chief sufferers by change are the Rhododendrons, which, a representation of some 60 or 70 spe found by us in the wet region, dwindl 15 or 20 species only in the dry region. worth noting, however, that the reductic in number of species only and not in dividual plants; there are probably quit many Rhododendron bushes in the one re as in the other.

Certain plants, typical of the dry regior not occur in the wet region at all, and *versâ*. Two shrubs of outstanding n peculiar to the dry zone are a variety of well-known Sophora viciifolia, and a va of the equally well-known Potentilla frutic

The former is a plant of the sand d and of the barest dry rocky ravines, a malicious-looking thorny shrub. But in it breaks into billows of dark violet flo floating in the sea-green foliage, and is more beautiful than the anæmic-loo Sophora we cultivate under the same na Except in the colour of the flowers I ca see any obvious difference between the plants.

It is much the same with the Potent As grown in England—and as I have quently seen it both in China and Tibet fruticosa is a small shrub studded with buttons. The flowers on our plant are c twice the normal size, so that the whole p is smothered beneath a shower of gold; bably this is a distinct species, not a va of P. fruticosa at all, though, out of flo there is very little to choose between the

In the dry region the forest is chiefly c ferous—Picea above, Pinus below. C trees occur, but they are scattered, as Pru Poplar (two species), Birch, Willow, and course, Rhododendron, together with variety of shrubs, as Elæagnus, Hippop Piptanthus, Euonymus, Clematis mont and others. Comparatively few of these plants of distinction; the best ones I already mentioned. F. Kingdon Wa

The Formation and Repairing of Garden Walks

SEEING the state of many garden walks after snow or rain shows how important it is to have them thoroughly well made at starting, for without that, one may patch and mend, and do what one will, short of remaking, and yet not get them in a satisfactory condition in wet weather. The first and most important thing, perhaps, to be thought of in the formation of walks is to get rid of the surface water, which many endeavour to do, and provide for, as they suppose, in the rubbish they put in at the bottom. To conduct water thus is the greatest mistake possible; as instead of the foundation being loose and hollow it should be just the reverse, and unless made so at first the top will never be firm and solid, however much the roller may be used. The same remarks apply, although not in an equal degree, to walks that are formed by just digging out a little earth and then putting gravel in without other material below, in which case they are sure to be soft and rotten and form a congenial bed and home for weeds, as the worms will work and throw up the soil, or it will ooze through and become mixed with the gravel above.

The depth at which a walk should be dug out at starting depends on the locality and soil of the garden, but, roughly speaking, a foot is quite enough; and with this done, the next thing is to provide the drains, and the simplest and most economical way is to run a main one along the centre of the path, and lead the branches to it. These, of course, will connect with gratings and cesspools placed at intervals, the cesspools being made to catch the sand or other débris washed off the walks, and so prevent the drains becoming blocked, as the gratings can be so arranged as to be lifted out easily, and the cesspools or traps cleared as may be necessary before they are full. The most suitable pipes for

FORMING DRAINS are those of glazed ware, which are very hard and durable. The 3-inch sizes are quite large enough. These run in 2 feet lengths, with sockets, may be quickly laid, and with a little fall will keep clear always, as being smooth inside as well as out, nothing can lodge on their surface. With the drains and cesspools down, all will be in readiness for the foundation, for the formation of which clinkers from the furnaces, burrs or broken bricks from the kiln, slag from any iron foundry, or other hard material of that character are most valuable. If none of these can be had near, and chalk alone is available, that forms an excellent substitute, and should, in any case, be used for filling up the interstices between the bricks, burrs, etc., forming the bottom, for reasons already stated above. Lime cobbles or the siftings after lime has been slaked come in even better than chalk, and failing either, gravel of an adhesive nature may be used in their stead. Now we come to the next layer, which should be rough, stony gravel of a good binding character, and with this spread and levelled evenly down, the finishing off should be effected by using some fine, keeping the middle of the walk at least an inch higher than the sides. This, if the walk is not wide, will be sufficient to throw the water off to the gratings, where it will quickly pass away, and as soon as the gravel is dry enough after rain it should be well rolled, and the same after frost, as frost lifts the surface. With regard to

OLD FAULTY WALKS, they may be improved by first breaking them up a little, and then adding the best binding gravel that can be obtained, but this must have plenty of small stones in it, as otherwise it will not bear the weight or wear that may come upon it. Where there is but little traffic, nothing looks nicer or is so agreeable to walk on as

TURF PATHS made from 3 feet to 4 feet wide. Their keep involves less labour and attention than gravel, as the mowing machine can be quickly run over and the Grass cut once a week during summer, and there the thing ends. With gravel there will be weeds, which must be pulled out or destroyed by using any of the weed-killers now on the market, and frequent rolling is required to have the surface good. In places where there are shrubbery borders

GRASS WALKS form a fine setting to the sides, such as can be had in no other way, but in situations of that kind they should be much wider, and those who happen to have walks made of gravel through their shrubberies and which are not satisfactory will find it the best thing to do to turf them over or sow seeds in the spring. All that is necessary by way of preparation is to scatter an inch or so of fine soil over before laying the turf or sowing the seed, and unless the position is very hot and dry the Grass will grow sufficiently strong and make a fine bottom.

Forests in Tibet, with shrub growth by the roadside

A village with Walnut and other trees in the dry zone, Tibet

Michauxia campanuloides

This is but rarely seen, and as the time for ordering seeds is with us it may be worth while drawing attention to it. It is desirable that seeds of M. campanuloides be sown under glass—the temperature of a warm greenhouse being suitable and hastening germination. The seedlings should be pricked off into pans or boxes when they are quite young, with a view to planting them out in May in the open. As these young plants will not, even under the most favourable conditions, bloom until the following year, the grower ought to aim at encouraging growth in every way. During late autumn the plants may be put out in the position in which they are to flower, and, if the situation suits them, they throw spikes quite 6 feet in height upon which a succession of bloom is carried over several weeks. The colour of the flowers varies; some are white, some pink, and some of a delicate shade of lavender. After flowering ceases the plants die, but they are so very effective in their season that all admirers of the Bellflower family ought to grow a batch of M. campanuloides. W. McG.

Mabie.

Gesneras

Few stove plants are more brilliant than well-grown Gesneras. I have plants in 6-inch pots with large velvety leaves and glowing pyramidal spikes of flowers of a dazzling colour. For the decoration of stoves, and even warm conservatories, also for dinner-table embellishment, there are few other plants that produce a richer effect than these. A shelf in a well-heated stove or Cucumber-house will accommodate a good number of plants, which, when in flower, may be kept fresh and healthy in a minimum temperature of 50 degs. Those who possess warm structures and desire brilliant flowers to succeed Poinsettias should grow Gesneras. For flowering at this time of year pot up the tubers in July. F. H.

CHOICE FLOWERS FROM SEED

Barr's Long-spurred Aquilegias

A grand strain, containing a great variety of colours, from pure white, blush, pink, and rose to scarlet, and from pale and dark blues to primrose and rich yellow

Tuberous Begonias from seed

LIKE every other florist's flower, the Begonia has passed through a wondrous phase of development. We have almost ceased to marvel now when we stand at the exhibition table and gaze at flowers we never dreamed possible a quarter of a century ago. But this much is certain. When we remember what beautiful strains of Begonias are now available we might well take care that the few plants we grow each year are obtained from seeds of some of these strains.

A greenhouse in which a temperature of about 65 degs. F. can be maintained is well suited to raising Begonia seedlings. Seed pans are best adapted for this purpose, and these should be adequately drained. The compost should consist of a good loam, leaf-mould and sand well mixed together in equal proportions. After passing the compost through a ¼-inch sieve partly fill the pans, firm gently, and water with a fine rose. Then spread a thin layer of the same compost passed through a finer sieve. Sow the seeds thinly and cover the pans with shaded glass. The pans should be watered as required by standing them in water, but in order to preserve a uniform moisture it is a good plan to plunge the pans in leaf-mould or other moisture-retaining material. In about three weeks, or probably less, germination will have started, and when the seedlings are through, the glass may be removed, although the seedlings must still be shaded from direct sunlight.

Pricking off the seedlings is a delicate matter on account of their extreme fragility, but with the aid of a wooden meat-skewer and well-controlled fingers the tiny seedlings may safely be transferred to another pan. This should be prepared in the same way as was the seedling pan, and the moisture must be equally well regulated. Take care not to discard seedlings because they are weakly. These often turn out the most precious varieties. The next shift may be made into a compost of rather richer soil, and in due time the seedlings may be potted singly into 3-inch pots. H. GREAVES.

Sidalcea candida

An excellent border plant which has been comparatively neglected because of the greater favour shown to its coloured relatives is Sidalcea candida, the white False Mallow. It grows well in any ordinary border, and can be cultivated in sun or partial, almost entire, shade. It is good for the mixed border, and one can visualise the beauty of a bed filled with plants of S. candida, with its many spikes of satin-white Mallow-like flowers on spikes 2 feet to 3 feet high. It is a plant easy to procure and easy to cultivate. It can be propagated by division or raised from seeds, the latter being sown in the open in shallow drills in May or June, or in pots under glass. Spring or early autumn is the best time to plant. The flowers should be staked timeously, as the stems are rather weak and fall over unless supported. Thin sticks or, preferably, slender branches are best for this purpose. S. ARNOTT.

Raising Dahlias from seed

Probably few amateurs realise with what ease Dahlias may be raised from seed. A sowing made in February in gentle heat will produce sturdy plants that will bloom the following autumn.

There are two distinct advantages to be gained by treating Dahlias as annuals. The is the chance of raising some charmi novelty, and where space limited the trouble of stori the tubers through the winter dispensed with.

Sow the seed thinly in pans boxes in light, rich soil, coveri lightly. When about an in high pot off each seedling sing into small pots, bringing the s up close to the base of the leav Do not discard the weakly see lings. These are worth a lit extra trouble, as they are t more likely to produce the m striking blooms.

Keep the plants in heat, givi a little extra care until w established. Do not remove t centre shoot as growth develo Water freely and give as mu air as possible.

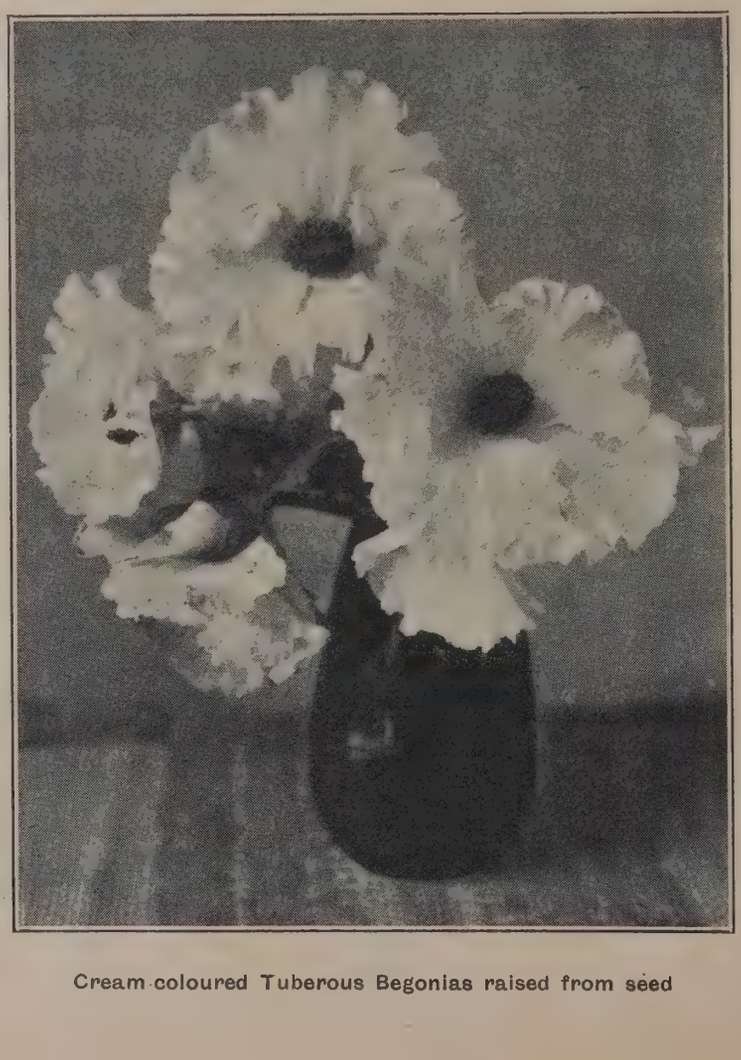
If you have more seedlin than you have room to plant c discard the strongest-growing

As the time for planting c approaches—the end of May beginning of June—harden off much as possible. The plan may now be standing outside care is taken at night to prot them from late frosts.

The Dahlia delights in a de rich soil and plenty of wat Plant about 4 feet apart ea way. Slugs are very partial the young plants, and it is visable to dust around them w soot or lime.

Beyond careful staking t Dahlia requires little more att tion, and will repay the garden with a wealth of bloom from Ju or August until cut down frost. R. E. TWINN.

West Horsley, Surrey.



Cream-coloured Tuberous Begonias raised from seed

Dimorphotheca aurantiaca hybrida (Barr's)

Producing charming blends of colour, such as blush-white and orange, creamy-white and lemon, yellow and salmon-orange, all with a central zone of another colour and a dark centre. A popular half-hardy annual

Single Aster Southcote Beauty, a giant Ostrich Plume variety that has become exceedingly popular
It is unrivalled as a border plant and for cutting and home decoration

Single Aster Southcote Beauty

SOUTHCOTE BEAUTY, the subject of the accompanying illustration, for which we are indebted to Messrs. Sutton and ›ns, is the name given to a fine race of anching habit which may be described as giant Single Ostrich Plume Aster, and it ıs become exceedingly popular. The flowers ıve long, perfectly-formed petals, but the ›lden-yellow centres are very small. They ·e carried on long stiff stems from 12 inches 20 inches in length. White, pink, scarlet, auve, and purple are now saved separately, ıd the mixed seed includes other beautiful ›lours. Sutton's Southcote Beauty is of ·eat value as a border plant, attaining a ·ight of 2 feet to 2½ feet, and is probably ırivalled by any other Aster for cutting and ›use decoration.

Single Asters are more largely grown each ·ason, and we do not know of any class of ›wers so valuable for cutting as these hen the days are shortening. The Sinensis a great improvement on the original hinese Aster; not only have larger flowers ·en attained, but the modern strain comes ırlier into bloom. The plants are very free-·owing, and require spacing at least 2 feet 2½ feet to admit of full development of the ›wer-stems, which are often 18 inches in ngth. Legion of Honour and Firefly are ·obably the richest-coloured of all, and the ›lden-centred flowers arranged in a large ›wl make a pleasant surprise for those who ıve not grown single Asters for indoor ·coration. The pink variety, Venus, is an extremely dainty flower, while Southcote Beauty, a giant type of Single Ostrich Plume, leaves nothing to be desired.

East Lothian Stocks

Where one can manage to preserve the plants over winter very fine results are had by sowing the seeds in July. Unfortunately, this is impossible, except on light, dry soils in mild, sheltered districts, for even when given the protection of a frame damp ordinarily destroys the plants wholesale.

Although somewhat later in flowering, plants raised in spring give an excellent account of themselves, and in Scotland, at all events, this is the method most often followed. As this Stock is, naturally, a late bloomer it is necessary to start early, and the last week in January is about the right time to do so. Any light sandy compost will serve for sowing the seeds in, and this should be placed in well-drained pans or small boxes. Sow thinly and evenly, for, like all Stocks, these are apt to damp off badly should there be anything in the way of overcrowding. A genial warmth of 55 degs. suits splendidly, but should greater heat be employed the pans should be removed to a lower temperature immediately growth appears through the soil. Until fit for pricking off the pans should be placed close to the roof-glass and care taken not to over-water. As soon as large enough to handle prick off into boxes of good soil, say, old Chrysanthemum compost to which a little leaf-mould and clean sand have been added. Return to the same temperature and shade well from the sun until established. It is seldom that damping causes any trouble after the seedlings are pricked off, but, all the same, water must be given with discretion in the earlier stages of growth. If time and frame-room can be spared it is an excellent plan to make up a bed of good soil in one of these structures and to transplant the Stocks hereto when the plants are 3 inches tall. This encourages the formation of numerous fibrous roots and so ensures the plants being lifted with good balls of earth attached when planting-out time arrives. This Stock thrives best on fairly rich and well-cultivated ground, and if of a slightly stiff nature so much the better.

About the middle of May is a suitable time for planting out in permanent quarters. Allow about 15 inches from plant to plant and press the soil firmly round the roots. The day previous to planting out give them a thorough soaking of water, which will help to make the soil cling to the roots, a very important consideration as ensuring very little check to the plants. Should the weather be dry give a good soaking of water in the evening, after planting, and well hoe the surface next morning.

A really good strain should be procured as this is just as easily grown as an inferior one, while the results will be altogether different. Several pleasing colours can now be had.

C. BLAIR.

Preston House Gardens, Linlithgow.

Sunshine Aster

A new Aster which will soon be included in every seed catalogue. The above figure, although illustrating to some extent the beauty of this introduction, cannot convey the striking colours and gracefulness of the flowers, which measure from 4 inches to 6 inches in diameter. The quilled centres are golden in colour, and are immediately surrounded by small florets which merge into white at the outer edges. The outer petals form a loosely curled circle, making the flowers extremely pleasing to the eye. The plant is of branching habit, throwing long stems which make it invaluable as a cut flower. Seed can be obtained in mixture and in separate shades. The mixture contains the following colours: Pink, delicate mauve, dark blue, dark red, and in addition there will be found pastel shades from pure white to coral pink, and clear mauve to silver-lavender

Rhodanthe Manglesi

THIS is a great favourite with everyone, its pretty rose-coloured blossoms being equally attractive in the bud state and when expanded. The white-flowered variety of it, too, is a charming plant. At one time these Rhodanthes were regarded as very difficult to cultivate, but of late years they have been brought into Covent Garden Market largely during the summer, and, in common with most things grown in quantity, many of them are excellent examples of good cultivation. Quite a sheaf of stems rises from the pot, all clothed with leaves that look as if mildew, once a great pest, was now unknown. The upper portions of the plants are masses of flowers, some expanded, and more in the bud state, which, with attention, will continue to open for a long time. The flowers of this Everlasting are easily dried, and in that state retain their beauty for a great length of time.

Having been very successful in the culture of this plant, I am induced to give my mode of culture. The seeds are sown about the end of February in shallow boxes and placed in a gentle heat, when they quickly germinate, and soon after are removed to a frame, through which a single hot-water pipe runs—just sufficient to keep out the frost. Air is given freely, and when the first leaf is developed the young plants are pricked off at once into their flowering pots. Therefore better soil is required than if they were to be again potted off. Five-inch pots are a good size for them, and these I fill with a compost consisting of two-thirds loam and one of decayed manure, adding a little leaf-mould and sand to lighten it if necessary, but that will depend upon the consistency of the loam. The soil is pressed moderately firm, and about 15 young plants are dibbled in at about equal distances from each other; a dozen is sufficient, but by putting in a few more a few deaths are thus allowed for. The plants set on a well-drained ash bed not far from glass, and have all the light and air possi in order to encourage a short and stu growth, so that by the middle of May blossoms commence to open and the pla are soon in full flower. Rhodanthes req careful watering. Especially avoid wett the foliage as the plants approach matur when young it does no harm. A little w manure-water may be given with advant as the pots become full of roots. By vary the time of sowing a succession may be k up, and if sown in the open ground early May a good supply of cut flowers will be tained at a time when they are very acc able. C. F

—— Some years ago this Rhodanthe regarded as a difficult subject to cultiv but our market growers nowadays do look upon it in that light, as the numb that are to be seen exposed for sale in streets of London will testify. L Mignonette, the Rhodanthe is very impat of being disturbed at the roots, so that i sown in the flowering pots, which is regulation 4½-inch or 5-inch pot. The soil pressed down firmly, and in doing so it m be borne in mind that the seed is to be so on the top and then covered with soil, so la sufficient space must be left for the water quired as the plants grow. Good drain must be ensured, for though the roots very impatient of stagnant moisture, they the same time quickly suffer if allowed become too dry. A free circulation of around the plants when growing is v necessary, for mildew is liable to attack foliage, which is soon permanently injur Besides Rhodanthe Manglesi and its w variety there are other forms, notably a sanguineum and maculatum, of which there is a variety with double flowers. Gr things were expected of this double vari but it is now little grown. C

The new scarlet-crimson Pyrethrum Harold Robinson which Messrs. Bath, Ltd., include in their list of novelties this spring

This variety has received the Award of Merit of the Royal Horticultural Society

Growing Sweet Peas with large blooms

AMONGST annuals grown there is none to compare with the Sweet Pea. Unfortunately the Sweet Pea does not get a ıir chance in many cases. A packet of seed sown some time during spring in any kind f soil, generally much too thickly, therefore iving the plants no chance. A row or clump f good Sweet Peas is a picture in any garen.

PREPARATION OF THE SOIL.—It is of little use ttempting to grow Sweet Peas with stems veraging 1 foot to 18 inches long with four more blooms on each in poor, shallow, and ıngry soil. This should be trenched at least feet deep, and a good dressing of manure ided to the bottom spit; also a dusting of me. I find basic slag an excellent substitute ır this. The surface should be left as rough possible until the middle of February, when good dusting of soot and superphosphate of me should be forked in, repeating the dose ıwards the end of March. The trenches will ow be in a fit condition for setting out the lants in April. These trenches should be dug om 2 feet to 3 feet wide, placing stakes at ıch end of the rows for future guidance.

SOWING THE SEED.—I strongly advocate ıwing the seed during late September or ırly October, growing the plants on in a ıld frame during the late autumn, potting up ngly; and if sown in boxes, the beginning f January, growing on in a cool house ır a month or so. Quite good results, ıthough not so early, can be obtained by sowıg the second or third week in January. oxes 4 inches to 5 inches deep are the most ıitable to sow the seeds in. These should ave holes bored in the bottom, over which ıould be placed a layer of clean crocks. A ice free and open compost containing a fair upply of sand should be passed through a -inch sieve, placing the roughest portion ver the crocks. The boxes should be filled ı within 1 inch of the top and pressed down evel and firm. A layer of clean sand to the epth of ¼ inch should now be put on top, in hich to set the seeds. All the blackıated seed should be chipped with a knife on ıe farthest side from the eye and pressed ently into the sand in lines 3 inches apart, llowing the distance between the seeds a ood 2 inches. Seed sown thus will need no ansplanting. Each line should be correctly ıbelled, afterwards covering ½ inch deep ther with clean sand or finely-sifted soil. Vater should be given to settle the soil from fine-rosed can, but no more should be given ntil germination takes place, as if kept connually wet many of the seeds will rot. To asten germination the boxes may be placed ı a temperature of 55 degs. to 60 degs., but hen once the seedlings appear they must be ept as near the roof glass as possible. rowth will be rapid from now onwards, and hen 4 inches in height the points should be inched to cause a break, which is essential ı the getting of good plants. About the iddle of March the plants should be transerred to a cold frame and gradually hardened ff. By the middle of April they should be ı fine condition for planting out in the preared trenches.

PLANTING OUT.—A fine day when the soil is ry should be chosen for this work, and after ıaking the surface of the trench level with ıe rake a line should be run down the entre. The best position for the trenches is unning from north to south, as in this way ach side of the row commands full sunshine. Vhen the line has been fixed the plants should e carefully removed from the boxes, and fter shaking the soil gently from the roots ıese should be set their whole length in the oil with a dibber or long trowel, watering ach plant as the work proceeds. Six inches n either side of the line, and 18 inches apart, are a good distance to plant, and these should be set alternately, so that when finished they will average 9 inches apart. If weather is dry water should be given each evening for several days. The remains of old besoms are excellent for placing around the plants to keep them upright, and a dusting of soot should be strewn around to ward off slugs and snails. Details as to staking, tying, disbudding, and general management will be given in due course.

GOOD VARIETIES.—Amongst the various kinds I grew last season the following were the best 12, and I can recommend them for exhibition or all-round purposes :—

President Harding was certainly the most telling in my four long rows. The colour alone (peach-red on a salmon ground) is quite distinct from any other salmon variety. Picture is one of the strongest growers and will throw five and six flowers on strong stems. The colour is flesh-pink shaded creamy-apricot. Hebe is another splendid bright pink and is certainly an improvement on Hercules. Renown (carmine-pink) is a strong grower with abundance of bloom. Mrs. Tom Jones (Delphinium-blue) is the best in its colour. Constance Hinton is the best black-seeded white. In Gladys (lilac) the blooms are much better placed than in R. F. Felton. Powerscourt is a splendid lavender and one of the best growers I know. I picked several seven-flowered stems from 18 plants of this variety. The Sultan is the darkest of all, but not so strong as Dobbies' Mammoth. George Shawyer, a glowing salmon-rose, is a robust grower. Majestic Cream is the best of the colour of three varieties grown. Royal Purple must be in every up-to-date collection. Picotee-edged and bicolors I have not included, as during wet periods the colours run and thus spoil the flowers. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

NOVELTIES IN SWEET PEAS

Venus.—Cream-pink, rather deeper than Fair Lady, very vigorous, colour perfectly fixed. Some double standards. Offered by J. Carter & Co.

Mermaid.—Rich lavender, with fine blue sheen. The flowers, which are very large, are produced in fours and fives on long, stout stems

Sweet Peas for exhibition

It is quite a simple matter to grow Sweet Peas for exhibition, and it does not entail a heavy expenditure. First obtain the best seed. This much having been done, one has a good start—after all, inferior seed is difficult to grow and results are poor. I prefer to sow in October in large pots, placing in a temperate house until all bad weather has passed. Then dig a trench 3 feet or 4 feet deep and place at the bottom some hoof parings obtainable from any blacksmith. Fill in with fine soil and plant out the Sweet Peas in the usual way. Having a great liking for these hoof parings the roots will go down after them, and thus produce blooms to be proud of, and much in advance of plants from seed sown in March. Remove all seed-pods that appear. Not one must remain, as leaving them on is detrimental to the blooming. C. H. WAITE.

A new Sweet Pea book

Mr. W. J. Unwin, the well-known Sweet Pea grower of Histon, Cambridgeshire, is offering this year a new book on Sweet Peas, from the pen of his son, Mr. Charles W. J.

The semi-dwarf Runner Bean Bijou

Unwin. The book is much larger and its scope much wider than the small edition on Sweet Peas so well known to Mr. Unwin's readers. The title of the new work is "Sweet Peas: Their History, Development, and Culture," and it is anticipated that it will be regarded as a standard work on the subject. Mr. Unwin also announces that "there is a plainly discernible increase in public interest in the Gladiolus," and this beautiful flower is now claiming a great deal of his attention. Wonderful advances have been made recently in new Gladioli, and each year extensive trials are being made at Histon with new American, Dutch, and English varieties. Several new varieties appear in his catalogue for the first time this season, and his slogan, "Modern Gladioli are as exquisite as Orchids, yet as easily grown as Mustard and Cress," is literally true, as all who grow these flowers will readily concede.

Making lawns

(Reply to Curious and others.)

In reply to several queries in Gardening Illustrated on this subject, if there is sufficient depth of soil, trench, burying the surface soil with the weeds to the depth of 18 inches any time during winter or early spring when the ground is sufficiently dry to work pleasantly. The advantages of trenching are, that existing weeds are got rid of, and the fresh soil, besides being free from weeds, is more likely to send up a vigorous plant. The soil should be kept as light as possible after trenching, to allow air and water to pass freely through it, which will sweeten and assist in pulverising it. During the trenching the level should be kept as accurately as possible, and if a very exact level is required it should be done shortly before seed time with the spirit-level, straight-edge, and pegs; but we generally find that a skilful man can do this with his eye. The ground should then be let lie until sowing time, which will be about March or April, according to the weather, remembering that dry weather should be chosen for the operation. It should then be forked lightly over and raked until a fine tilth is produced, which is most necessary for Grass seeds. Now tread the ground or roll it until it feels comfortably solid under the foot, which is a very necessary part of the preparations. Scratch the ground with a rake until a little fine soil is produced wherein to sow the seed. A calm day is very necessary for sowing, the seed being easily blown about by a slight puff of wind. Two garden lines should be stretched about 4 feet or 5 feet apart to sow between, and the ground should be sown at least twice, which will materially assist the even distribution of the seed. When a breadth has been sown it should be lightly raked and covered to the depth of 1 inch or 2 inches with a mixture of well-decomposed stable manure and leaf-mould in the proportion of about one to two, which should be nicely levelled and not walked upon until the Grass is all well through, when it should be lightly rolled. The ordinary quantity of seed is 4 bushels, but where a lawn is required in the space of two or three mont double the quantity is requisite. Althou April has been mentioned as the time to so it is perfectly safe to sow Grass seeds a time up to the end of September, provided t weather is sufficiently damp. The af management consists in mowing with scythe as soon as the Grass is high enou and this should be continued as requir using the scythe for the first three or f cuttings, and after each cutting rolling w with a light roller. The machine may th be used if desired, but set it as high as po ble for the first half-dozen cuttings. Mo ing, watering, rolling, and an occasio edging are all that will be required. Dra age is all-important, there being no better w than cutting drains from 2 feet to 3 feet d from 15 feet to 18 feet apart in the direct of the outfall and placing in the bottom o nary drain pipes 2 inches in diameter. Pl a layer of stones or broken brickbats over pipes, or brushwood will do. Before sow down you ought to write to a seedsm giving him the constitution of the soil, a he will send you the proper mixture of Gr seed for the same.

VEGETABLES

Bean semi-dwarf Runner Bijo

THIS semi-dwarf Runner Bean, rai and introduced by Messrs. Watkins a Simpson in 1922, is distinct in seve ways. It is extremely short-jointed r growth, and the plant rarely exceeds 3 f in height, thus rendering staking and t ping quite unnecessary, but the chief feat is its highly prolific character, the po which are about 6 inches long and v fleshy, being freely produced in very la bunches. It has proved itself to be one the most prolific Runner Beans on market.

Market gardeners find it very useful, ow to the pods preserving their youthful appe ance longer than the ordinary Sca Runners, which at a certain age begin show the swelling of the seeds in the p making them look old and presumably so tender as they should be.

By selection the length of the pods is be increased up to 8 inches in length.

In the course of experiments Mes Watkins and Simpson have developed m new forms. For instance, they have which bears pods like the Scarlet Runner plants as dwarf as Dwarf French Bea There is the promise of further interest developments.

Winter vegetables

THERE can be no question as to the va of winter vegetables, and the better th are grown during the early autumn more reliable they are in mid-win Amateurs often have none too many re good winter vegetables, this being due to planting, so that the plants have not time make a good growth before being cut do by frost. This mostly refers to the Kales early Broccoli, though even with the best ture no one can prevent injury to the l named by frost. If good-sized plants obtained they are in a better position to st our winters; indeed, if the heads are forn the latter will keep good for weeks, gi the shelter of a cool cellar or shed just fr proof. Though it would be out of place dwell at length upon the culture of win vegetables at this season, as very little car done now, still, there are many amateurs w may not be in a position to judge the b kinds of vegetables for a long and var supply, so that I will note a few of the b At this season forced vegetables form an

rtant item, and some few kinds can be rced so readily they are well worth more tention. I find no difficulty in having an nple and varied supply of winter vegetables, th forced and otherwise. The short supply in the early spring—from the end of April d in May. Though there is the useful sparagus, amateurs never have this veget- le in very large quantities, and frequently ter a severe winter there are few Broccoli ft, and there are few other Brassicas as the inter ones are seeding.

Broccoli.—Few kinds are more reliable an the Superb Early White. This is so ell protected by foliage that it is less injured an others. To this variety may be added now's Winter White, White Emperor Barr's), and Self Protecting, the last-named r very early supplies. For years I grew the Calcheren, and one feels at times one fails get the true kind. I find Broccoli soon de- riorates if not carefully seeded; indeed, this mark applies to all the Brassica crops.

Cabbages.—Few vegetables are so hardy as e Winter Cabbage, but these are distinct om the spring varieties. There are two ex- llent kinds—the Winningstadt and Christ- as Drumhead. The former has a conical eart, very small, and is of dwarf growth. he last is flat, or Drumhead, with deep, reen leaves, the latter well covering the eart and thus making it more hardy. Both f these types are splendid winter vegetables. he Colewort is most valuable, but it is more nder than the two varieties named. It hould be grown in all amateurs' gardens for arly winter use.

Borecoles.—Doubtless the Scotch varieties re the greater favourites, and in my opinion one is superior to the Dwarf Green Curled. hough they vary in build they are superior o the tall kinds so much grown near the sea- oast in the north, as in many exposed places he long stems suffer badly in severe weather nd the plants are ruined. Two Kales intro- luced a few years ago are suitable for poor oils in cold districts—these are the Arctic reen and Purple Kales, two of the hardiest Borecoles I have grown. Of older kinds, hough not quite so hardy, is Read's Heart- ng, a beautiful vegetable just like the Curled Scotch, but it forms a compact heart, and is f very mild flavour. There are other hardy Kales, such as the Cottager and the Buda or Asparagus. These latter are specially good or late winter supplies, but the plants should lways be grown in an open, exposed place, o that they are hardy and of compact growth. Cabbage for mid-winter should be sown in May, Kales also, and for late autumn use April sowings are best. No matter how good he soil at planting, there should be no tarving in the seed-beds, as thick sowing and lelay in planting make a weak plant. Far etter defer sowing for a short time if land s not available at the time.

Brussels Sprouts are always valued; but t times one does not see them particularly ood in gardens. They need time to develop, nd should be sown early in the spring, plant- ng out when large enough. I find a small r medium Sprout hardier and nicer when ooked than a coarse one.

Spinach, Carrots, and Turnips.—Next to he Kale, Spinach is an important winter vegetable, and though less grown by amateurs than it deserves, it is of easy cul- ture. Sown in August or the end of July, there will be good winter supplies. The land must be well done, and such aids as soot and lime used freely to check the ravages of in- sect pests. For winter such kinds as the Vic- toria and Viroflay, with the Long-standing or Prickly, are the best kinds. Carrots, Tur- nips, and other roots are always at hand for winter supplies; but I like the smaller roots for storing and sow a good breadth of a Shorthorn variety or the Early Gem in July. Of course, Turnips are less amenable to this mode of culture. They keep best sown at the same date as advised for Carrots, but much depends upon the variety, as severe frost does them more injury than in the case of Carrots. At the same time they can be forced more readily than Carrots, so that there is no need to dwell on these.

Salsafy and Scorzonera.—These may with advantage be grown for winter use. I do not think both are needed, and probably the Salsafy is the more useful of the two. This is so distinct from other vegetables that it should be grown in all gardens. Sown in May and lifted and stored like other roots, it is in season from December to April. The large Russian and Mammoth are the best varieties.

Celeriac is well worth attention. This may be described as Turnip-rooted Celery, and is just like it when boiled. It needs little attention during growth, not earthing up but growing in deep drills 2 feet apart and 1 foot between the plants, and abundance of moisture during growth, also liquid manure if obtainable. This boiled is a delicious winter vegetable. Celery may well be described as a vegetable, as when cooked it is equal to Sea-kale—indeed, superior to my idea.

Artichokes are useful as they give variety. The New White is much superior to the older coloured tuber.

Forced vegetables.

French Beans swell the list, and those who can force have much greater variety. I do not advise growing French Beans for a supply at Christmas. Grown then they are most disappointing and are best left alone till the New Year begins. As a crop can be secured in six weeks from the time of sowing, it will be seen they may be classed as winter vegetables.

Seakale is now grown largely for forcing. Anyone can buy it cheaply, and force in a dark place, such as a Mushroom-house or under the stages of a warm pit, if the plants are kept dark and close. A few roots, according to the demand, placed under cover every 10 days or a fortnight, will keep up a regular supply. Of course, this vegetable may be forced in the open with hot manure and pans and pots, but it takes a longer time, and needs more labour and attention, as, if over-heated, the tender Kale blackens and decays.

Asparagus.—Roots lifted from November to March will provide regular cutting, but it is an expensive process to the amateur, as the roots are worthless after being forced. On the other hand, this does not apply to permanent beds, as these, if forced slowly, last many years. Asparagus after lifting takes three weeks to produce a crop; I give permanent beds double that time. Another vegetable which may be used to advantage is the young growths of Chicory. Mushrooms must not be overlooked. W. V.

Radishes

Having large quantities of leaves at this season, I turn them to good account. The Radish with warmth germinates so quickly

A Carrot novelty

The new and large stump-rooted Intermediate Carters' Autumn King. A handsome long, cylindrical, heavy stump-rooted Carrot of large size. Rich, deep orange colour, splendid quality flesh. This handsome Carrot has a very large yielding capacity, and is particularly suited for soils that are not of sufficient depth to grow the longest types satisfactorily

that two or three crops may be had from the same frame or pit. The Turnip varieties, such as White or Red Forcing, the Olive or Oval Crimson Forcing, and Earliest of All, are specially good. Here less soil will suffice, 4 inches to 6 inches on the heating material being sufficient. Sown now in warmth there should be good roots in six weeks. I find the old Radish beds in frames most valuable for pricking out tender seedlings, such as early Lettuce, Cabbage, Cauliflowers, and such like after raising in heat. The little warmth left in the bed is just sufficient to start the plants. Many sow Radishes with Carrots. I do not advise it, as the Radish often ruins the Carrot crop. W.

Tomatoes

(J. P.).—In our estimation Perfection Tomato is about the best variety. You certainly seem to have had too many plants for so small a house, seeing they occupied 10-inch pots, and were probably allowed to gr almost at will. This, with other subjec would decidedly overcrowd. There is reason why other plants cannot be grown w Tomatoes, and your house should have p vided a fair crop. Try again, and this ti cut off the main portion of large or coar growing leaves; also confine your plants one or two shoots only, pinching out laterals. This secures more fruit in place so much succulent growth.

REMINDERS FOR THE WEEK

Southern and Midland

Spraying fruit trees

This is an important operation now that the winter pruning is completed, and before the various eggs begin to hatch out. A quiet day should be chosen and the branches made thoroughly wet with the spray from a knapsack sprayer or Abol syringe. There are various caustic and soda washes. The operator should wear an old waterproof coat and rubber gloves to protect the clothes and hands.

Outdoor Vines

Now is the best time to prune and clean the outdoor Vines. All side shoots made during last season should be cut back to within two or three buds of the base, shortening the leading growths to two-thirds of their present length. The rods should be treated with Gishurst Compound or other winter wash. It is advisable to give the walls a coat of lime-wash before tying back. When this work is completed attention must be paid to the border by removing several inches of the old soil, replacing with good rich loamy compost.

Unfruitful trees

It is quite possible in many gardens and orchards that there are trees that bear no fruit, yet make luxuriant growth. In the case of dwarf trees this can be rectified by lifting and pruning the roots in autumn. Standard trees cannot be treated with advantage in this manner when they become large. The best way to deal with them is to cut them back to within a foot or so of the trunk and graft them with good kinds in April.

Spring Cabbage

After the severe frosts we have experienced during the last month much damage has been done amongst the winter Brassicas, so it is essential to make the most of the spring Cabbage. It is a little too soon to fill up the blank spaces, but the bed should be carefully examined and all plants that have become loose should be made firm by treading around them. A dry day should be chosen for the work, and if slugs are troublesome protection must be given. Dry sawdust which has been sprinkled with paraffin placed in rings around the plants is an excellent deterrent, as is also lime and soot.

Early Lettuce

Where there is a demand for early salads a sowing of an early variety may be made thinly in shallow boxes of light soil. These should be germinated in the warm greenhouse, and when the seedlings become large enough to handle they should be pricked off 3 inches apart into other boxes, growing on in a light, airy position, or if they can be set out on a slight hot-bed in a frame so much the better.

Planting Shallots

In many small gardens it is difficult to grow Onions, so advantage must be taken of the Shallot, and where the soil is in a fit condition the bed should be made up as soon as possible and the bulbs set in lines 1 foot apart, allowing about 8 inches from set to set. The bed must be made firm and the bulbs dibbled in, so as to only leave the tips showing, pressing the soil well around them with the hands, or otherwise many will be lifted by the worms.

Chrysanthemums

Continue the propagation of these plants, and those that are already rooted should be potted singly into 60-size pots, using a little rougher compost than that used for striking the cuttings. Careful watering should be exercised, and when the sorts have taken hold of the new soil the plants should be placed in a cold frame, as too much heat and coddling in the early stages of growth are detrimental to the culture of good Chrysanthemums. Ample air must be given on all favourable occasions.

Sweet Peas

Where the seeds were sown in boxes during the autumn, and have been housed in cold frames, it is a good plan to pot these up singly into small pots at this season. Any good potting compost is suitable, and if space can be found on a shelf in the warm greenhouse for a few weeks the plants will make good headway, and when growing freely return them to the cold frame, gradually hardening them to outside conditions. Any plants that have not made a break at the base should have the tips pinched out.

W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Roses under glass

Where Roses are planted out under cool treatment pruning may now be undertaken with a view to having the plants in bloom early in April. Where robust varieties are used the treatment in respect of pruning should be rather drastic—hard cutting not only keeps the resulting shoots at a reasonable height, but it produces plenty of young wood which always gives the finest blooms. For planting out in cool houses or in corridors the old sorts, such as Maréchal Niel, Niphetos, and La France, can be recommended. Many of the H.T. family are not conspicuous successes under glass, but no one need hesitate to plant Mme. Abel Chatenay, Lady Pirrie, or Caroline Testout. The Tea Roses in pots now force easily if given sufficient heat. Lady Hillingdon succeeds exceptionally well when forced, but much patience is required in the way of syringing, and so forth, in the case of Tea Roses subjected to a strong heat at this season.

Sweet Peas

The number of varieties of Sweet Peas tends to embarrassment when ordering, and it is, perhaps, better for the ordinary grower, as distinct from the exhibitor, to rely upon proven favourites in the desired colours. Sowing may now be done in pots or in boxes in order that plants may be ready for putting out in April. Well-drained boxes or pots filled with light soil, and which are perfectly clean, are desirable. Each seed ought to coated with red lead and put in at a depth half an inch. After sowing is completed o good watering should be given, after whi little moisture will be necessary until g mination takes place. Coolness at all tim is essential, and even the suspicion of he must be avoided. Those who raised Swe Pea plants from seeds sown in August f flowering under glass will now require to g them into their flowering pots. Ten-in pots filled with fairly rich material, and ea accommodating half-a-dozen seedlings, w give good results. At present these may fi a place in the early Peach-house.

Seeds for present sowing

"Hasten slowly" is a good motto at th season, yet there are some seeds which, to useful at a given time in the course of t present year, must be sown now, or shortl Among these are Begonias, Streptocarp Petunias, Violas, and Ageratum amo flowering plants. As regards Begonias a Petunias the seeds of double varieties may used, for it is certain that there will be considerable proportion of single forms whi can be utilised for bedding, while the choic doubles may be reserved for the greenhou or conservatory. Among vegetable see small sowings of Brussels Sprouts, Cau flowers, Cabbages, and Lettuces may made. A good sowing of the selected sor of Onions is now due, the resulting seedlin being boxed off as soon as they can safely handled. Even for exhibition it is wrong sow Leeks at this time. Equally good spec mens, given the correct treatment, will resu from a sowing in the middle of February.

Bulbs

Dutch Hyacinths, as distinct from th "prepared" bulbs, Tulips, Freesias, Lily the Valley, and similar things, will now con away in a satisfactory manner in an ordina greenhouse temperature. If it be desired have a batch of Hippeastrums in bloom at a early date well-rested bulbs may be shake out, repotted, and set to work, at first in cool temperature. Iris tingitana is usefu too, and forces easily if too much heat is n given.

Under glass

Fruit-houses now having been attended t and everything ready for a start at a give time, the work for the moment is routin Plant-houses, too, do not call for much atte tion, although it is well to pay daily attentie to detail, in respect of removing spent bloom decaying leaves, and attending to the needfu watering. In the stove, during storm weather, there is always some sponging to b done, and if mealy bug be present an attem ought to be made to clear it out. Where the is no regular Orchid-house a few of the mo easily-grown sorts usually find a place in th stove. Some of these are rather attractiv at this time, including Cypripediums of sort Cœlogyne cristata, Lycaste Skinneri, a fe of the Oncidiums, and some of the Mexica Lælias and Cattleyas. W. McGuffog.

Mabie Gardens, Kirkcudbrightshire.

Answers to Queries

uestions—Queries and answers are inserted in DENING ILLUSTRATED *free of charge if correndents follow these rules: All communications uld be clearly written on one side of the paper y, and addressed to the* EDITOR *of* GARDENING USTRATED, 8, *Bouverie Street, London, E.C. 4. ters on business should be sent to the* PUBER. *The name and address of the sender are uired in addition to any designation he may ire to be used in the paper. When more than query is sent each should be on a separate e of paper, the name and address being added each. As* GARDENING ILLUSTRATED *has to be sent press some days in advance of date, queries not always be replied to in the issue immedily following their receipt. We do not reply to ries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

TREES AND SHRUBS

out Rhododendrons

N. M., Rotherham).—The question of a iliser for Rhododendrons is a little diffi-; most of our leading growers depend n a good medium in the form of a peat or ous loam with silver sand, and for plants the open copious top-dressings of decayed ves. It would be a mistake to apply contrated fertilisers to Rhododendrons; a ht overdose would be disastrous. Very ak applications of liquid guano might be lied when the flower trusses are forming, it is important that it should be applied y in *very* weak solutions. We are glad to w that the notes which appeared recently Rhododendrons are so much appreciated, l if we can help you in their cultivation we ll be only too happy to do our best. You l find the book entitled "Rhododendrons l Azaleas," by William Watson, very help- on hybrids and their cultivation. This s published in the Present Day Garden- series a few years ago by T. C. and C. Jack, Edinburgh. It was originally lished at 1s. 6d., but we doubt if you uld now be able to secure a copy under 6d. or thereabouts.

alia too tall

D.).—You can cut the Aralia down in rch before growth begins, as in the course the spring the stem will again start into wth. In cutting down, leave 6 inches or nches of the old stem, as if you cut close to ground the old plant will probably die. you have the convenience—*i.e.*, a warm pagating-pit—you may strike the top. ung seedling plants are now so cheap that think it would be far better to buy a ng plant in the spring, as you will find s more satisfactory in every way.

GREENHOUSE

eatment of Agave

G. O.).—If the rot has affected the main n or heart of your Agave it may be ious. Once these are injured they seldom ne into good form and shape again. vder up some charcoal, and dust this freely the affected part after cutting away as ch of the decayed matter as possible. ese plants need more careful handling than ir hardy and rugged appearance would ply, and are frequently permanently ured by careless transporting from open to oor treatment.

aleas in bad condition

W. M.).—Your Azaleas have been badly acked by thrips and red-spider. Syringe spray them with paraffin emulsion, assia Extract, or Tobacco-water. If you ld move them into a small house and nigate them well, this would clear off the ts. A cheap insecticide for destroying se pests is as follows:—Tie up a peck of t in a canvas bag and place it in a hogsd of soft water. Stir the bag of soot out daily for a week, and then when clear syringe the plants, diluting if need be. Try it on one or two plants first. This is an excellent syringing mixture, not only freeing the plants from insects, but giving health and vigour to them.

Araucaria excelsa

(I. L.).—This is the name of your plant.

Ornithogalum lacteum

The flowers which are now being sent over from South Africa remain fresh for many weeks

We fear you have allowed it to get dry at the roots. The surface of the soil may appear moist, but the ball we suspect is dry. If so, then stand it in a tub of water so as to thoroughly soak the ball of soil. Next spring—say, in April—we should advise you to turn the plant out, remove all superfluous soil, and repot, using for the purpose a pot just large enough to take the ball, leaving a space all round of about half an inch to take the new soil. After this place in a shady part of the greenhouse, if you have one, and syringe overhead occasionally, taking care not to make the soil too wet.

Raising Fuchsias from seed

(New Beginner).—Gather the Fuchsia seed as soon as ripe, and place it in a little dry sand for a few days. Then squeeze the whole between your fingers and sow sand and seed together, using a sandy compost of leaf-soil and a little peat. They should germinate in two or three weeks in the temperature you suggest, and some will bloom this coming autumn.

Crinum amabile

(D. L.).—This is a hot-house plant and will not thrive in a cool greenhouse. It is a native of Sumatra, and is a very handsome plant. The flowers are large, white, suffused with crimson, and they are also very fragrant. Pot the bulbs in good loam, with a little leaf-mould and sand; fibrous peat should be mixed with the loam if it is heavy.

Fibrous-rooted Begonias

(B.).—These must not have so much water when the blooming season is past; just enough to keep the wood and foliage fresh. At the turn of the year cut them back rather hard, otherwise they become too lanky. Young plants are, however, far the best, and those who grow this class of Begonia annually put in some cuttings as soon as they can be had early in spring, at which time they quickly root in a temperature of about 60 degs. These Begonias do much better in summer in cold frames where they can be occasionally exposed to the open air.

Flowers from South Africa (W. F. S., Gloucester.)

THE flowers are those of Ornithogalum lacteum, the Chincherinchee of South Africa, which have been sent to this country in quantity in recent years. As you say, the flowers remain quite fresh for months. With regard to cultivation, it should be given cool greenhouse treatment. Plant the bulbs in March or April, three in a 4½-inch pot, in a compost of two parts loam and one of leaf-mould and sand. Place the pots in a cool greenhouse or frame, and withhold water until top growth appears, they should then be placed in a sunny situation near the glass and growth encouraged by moderate watering. After they have flowered and completed their growth water should be withheld, and the pots be exposed to the sun to thoroughly ripen the bulbs. The racemes of satiny-white flowers are invaluable for winter decoration.

Treatment of Fuchsias

(F., Southsea).—The Fuchsias in question had better remain where they are until the month of March, when they may be brought out and set in a sunny window in a room from which frost can be excluded. They should be cut back a little into shape, and receive a good root watering. They will speedily begin to put forth shoots, and when these have grown about an inch in length turn the plants out of their pots and shake off a good portion of the old soil from the roots, and repot them in good, turfy loam, decayed manure, and sand. Keep them in the window, and give just enough water to keep the soil around the roots moist; when they are in active growth they will want more. When the end of the month of May arrives they can either be shifted into larger pots or be planted out in a flower-bed in the open air.

Stocking a conservatory

(G. Jones).—Your suggestions of procedure in your greenhouse are so good that we need add little to them. You must bear in mind the size of your house and do not overcrowd. The Asparagus would do admirably. Clerodendrons will need too much heat for you, and are very subject to mealy-bug and other insect pests. From 50 degs. to 55 degs. is a useful winter temperature, and should be easily maintained in your small house. In addition to your selection of "permanent flowering plants" we would add Begonias,

Callas, Carnations, Cyclamens, Indian Azaleas, Acacias, and Genista fragrans. But we must cease, or far too many will be found for your limited accommodation.

Raising Gladioli from seed

I have a lot of Gladioli seed I saved last autumn. When is the best time to sow and where? In boxes or open ground? It is saved from the best named varieties.

GLADYS.

[Yes, you may adopt both methods. In the open the seed should be sown in April on well-prepared ground in drills about 4 inches apart. See that the ground is not allowed to become on the dry side. It is a good plan to cover over with a mat until the seed germinates. The seedlings might remain in the ground, if given protection, until the following year, when you should see some bloom. The more certain method is undoubtedly to sow in boxes in February or March. You will have more control over the seedlings. The boxes, of course, as well as the seed beds, should be kept free from weeds. Those in boxes should be shaken out the following spring and either planted out in the open or replanted in boxes about 2 inches apart. A large proportion will flower, and those showing no improvement on existing varieties should be pulled up and burnt. Raising seedlings is an interesting pastime, but drastic weeding-out is essential, otherwise you get snowed under with a lot of inferior varieties.]

Libonia floribunda not blooming

(A. Reader).—The most probable cause of the failure to flower of the plants in question is that they have been allowed to become a prey to insect pests, especially red-spider, which very frequently attacks them, and, if allowed to gain a footing, will assuredly cause the foliage to fall off and the young shoots to wither away. The general treatment of Libonias is similar to that required by the Fuchsia—that is, a moist, genial atmosphere to grow in, thorough cleanliness of the foliage, maintained by frequent syringings and occasionally fumigating with XL All. When in active growth great care must be taken that they never suffer from want of water at the roots. If so, they will be sure, sooner or later, to lose their leaves and fail to flower properly. Also, they are very impatient of cold, cutting draughts.

Maiden-hair Ferns

(V. W.).—To procure spores it is needful to obtain some well-matured Fern fronds, on the undersides of which are numerous brown spots or eruptions. These are spore cases. These fronds should be laid to dry on paper, and when well shaken or rubbed, spores like dust will fall out on to the paper. That dust should be strewn over pots or pans, well drained, filled with sandy soil, and stood in a warm, shady place in the greenhouse. Later the soil will become coated with green, and from out of it tiny leaves or fronds will spring. These will presently grow into young plants, but take three or four years to become of good size. Properly done, there is no reason why your divided plants should not do very well. These Ferns need a compost of one-half peat, the other half loam, with some sand. It may be best just now for you to buy a few small plants and grow them on.

VEGETABLES

Outdoor Tomatoes

(L. W.).—Sow the Tomato seed in March either in a warm greenhouse, in which case place the pan in the warmest spot, or in a hot-bed. Sow thinly in a compost of leaf-soil and sand, and do not over-water in their young stages. Pot on when the rough leaf has formed, and get them as forward as you can before the end of May. Then gradually harden off previous to planting outside. It is very important to get them forward for outdoor culture. Plant them 18 inches or 2 feet apart, and keep them to one stem only, cutting away the coarser leaves and pinching back the lateral growths. Any ordinary loam will grow these. It is more a question of early treatment and a warm season than soil.

FRUIT

Treatment of fruit trees

Last autumn I planted some two-year-old fruit-trees—Apples, Pears, and Plums. Would you kindly inform me if they should be pruned this year, and, if so, to what extent and when? They are bushes, espaliers, and half-standards. PENSILVA.

[The fruit-trees in question should certainly be pruned, and now is the right time to do it. Bushes and half-standards, which require no central branch or stem, should have the centre of the trees or heads kept open and be treated as follows:—From among the existing shoots on each example select four or five of the strongest and have them as widely apart and equi-distant as circumstances permit, with the centre quite open. Cut these back to within 9 inches or 12 inches of the stems to an outward-looking bud, and have them as near as possible of one height. The foundation of the future main branches will thus be formed. Cut clean out the weakest of the remaining shoots, and the surplus stronger wood if any remains, to four buds to form spurs. If all goes well the cut-back shoots or main branches will produce growths at their tips, termed leaders, which will allow for their extension. Side shoots should also be emitted, and two of the best placed of these in each instance should be retained to form subsidiary branches. Stop all other growths at the fourth leaf, counting from the base, about the middle or end of July, to form spurs. Next winter cut back the leaders and side shoots retained, leaving the former about 15 inches in length and the latter 12 inches. By a continuance of these methods annually the trees will eventually become fully furnished with branches well clothed with spurs and well-balanced heads secured. Although the length at which the shoots should be left is given, it does not follow that the figures need be rigidly adhered to, as it sometimes happens it may be necessary to leave a shoot a little shorter or longer, as the case may be, in order to obtain uniformity or the proper balance. With regard to espaliers, a central shoot must be secured with which to extend the stem as well as to supply shoots for the purpose of forming new tiers of branches in a diagonal direction. Therefore the leading shoot should be cut back to a point just above or level with the wire immediately above the last or existing tier of branches. The shoot emanating from the topmost bud will serve to extend the stem. The two nearest and best shoots below it train out at right angles, *i.e.*, one to the right and one to the left, which will form the basis of that particular tier of branches. Suppress all other growths, as, with the exceptions already mentioned, the stem should be kept clean. Cut back leading shoots on existing branches to 12 inches, and all other growths to four buds on Apples and Pears and five on Plums and Cherries. In regard to shoots retained and laid or tied in to form the foundation of a new tier of branches cut back to within 9 inches or 12 inches of the point of origin according to vigour.]

Treatment of Vine

(I. M.).—You must not fruit your Vines much after moving, as the roots will not be in condition to bear any fruit. The whole energies of the Vine will be needed to build up wood and roots for another year. Allow a free growth this year, feed well, and allow only a very few bunches to remain. We would prefer cutting all away; it will pay in the end. Thin the shoots, each one to eye; leave the strongest, remove others. may remove the mulch early next month, to get more warmth on the surface you now remove a portion, only leaving sh litter.

Pear Seckle

(E. M. T.).—This Pear can be supplied Mr. J. G. Allgrove, Langley, near Slough Messrs. G. Bunyard and Co., Maidstone. forms a prolific pyramid on the Pear stock good cordon on the Quince, and does wel an orchard tree. It is on the small side, it is of delicious flavour.

MISCELLANEOUS

The white Cabbage butterfly

I am sending you what seem to me to two grubs of some kind. I have got these dry places, apparently resting for the win I would be most interested to see their history published in the columns of GARDENING ILLUSTRATED at your earliest convenie

"ULSTERANDA.

[The two "grubs" are not grubs, but chrysalides of the large white Cabb butterfly (Pieris Brassicæ). If you kept a of the chrysalides in a box with a piece muslin over the top you would find that butterflies would emerge from their pu cases some time during April or May. life-history is briefly this. After the butt flies emerge, pairing takes place and eggs laid in groups of 20 or more on the foliage Cabbage or some other suitable pla When the caterpillars hatch they comme to feed on the host plant. This particu species always feeds in groups, generally the leaf where the eggs were deposi When fully fed the caterpillars leave th host plant and crawl away to any conven shelter, where they fasten themselves up b silken thread and change into the chrys form. This first batch remains as chrysali until some time in August, and then butterflies emerge. The life-history is ag repeated, except that the second generat remains for the winter in the condition which you found your specimens. Hand-p ing the caterpillars from their host plant the most practical way of dealing with particular pest. The small white Cabb butterfly (Pieris rapæ) is, however, not easily controlled by hand-picking. Both large and small Cabbage butterflies have b troublesome in the gardens this last season]

Artificial colouring of flowers

(M. M.).—There are chemical solutions various colours, a few drops of which pla in a glass of water will gradually impart same shades to many flowers. As the ti of any desired colour affects the blooms wa and remove to clear water when to y liking. The same solution will serve ag but not so rapidly or with such intensity colour. We have seen these monstrosi many times, but the name of the solution the strength to use we have not felt ficiently interested to learn. Such inter ence with flowers does not appeal to taste. The shades are imparted by abs tion of colouring matter placed in the wa and the pores of the cut flower kept open free by cutting off the bottom with a sh knife—not scissors.

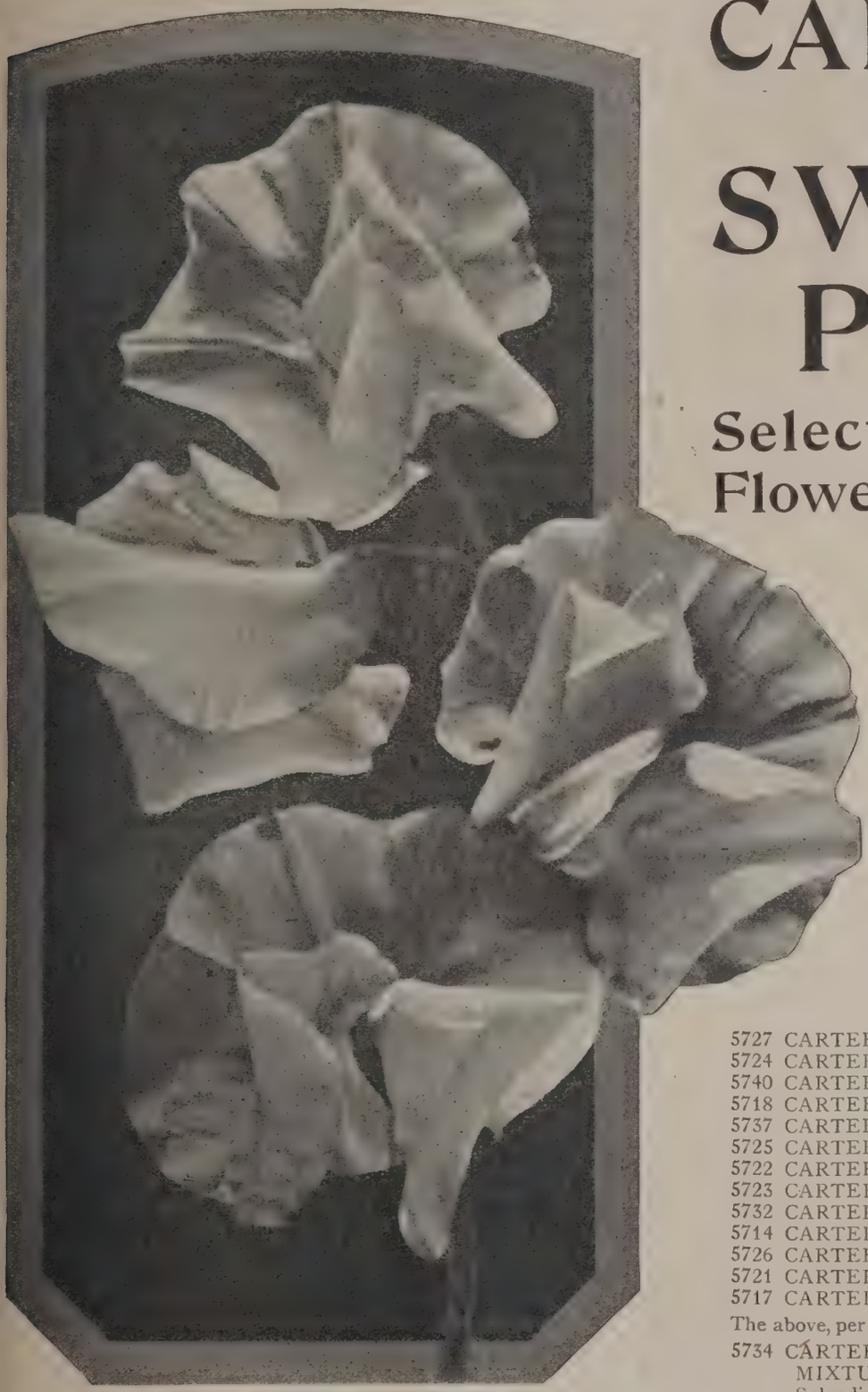
Charcoal burning

(Charcoal). — Charcoal burning is understood by those who have a knowledge the subject, and it must be done thoroug Unless you require large quantities you purchase cheaper than by burning it yours If your wood is charred through it will do the purpose named; if not, it will cause soi get sour and promote fungus growth.

SEEDSMEN BY APPOINTMENT.

CARTERS FOR SWEET PEAS

Selected Large-Flowered Colours



CARTERS LARGE-FLOWERED SWEET PEAS

SELECTED Giant Flowered Types, borne in threes and fours on very long stems. Bright colours and pleasing shades. The plants are of robust habit, and will produce large quantities of beautiful flowers through the summer. This selection will greatly assist those who are not quite conversant with the present extremely numerous named varieties.

No.
5741 CARTERS BLUE.
5729 CARTERS BRONZE.
5716 CARTERS CERISE.
5719 CARTERS CREAM PICOTEE.
5739 CARTERS CRIMSON.
5728 CARTERS DARK BLUE.
5738 CARTERS DEEP CREAM-PINK.
5727 CARTERS LAVENDER.
5724 CARTERS ORANGE SCARLET.
5740 CARTERS PALE BLUE.
5718 CARTERS PALE CREAM-PINK.
5737 CARTERS PALE PINK.
5725 CARTERS PINK.
5722 CARTERS PRIMROSE.
5723 CARTERS ROSE-PINK.
5732 CARTERS ROYAL PURPLE.
5714 CARTERS SALMON-PINK.
5726 CARTERS SCARLET.
5721 CARTERS WHITE.
5717 CARTERS WHITE PICOTEE.

The above, per packet, 6d. and 1/-; per ounce, 4/-

5734 CARTERS SUPERB LARGE-FLOWERED MIXTURE OF ALL ABOVE COLOURS. Splendid for forming hedges. Per Packet, 1/- and 2/6; ½lb., 8/-; 1 lb., 15/-

ALL THE BEST RAISERS' NOVELTIES AND THE PICK OF THE STANDARD VARIETIES SEE THE SPECIAL SWEET PEA LIST IN

CARTERS CATALOGUE FOR 1926

POST FREE ON APPLICATION

Carters TESTED SEEDS

SWEET PEA SPECIALISTS

RAYNES PARK, LONDON, S.W.20

National Rose Society

A successful year and the forthcoming Jubilee Shows

THE forty-ninth annual general meeting of the above Society was held at Caxton Hall, Victoria Street, Westminster, on January 19th, when Mr. C. C. Williamson presided over a well-attended and enthusiastic meeting. During the meeting the Dean Hole Memorial Medal was presented to the Secretary, Mr. Courtney Page, in appreciation of his great services on behalf of the Society.

The report of the Council states that further satisfactory progress is being made, no less than 1,756 new members having joined the Society during the year just ended. The total membership of the Society is now 12,520.

This year will be the Jubilee of the Society, and the Rose Annual for 1926 will contain: The History of the National Rose Society, a Symposium on the Twelve Best Roses of the last ten years, together with a number of interesting articles which will be helpful to Rose growers generally. It will also contain 17 coloured plates and numerous black and white illustrations.

The great Summer Show was held at the Botanic Gardens, Regent's Park, on Friday and Saturday, July 3rd and 4th. The exhibits were staged on an entirely new principle, which enabled visitors to inspect in comfort. The large number and quality of the blooms staged were remarkable and, as usual, the nurserymen's groups, which were the feature of the show, were the admiration of all visitors. It was a two days' show and the quality of the blooms on the second day left nothing to be desired. The attendance was nearly 32,000—a record.

The Provincial Show was held at Bath on Wednesday and Thursday, July 8th and 9th. The ideal weather conditions that had prevailed prior to the show enabled growers to stage at their best, and some remarkably fine exhibits were seen. The local Society spared no trouble or expense, and it was voted to be one of the finest Provincial Shows the National Rose Society had ever held.

The Autumn Show was held in the Botanic Gardens on Thursday and Friday, September 17th and 18th. This was again a two days' show, and although still an experimental one, it proved to be very successful.

FINANCE.—The financial position of the Society continues to be most satisfactory. The total receipts for the year, including the balance of £551 12s. 1d. brought forward from last year, amounted to £8,562 0s. 6d. and the total payments for the same period, including the sum of £1,665 7s. 9d. which has been placed to the credit of the reserve fund, amount to £8,491 3s. 11d., leaving a balance at the Society's bankers on December 31st, 1925, of £70 16s. 7d.

Mr. W. E. Nickerson, of Boston, Mass., U.S.A., one of the Society's Vice-Presidents and a most generous supporter, has made the Society the handsome donation of £875. The money has been invested in the names of the three Trustees of the Society, and the fund will be known as The Nickerson Trust Fund. It is intended that the income shall provide for a cup to be awarded each year for the best new Rose of British or American origin of the previous six years. The thanks of all members of the Society are due to Mr. Nickerson for his generous gift.

The Council regret the loss during the year of Mr. de Escofet, a very old and valued member of the Council; Mr. Frederick Slaughter, who was a member of the Council for a great number of years and a loyal worker in the Society's interests, he will be greatly missed by his fellow exhibitors; Mr. Cecil Cant and Mr. Elisha J. Hicks, both of whom were stalwarts at all of the Society's exhibitions.

Forthcoming Rose Shows

The Secretary announced that six shows will take place this year, including one for new Roses on July 23rd. At this show, which will be held at Vincent Square, the "Daily Mail" gold cup for the best new scented Rose will be awarded to mark the Society's Jubilee and to encourage the raising of new Roses distinguished for their perfume.

The show will be unique in the history of Rose exhibitions, as, apart from the novelties in competition, the best new Roses of the previous six years will be displayed.

These new Roses must have been sent out between January 1st, 1919, and December 31st, 1924.

The dates and places of the Jubilee Year shows are as follow:—Spring, April 23rd, Horticultural Hall; Summer, July 2nd and 3rd, Royal Botanic Gardens, N.W.; First Provincial, July 13th and 14th, Leeds; new and scented Roses, July 23rd, Horticultural Hall; Second Provincial, August 25th to 27th, Southport.

The gold cup may be won by any type of Rose which is quite new (that is, "not in commerce") and produced in Great Britain or Ireland. The winning variety will be known as the "Daily Mail" Scented Rose.

The Autumn Show will be held some time in September.

National Carnation and Picotee Society (Northern Section)

The annual general meeting was held at Sheffield with a much-increased attendance, and several new members were enrolled. The year 1925 commenced with a balance in hand of 11s. 10d., and after holding the annual show and carrying on a good year's work the Treasurer was able to report a balance in hand of £7 2s. The annual exhibition will be held in Sheffield on August 7th, 1926.

Officers elected.—President, Dr. Guy H. Mead, Eckington; Treasurer, H. E. Pearson; Secretary, W. Secker, 11, Longley Avenue, Sheffield.

Full particulars of membership may be obtained from the Secretary.

The annual dinner again proved a great success. P. Smith, Esq., Birmingham, proposed "The Society," and in his unique manner explained how the cultivation of the Border Carnation was rapidly increasing in the northern counties, acclaiming that the amateur was at last realising that the Border Carnation of the present day was easily the premier flower for "His" garden. Mr. Smith amused his audience by stating that anyone could grow this flower to perfection, but most gardeners don't, and that the only way to gain perfection was to join the Society and learn how simple it is.

A notable collection of vegetables

It came as a pleasant surprise to see so wide a range of vegetables at Vincent Square on the 12th inst., all grown to perfection by Messrs. Sutton and Sons, Reading.

Why is it that in the average household or hotel there are few vegetables in winter other than eternal Potatoes, Parsnips, and Brussels Sprouts. The collection staged by the Reading firm was a joy to behold. It comprised 128 distinct kinds and varieties. There were delicious-looking Mushrooms named Twentieth Century; forced Seakale, Endive, and Dandelion; Prizetaker and Acquisition Leeks with long, well-blanched stems; heads of Broccoli, Snow White; Celery, Superb Pink and Solid White; black Spanish Radish, nearly a foot long (presu ably they are cooked like Turnips, though have not tried them); Beetroot, Sutto black and green Tip; young Carrots, imitable Forcing and Early Gem. Th were, of course, Onions, Ailsa Craig, v large specimens, and the smaller but m serviceable Long Keeping. Of the Potat the variety The Bishop looked very prom ing. Then there were numerous vegetab not generally grown, including Kohl Ra forced Chicory, Garlic, Stachys tuberife Salsify Scorzonera, and the purple bla salad Potato. H. C.

Benn Brothers' Other Journal

The Cabinet Maker.—Arts and Cra Society Annual Exhibition: Full Report w Illustrations; Furnishers' Chamber of Tra Annual Banquet and Dance; The Market Furniture in the U.S.A.

The Chemical Age.—"Phenol: Its Sy thesis, Uses, and Derivatives," by Dr. Malcolm Dyson; "A Review of 1925," Sir Max Muspratt; Plan and Particulars the British Industries Fair.

The Electrician.—The Government El tricity Scheme; Auto-Suggestion and Sal manship (E.D.A. Conference); Safety Devi for Electric Locomotives; Full Report Electrical Contractors' Association's Ann Dinner.

The Fruit Grower.—Pollination Influen on Fruit; Brown Heart Case in App Court; Benevolent Society's Festival.

The Gas World.—The Government El tricity Scheme; The Process of Combusti as Applied to Gas; Should Gas Appliances Fixed Free?

The Hardware Trade Journal.—The El trical Age: New Opportunities for Ironmonger; Redditch and Its Industrie How to Sell More Paint; Intricacies Enamelled Hollowware Manufacture.

CATALOGUES RECEIVED

W. H. Simpson and Sons, Birmingham.—Seeds, including Antirrhinums.

Blackmore and Langdon, Bath.—Begonias, Delphiniums, Gloxinias, Cycl mens, etc.

Wm. Power and Co., 25 and 26, Ki Street, Waterford.—Power seeds, 1926.

Wakeley Bros. and Co., Ltd., Hondur Wharf, Bankside, London, S.E. 1.—Spri catalogue for 1926.

Henry Eckford, Wem, Salop.—Sweet Pe flower, and vegetable seeds.

Joseph Fison and Co., Ltd., Ipswich.—Horticultural fertilisers.

H. N. Ellison, 5 and 7, Bull Street, We Bromwich.—List of seeds, bulbs, etc.

Daniels Bros., Ltd., Norwich.—Illustrat guide for amateur gardeners, spring, 1926.

Isaac Poad and Sons, Ltd., York.—Se Potatoes, spring, 1926.

R. H. Bath, Ltd., Wisbech.—Select gard seeds and plants.

E. P. Dixon and Sons, Hull.—Seed li 1926.

W. Atlee Burpee Co., Philadelphia.—Burpee's Annual for 1926.

Ransomes, Sims, and Jefferies, Ipswich.—List of lawn mowers.

Thompson and Morgan, Ipswich.—Cat logue of choice flower and vegetable seed 1926.

NAME OF PLANT

H. O., Kirkcaldy.—The bronze Chry anthemum is Teresa.

GARDENING APPOINTMENT

Mr. ROBERT POTTER, for 4½ years gardener the late Sir WILLIAM and Lady NELSO Antwick Manor, Letcombe Regis, Wantag as gardener to Major RALPH GLYN, M.C M.P., Marndhill, Ardington, Berks.

GARDENING ILLUSTRATED

. 2447—Vol. XLVIII. JANUARY 30, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

nes, gold medal ... 69
ered for 64
e, a very late... ... 73
e, dessert, Adam's ... 64
rmain ... ...
LES, COOKING, ... 63
R BEGINNERS...
es, dessert, for be-... 64
mers 64
es, long keeping ... 73
es that pay to ... 65
w ... ...
s, Broad, sowing
Cabbage, a good winter 66
Camellias, failure of... 76
Catalogues, of 73
Celery, the protection of 72
CHRISTMAS DAY AT LOS ANGELES ... 65
Cotoneaster divaricata 66
Crocuses 68
CROCUS, THE STRIPED (CROCUS VERSICOLOR)... ... 68
Erica carnea varieties 64
Flower scent 75
Fruit trees, treatment of 76
Gladioli, scented 64
Heaths, planting hardy 65
Herb garden, the 72
Hyacinths for Christmas, prepared 65
Manure, digging in ... 72
Marguerite, the Blue (Agathæa cœlestis) ... 68
Mealy bug in vineries 66
MELON BLOOMS, MALE AND FEMALE 76
Melons 73
Melons, hardy 76
Mulberry tree, treatment of 76
Narcissus bulb embargo, the 74
Parsnip seed, purity of 73
Potatoes, seed 73
Raspberry Lloyd George 65
Register of growers of certified stocks of Potatoes in 1925 ... 73
RHODODENDRON EARLY GEM 66
ROCK BORDER AND BOG GARDEN, A READER'S 69
Rock gardens, small ... 69
Rock plants under a stage 76
Rose Etoile de Hollande 64
Roses, standard 74
SEDUM MURALE ... 70
Sow-Thistles, the blue 68
Sulphate of ammonia, the application of ... 75
Sweet Pepper Bush (Clethra alnifolia), the... 66
Sweet Rockets 66
Tomatoes: Cultural notes 72
Trees, ornamental, and herbaceous borders... 75
Vine, the Lawyer (Rubus australis) 64
Winter moth... 76
ZYGOPETALUM MAXILLARE AND ITS HYBRIDS 67

Cooking Apples for Beginners

Planting has been delayed in many gardens owing to the severe frosts of December and January. Happily there is still time for successful planting. From now till the end of next month is a good time for planting Apples, provided the weather is open. The writer of this article makes out a good selection for cooking

N a previous issue we discussed the quali-ies of some of the more easily-grown lessert Apples as being suitable for a inner's garden. But the beginner would be well advised to confine his attention ly to dessert varieties. From the house-e's point of view there is no fruit so ser-able as a good cooking Apple, and no t gives better returns for the necessary ay and attention required. Let us, then, sider a few of the more accommodating ieties which are suitable for use in the hen.

'or early use we have several good varie-of the Codlin type, with little to choose ween them. Keswick Codlin, Early Vic-a, Lord Suffield, and Lord Grosvenor are good Apples, and local experience alone determine which variety will give the t results. For the average garden I would ose the two first-ned; they are both t-rate cookers and are dy for use in August. ey are usually re-ble croppers and are parratively free from ables. Many people, ose tastes incline to-rds an acid Apple, are y fond of a ripe llin from the dessert nt of view. These ieties give the best ults as open bush es on the Paradise ck. For a permanent ndard tree Warner's g is well worth nting. It combines with cooking lity, and usually kes a strong, healthy e, rarely failing to p. It is a good-king Apple, large and en, yellowing and proving in quality as ripens. Another use-and popular early umn Apple is Stirling stle. The tree is not shapely grower, and fruit is neither large particularly hand-ne, but it is an excel-t cooker and an ndant bearer — too ndant sometimes, as its constant heavy crops are often produced at the expense of the growth and general health of the tree. If kept in check a little and given good cultivation it often proves a good standby, and a couple of trees are well worth a place. For a standard tree, particularly on light soils, I know of few better varieties than Annie Elizabeth. Large and handsome, it is of excellent cooking quality and flavour, and keeps till Christmas. The tree is usually healthy and a constant bearer. What more need we say to recommend it?

Another popular variety is Bismarck. This Apple looks well on the show table. It usually crops well, even on cold and indifferent soils, and although in some districts the tree is susceptible to mildew and other troubles, its merits outweigh its faults, and it is worth a place in every garden. It is happiest as a free-growing bush on Paradise stock.

If I were asked to name the best of all utility Apples I should plump for Newton Wonder, which, in my opinion, has but one fault, it is inclined to be an alternate cropper, a heavy crop one year being often, but not always, followed by a very poor one the next year. Apart from this the variety has every good point to recommend it. The Apple is of handsome appearance and first-rate quality. It is an excellent keeper, and after Christmas is fancied by many for dessert. The tree is a strong, healthy grower, resistant to many diseases, and does well in most soils and localities. I know of no better Apple than this for top grafting on to trees of unprofitable varieties.

Lane's Prince Albert is another good old favourite, and justly so. It is good in quality and appearance, and bears excellent crops. Like Newton Wonder, it gives good results on either type of stock and under all reasonable conditions.

The useful and popular Stirling Castle is an excellent cooker and an abundant cropper

For permanent orchard trees, or for any type of tree on heavy soils, there is no better Apple than Bramley's Seedling, the strongest grower of all and one of the most consistent croppers. The large green Apples are well known and deservedly popular in the kitchen. They cook well and keep well, and rarely disappoint the grower. Bramley's Seedling has stood the test of time, north and south, and may justly be termed the "Queen of cooking Apples." The crimson variety is better-looking, but is of doubtful superiority from any other point of view.

It may be observed that most of the above are old varieties. There are many others of equal merit, but the amateur of limited experience cannot do better than start with those whose merits have been proved over wide areas.

C. H. Middleton.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Dessert Apples for beginners

IN the interesting notes on the above subject on p. 31 I was surprised (with the exception of Worcester) to find none of the Pearmains included, and certainly think three of them, at any rate, might find a place. I find Mabbott's a most useful fruit in this district, a very consistent cropper, a good keeper, and for a Pearmain a large and handsome Apple. The only drawback is that, being a favourite of the birds, we have to gather it rather earlier than is advisable, which causes the fruit to shrivel a bit, otherwise it will keep sound and good until January is well advanced. It is, with the exception of Blue Pearmain, the largest of that section of Apples, but the latter is of poor quality. Among the most desirable Apples there are two others, however, that deserve a place in any collection, Claygate and Mannington, the latter comparatively small but the better from a quality standpoint. I have not found them, however, quite such consistent croppers as Mabbott's. Then there is the old Pearmain, an excellent Apple remaining in favour in a few districts, although over six centuries have gone by since its merits were first recorded. I think, too, in the majority of planting operations one or two of the smaller Apples might be included, small but delicious, like Golden Harvey, Golden Pippin, and Wyken or Warwickshire Pippin. These little Apples do well as dwarf bushes or cordons and are a charming feature of the garden when laden with fruit. E. B.

Aylesbury.

Long keeping Apples

I note the Editor asks for opinion as to time limit for keeping Apples. There was one grown in several gardens in West Sussex known locally as French Crab, or Easter Pippin. What it was I do not know; certainly not the French Crab, or Winter Quoining of Hogg. I have several times seen samples of this fairly sound and good at the end of 12 months. E. BURRELL.

A very late Apple

That was a most interesting note on the above in GARDENING ILLUSTRATED, page 33, from Mr. Geo. R. Kerry. The Apples that remained sound for 21 months are a record. Certainly keeping them in a cellar has a good deal to do with this. I have kept the variety Newton Wonder for 13 months, these being stored in a properly-constructed fruit-room. When showing a collection of fruit at a local flower show in 1922 I put up a dish of this Apple. They were perfectly sound and well coloured. This was during August. I was disqualified by the judges, and, on inquiring why, I was informed that they were not English Apples. On enlightening the judges that the exhibit was mine, and bringing my employer and other witnesses to state that we had practically a bushel of these at home, I had a further bombshell, and that was that the Apples were not grown in the year when shown. W. E. WRIGHT.

Stockton House Gardens, Near Rugby.

Dessert Apple Adam's Pearmain

You have of late published a number of interesting letters on the subject of dessert Apples. As people have different tastes and attach different values to various qualities, such as colour, size, sweetness, flavour, juiciness, productivity, and the like, they must arrive at different judgments. One quality I do not see noticed is thickness of skin. If an eating Apple needs peeling I think it must be placed in a low class. Adam's Pearmain has the thinnest skin of any Apple I know, and I think it should be placed next to Cox's Orange. I first found it growing at Vange Rectory, near Stanford-le-Hope, in Essex, where the soil is strong clay, but I find it grows equally well on sandy soil. It crops quite young. However, I have not come to what moved me to write, which is to point out, what does not seem to be generally known, that the finest *late* eating Apple is undoubtedly Wellington. In my judgment it is by far the best cooker yet known, but if eaten raw in June, July, and August it will be found to be as sweet, juicy, and refreshing as a good eating Apple at Christmas.

THACKERAY TURNER.

Rose Etoile de Hollande

I am glad to see the two replies to "E. M.," December 5th, in favour of this (what I call) splendid red Rose in your issues of December 19th and January 9th, page 19. In the gardens here there were a few of it planted last year; this year there are many more. DUMBARTONSHIRE.

—— On page 19, issue January 9th, "Victoria" is astonished that "E. M." has discarded this Rose. Well, from my own personal experience I consider there is nothing wrong, as "Victoria" states, concerning the remarks made by "E. M.," with whom I entirely agree. One dozen plants was all I ventured to add to the Rose garden I previously had charge of two seasons ago, and these went in the same way as "E. M.'s" last autumn. Not complaining so much of the colour fading—there was very little to fade, as the plants made little or no growth under the best treatment, and what blooms appeared had the worst shape of any new Rose I have met with in recent years. I may say I should not like to recommend it as a bedding Rose. It would be interesting to know where and under what conditions "Victoria" saw this Rose doing so well and of such an excellent character. Grand colour, good habit, and glorious scent sound great, but matters of taste and opinions differ.

W. E. WRIGHT.

Stockton House Gardens, Near Rugby.

Scented Gladioli

I was interested in the notes by "Smilax" *re* scent in the Gladiolus, in your issue of the 16th inst. At times I have wondered if Mr. Groff, in declaring that one of the *causes* of the popularity of the Gladiolus was its lack of scent, did so with a sigh of resignation, or whether he viewed the Grapes through reynard's eyes! I cannot imagine lack of scent being a cause of popularity, but then, of course, it all depends on what we imply by scent. Let the mind drift to such things as Aristolochia Sturtevantii, or to Iris fœtidissima, and we shall thank the gods that be that the Gladiolus has no such adornment. If, on the other hand, the glorious petals marked their presence with a faint emanation of Lily of the Valley scent, or that of the Night-scented Stock, I think most of the horticultural fraternity would start growing Gladioli.

Optimistic as folks tell me I am, I have no golden visions such as Kunderd had in 1911. Of the three sources from which he confidently looked for scented Gladioli all have failed. Lemoine's list of Gladioli seems to grow smaller and smaller year by year, just the same old names, or rather a rem of them, are printed in each succeeding c logue. Of Burbank—well, we all hea great things, but seldom see them, and splendid flower breeder, Dr. Van Flee gone into the past.

I think in time scent will come to Gladiolus, but there are many difficulti the way and the journey is long and ardu G. tristis certainly gave us hopes, but th its blood runs through a number of hyl commonly grown there is no suggestio perfume whatever in any of them. G. t flowers in April, and it is difficult to blooms of any other variety out at the s time with which to make marriages. several vexatious disappointments of timing I succeeded in crossing it with "Herald" group and the latter with tr and the first few seedlings bloomed last s mer with abnegating results. I have s more which may throw spikes this year, hope is not very high. I do not thinl tristis is the right parent, and I look for more trustingly to a number of species growing from seed kindly sent me by I. B. Pole Evans, of South Africa, son which are scented, including G. grandis I understand, the one which is synonyr with tristis). But these species grow so slowly from seed that a long time must el before crosses can be made, supposing the flower in due course, and another o tunity for patience arises when the resu progeny is being reared and brough maturity.

I was very sorry I did not see the Blue of "Smilax" when it flowered, and wo if perchance Dr. Pole Evans sent it to amongst the 55 species he dispatched summer, all under number only.

J. L. GIBSC

The Lawyer Vine (Rubus austra

Judging from the infrequency with w Rubus australis is mentioned in the l cultural press and from personal observa this distinct subject is seldom grown. far it is hardy is a question which will c to many on reading the note by "G. M. (page 39). It is hardy in a good numb warm, well-sheltered gardens in diff parts of the British Isles, but I do not t that it can be considered hardy enoug any but such places as I have indicated al It is, as your correspondent mentions, g ally seen on sunny walls, but he sug what is really a better position, *i.e.*, ir rock garden, where its tangled, pr masses of branches form quite a dis feature. In some of the seaboard Sco counties it thrives well near the sea, away from the ameliorating influences o sea it does little good, as a rule. S. ARNO

Erica carnea varieties

The article and notes on the hardy He in your issue of January 16th, are timely helpful to those desiring to plant these ch ing subjects. Perhaps I may be permitt supplement them by mentioning the exis of a set of lovely varieties of the exceed valuable Erica carnea. It is now a number of years since Messrs. Backl and Sons, of York, sent out about a c varieties, which had been selected by Mr. Potter in the native habitats of the p I secured the set on their being distrib and obtained much pleasure from them number of years. They varied both in c and in habit of growth. Some were deep-coloured and others were white or n so, and had more flowers on a spray are generally furnished by E. carnea Then in habit some were much more than others, and there was also some v tion in point of coming into bloom. Q

warf Lantanas and Veronicas in the ›reground, with Pyrostegia (?) venusta blaze of colour covering the house

England, Prince of Wales, King Edward, l various other well-known names were ›lied to these varieties. I have seen some .rming beds composed entirely of these ›ter-flowering Heaths, and very beautiful ·ed they were. S. ARNOTT.

— Since Mr. Mark Fenwick challenges statement as to the flowering of this little ub I feel that, in order to prove the correct- s of what I wrote on page 3, issue January , my best course is to send the Editor a sprays of flowers taken at random from group (about 50 plants) in question, all of ·ch are a mass of bloom to-day (January 1).

'hese flowers have been frozen up and ied in snow more or less for the past night, but in spite of this it will be seen t some of the blooms are already past r best, and to have reached such a stage this time it should be apparent to any wer of E. carnea that a few flowers must e been open some months previously, as n the time it commences to bloom to the e it loses its effectiveness is at least six ıths.

ome readers may remember Mr. rymple's remarks upon the same subject the columns of GARDENING ILLUSTRATED ut a year ago. It would therefore appear t for some reason this plant varies its son of flowering.

'he group of plants which form the sub- of this note, are growing on very sandy , scorched up in summer, in a garden on estate and about a mile from Gravetye, ·ation about the same as at the latter place ·re another group of equal size has scarcely flowers open so far. I am rather puzzled r this, also a great mass of E. Darley- is which has, to date, insufficient flowers n to be called effective, yet here, again, particular mass was practically at its in December last year.

Iost of the varieties of E. carnea have n grown here, and among these the ·ering season varies considerably, some ıg months behind the others. There is not, however, in my opinion, a bad one among them.

As to the mother plant, this varies considerably in the *colour* of its flowers, one of the richest and most desirable forms known to me being sent out by a famous Surrey nursery. E. M.

[This letter was accompanied by a box containing sprays of Erica carnea, which have obviously been in full bloom for many weeks. The flowers of this cheerful Heath arrived in bright and fresh condition, apparently none the worse for the severe frosts and recent covering of snow. There is evidently great variation in the time of flowering, the plants in question having been a mass of bloom for a long time—commencing in October. It might be worth while selecting forms that bloom through the dull winter months.—ED.]

Raspberry Lloyd George

I await with some interest, and not a little curiosity, the fruiting of a small plantation of this Raspberry. Last season in my rather thin and shallow soil the yield of Raspberries of all kinds was an indifferent one, and the berries of no single variety could be said to excel those of the others. I have long considered Superlative the last word in general utility Raspberries. I planted a few dozen canes of Lloyd George two years ago. So far the rare and refreshing fruit has not materialised, but if the berries of Lloyd George are as good as those of Superlative I will be quite satisfied. Will any grower of the newer variety who has proved it give his opinion of it? A SCOTTISH GARDENER.

Christmas Day at Los Angeles

I AM enclosing one or two photographs taken on Christmas Day, thinking they might possibly interest some reader. In addition to the plants illustrated the following were in flower on Christmas Day:—Erica melanthera and Erica mediterranea, Genista monosperma, Hibiscus sinensis, in wide range of colour and variety.

Can any of your readers tell me where I can procure seeds of the following:—Eucryphia cordifolia, Clethra arborea, Plagianthus Lyalli, Desfontainea spinosa, Eucryphia pinnatifolia, Tricuspidaria lanceolata or Crinodendron Hookerianum, Embothrium coccineum, Drimys Winteri? I got some of these plants in recently from England, but on account of them having to come through without any soil they arrived in poor condition, and I think the best way to procure these plants is to raise them from seed. I cannot get them in this country. Any information would be very much appreciated. When I know where I can procure the seeds I will at once procure a permit to import them. HUGH EVANS.

508-9-10, *California Bank Building,*
625, *South Spring Street, Los Angeles.*

Sowing Broad Beans

Just a word on the note of your correspondent, "W. S.," issue January 16th, page 41, as to the sowing of Broad Beans. I find it more convenient when raising Broad Beans under glass for planting outside later to use boxes instead of pots. I believe that pots are really the ideal, but there need be no hesitation in using boxes if the following method is employed. Instead of sowing the Beans singly, as is usual, I make holes of suitable dimensions in the soil in the boxes at 4 inches apart, and into each hole I put two Beans. The result is that these grow together and the roots become so entwined that when the groups are lifted for planting they hold more soil than would be the case if they were sown singly, and there is thus less root disturbance. I do the same with Peas, but instead of two seeds I use three. I also adopt the plan of grouping Dwarf Beans at three in a hole and Runner Beans in twos. I would advise your correspondent to try this plan. Of course, when the planting is done the groups are not divided, but are planted at a foot apart. This space allows of hoeing between the plants as well as the rows. W.

Prepared Hyacinths for Christmas

It is interesting to read the experience of Mr. Lowry Corry (p. 48) and A. Cowen (p. 33) in growing prepared Hyacinths for Christmas without the aid of a greenhouse, and credit is due to both. It may be mentioned that the Cynthella Hyacinths are little gems for this early work, and are not so well-known amongst amateurs as they deserve to be. These small-flowered Hyacinths can be obtained in various colours and are of quite easy culture. Mr. Lowry Corry asks the question, "Why do not British nurserymen keep Cervantes Narcissi?" I can assure him that some do. I have obtained bulls from three nurserymen "who supply bulbs" during the past three seasons. This is certainly the earliest Daffodil for pots that I know, but at the same time it must not be forced until the buds have appeared or it is a failure. In shape it is not unlike princeps, but the colour is pale primrose.

W. E. WRIGHT.
Stockton House Gardens, Near Rugby.

Planting hardy Heaths

Intending planters should ca' canny before adopting the advice given by J. Hill, Devon, p. 36, January 16th, who would use for Heaths unsatisfactory Rose beds which are probably too shady, too wet, and too much enclosed by hedges, etc., for Roses to succeed in.

To trench such beds, adding rotten manure, etc., as he advises, to say nothing of the other unsuitable conditions, is to invite disaster. Heaths grow much too rampantly on manured land, and in quite a short time have spent themselves. Very few of them will tolerate wet places and none shade—or very little of it—and flower as they should do. Heaths are plants of mountain and moor, where they are exposed to all the elements, especially scorching sunshine. They will thrive and bloom amazingly in quite ordinary soils, and the hardier they are grown the longer their beauty remains. Many will also read with no little

Choisya ternata, with Melaleucas and Metrosideros in the foreground

From photographs taken on Christmas Day, 1925, at Santa Monica, California

surprise that a bed which is too wet for Roses is suitable for groups of Lilium auratum and L. speciosum. E. M.

Sweet Rockets

It is to be feared that the old double white form of the Rocket (Hesperis matronalis) is diminishing. In my younger days it was often referred to as the Scotch Rocket, because north of the Tweed there were noted firms and private gardeners who grew it well. Of late years one scarcely meets with it in the average garden, and in places where it was once seen stocks have dwindled away. Some plants in our gardens are impatient of disturbance; this Rocket is not so, as its existence depends upon the roots being taken up and replanted every two years or so. An old friend of mine who grew it successfully took the precaution to cover the crowns with ashes in autumn, besides propagating cuttings in a cold frame in September, much in the same way as one does Pentstemons. Doubtless the winter has played havoc with plants which have been left in the ground unprotected, and the safest way to perpetuate a stock is from cuttings. DERBY.

Rhododendron Early Gem

Mealy bug in vineries

The methods described in the last few numbers of GARDENING ILLUSTRATED for the destruction of the above pest seem to me to be antiquated, and I will try and describe to readers the method which I consider best for the total riddance of this pest. That method, I say, is by fumigating with prussic acid gas.

Five fumigations are necessary to absolutely clear a vinery—1st, as soon as the Grapes are cut; 2nd, seven days later; 3rd, 10 days after No. 2; 4th, 14 days after the vinery has been started in the spring; and 5th, 10 days after No. 4. For fumigations Nos. 1, 2, and 3 the vinery should be kept at 55 degs. to 60 degs. Articles required are cyanide of sodium, phosphoric acid, water, and a 9-inch earthenware pan for every 2,000 feet to be fumigated.

Obtain the cubic capacity of the house and then weigh 2 ozs. of cyanide, 4 ozs. of acid, and 8 ozs. of water for every 1,000 feet. Mix water and acid in pan an hour before the time selected for fumigating, which should be at sunset. Close all ventilators. Place pan or pans with mixture in on floor and starting from pan farthest from exit pass along as quickly as possible, dropping in each pan the required quantity of cyanide. Each lot for each pan should be lightly wrapped up in tissue paper to facilitate the operation.

Lock all doors, and if duplicate keys are in use put a danger label on all doors.

The house can be entered in the morning to open the ventilators. After these have been open for an hour the house will be freer from danger. The residue left in the pans should be emptied into a drain, the pans washed and put away till needed for the next operation.

NOTE.—The fourth fumigation should be at the rate of 1½ ozs. of cyanide to 1,000 feet and the fifth at 1 oz. to 1,000 feet. There is considerable danger to the operator if he delays in the house after placing the cyanide in the pans. There is a machine on the market which works by a string through the keyhole of the door, and it is better to invest in one of these than to meet with an accident.

To eradicate white fly fumigate at the rate of ½ oz. of cyanide per 1,000 cubic feet on first, third, and eighth days. I have used this fumigant at the rate of ¼ oz. per 1,000 feet on Gloxinias, Cinerarias, Cyclamens, and mixed plants in flower for experiments and have so far damaged nothing. For Perpetual-flowering Carnations I use it at the rate of ½ oz. to 1,000 feet. You need nothing else. It has two great advantages, viz., its cheapness, and it does not take the colour out of the flowers. H. W. G.

A good winter Cabbage

One of the finest winter Cabbages which I have ever grown is Danish Ballhead. The seeds were sent to me from America, and the variety, I fancy, is a very good selection of the Drumhead Cabbage, although it is longer in the stem and even firmer in head than the latter. The leaves overlap so firmly that neither rain nor snow can penetrate, consequently the heads are not liable to rot during the damp days of winter. I do not say that Danish Ballhead is anything outstanding in the way of being a delicately-flavoured Cabbage, but it is, at least, as good as any other winter Cabbage and is much less inclined to decay. It certainly attracts attention among the winter vegetables in the garden. I gave a dozen heads to an agricultural friend, who exhibited them at a Christmas show of fat cattle in Edinburgh, where the size of the heads and their remarkable firmness were the subject of much comment. From this it must not, howe be inferred that Danish Ballhead is me fit for cattle, for I find it in request in kitchen and appreciated when cooked.

A SCOTTISH GARDENE

TREES AND SHRUI

Rhododendron Early Gem

GIVEN a favourable spell of weather plant is very effective during the la part of January and early February. Early Gem, according to Hortus Veitchii, hybrid between R. præcox and R. dah cum. The first named is also of hy origin, being derived from the interc ing of R. dahuricum and R. ciliatum. Early Gem is considered by some author to be merely a form of R. præcox. The ject under notice is a dwarf compact-grov plant with small dark green leaves, and flowers of moderate dimensions are a pr shade of pinkish lilac. These are prod in quantity from well-grown plants, an frosts are not prevalent to destroy the bloc a large bed is a pretty sight at a time w few flowers are available. A groundwor Erica carnea is most effective. It is a us subject for pots, and especially the greenhouse, where it can be had in bl early with little or no fire heat.

Where beds of this Rhododendron exi few Liliums could be planted for a sum display, and some years ago Lilium He was tried, but after a few seasons it dwin and finally ceased to exist. The reaso this, L. Henryi has proved to be a lo loving Lily, and, therefore, would not th in a peat soil which the Rhododendrons Ericas enjoy. T. W.

Cotoneaster divaricata

This handsome species has this aut borne a quantity of its egg-shaped red ber When in fruit it is one of the best of Cotoneasters. It is a native of China, whence it was introduced in 1904, and ga a First-class Certificate from the Royal H cultural Society in the autumn of 1912. related to the well-known C. horizontalis is more vigorous. It is deciduous and re spreading in habit; in fact, if allowed to velop it would in a few years cover qu large area. Small plants do not bear freely, but after a few years the bushes clothed with berries annually. The pali conspicuous flowers appear in May. It succeed in loamy soil, and is suitable fo front of shrubberies and sunny banks, b has proved rather too rampant for the garden. C. divaricata should be added to garden where berry-bearing subjects are preciated, and although it is inclined t somewhat dense, nevertheless it has a g ful appearance. Young shoots readily roots in a close frame during the summ sandy soil. T. W.

The Sweet Pepper Bush (Clet alnifolia)

It is surprising that this is so rarely se collections of flowering shrubs in private dens. The reason for this compar neglect is a difficult one to find, for the s is not only ornamental but highly effe I have had specimens which attained height of 5 feet, and when clad with white racemes of flowers during Septe they invariably arrested attention. flowers are fragrant—to some oppres so. I find C. alnifolia requires plen moisture, and succeeds best in rather a position. W. Mc

Mabie.

ORCHIDS

Zygopetalum maxillare and Its Hybrids

HE history of Zygopetalum maxillare goes back to the year 1829, when it was introduced from Rio de Janeiro by essrs. Loddiges. Nine years later it was und on the Organ Mountains by Gardner, ho was the first to inform Dr. Lindley that is species always grows on the stems of ee Ferns, upon pieces of which it is occaonally imported. It was named maxillare account of the fanciful resemblance of the est and column to the jaws of an animal. e rhizome is creeping and flexuose; eudo-bulbs ovate-oblong 2 inches to 3 hes long, more or less compressed, and th leaves, usually a pair, 8 inches to 15 hes long; scapes erect or slightly noding, as long as or longer than the leaves, e to seven or more wered. The flowers e 2½ inches across rtically, sepals and tals bronzy - brown ith light green transrse streaks; the petals nilar but narrower; e labellum having the le lobes joined to the olet-purple, fleshy crest at is ridged and rrowed on the inner de; the front lobe olet-blue, paler at the argin. The variety autieri differs but tle. It is said to be ightly more robust in s habit of growth, hile the violet-blue of e labellum is sometimes spotted and riated with deeper ue. It was originally llected by M. Gautier n Santa Catherina, outhern Brazil.

Zygopetalum Sedenii naxillare x Mackayi) as the first hybrid ised from Z. maxillare. was shown by Messrs. eitch and recorded in 874. The flowers are escribed as being interediate in size between ose of the parents; pals and petals ownish-purple with a etallic gloss and sometimes with two or three ale transverse bands; lip bright violet-blue, ore or less striated; crest and column dark olet-blue.

Z. Clayi (maxillare x crinitum) was raised the collection of Colonel Clay, of Wallasey, irkenhead. The seed was sown in 1869, nd the first flowers were seen at the meeting of the Royal Botanical and Horticultural ociety, Manchester, held April 21st, 1877, hen a First-class Certificate was awarded. eichenbach described it in the *Gardeners' hronicle,* adding, " It is a great pleasure to ee the Manchester gentlemen appreciating high and so well horticultural work, orticultural performance, horticultural skill, owadays so often overlooked." When subequently exhibited at the meeting of the oyal Horticultural Society, May, 1877, it nly gained a Second-class Certificate. It is ere of interest to mention that the R.H.S. econd-class Certificate does not appear to ave been continued after 1877. Z. Clayi has epals and petals of brownish-purple with a arrow green margin and sometimes with a few narrow transverse green streaks; labellum purplish-blue with darker lines; the ridges of the crest dark violet-blue, the furrows whitish.

Z. Perrenoudi (intermedium x maxillare var. Gautieri) was first recorded in 1894. The flowers, which are fragrant, have the sepals and petals purple-brown in colour, except at the base, which is light green; the labellum wholly suffused with purple, and with darker blue radiating lines; the crest is whitish with numerous purple ridges, and the column wholly deep purple.

Z. Rœblingianum (rostratum x maxillare var. Gautieri) was raised in the collection of Mr. C. G. Roebling, Trenton, New Jersey, by Mr. H. T. Clinkaberry, and received a certificate at the spring show of the New York Horticultural Society in May, 1902. When Mr. Sander was in the United States in the following autumn he brought one of the plants over, to be flowered, exhibited, and sold by auction, the amount realised to be handed over as Mr. Roebling's gift to the new Horticultural Hall. It was offered for sale at Messrs. Prothero and Morris's Rooms in Cheapside and purchased for 50 guineas by Sir Frederick Wigan. The flowers were described as being more like the rostratum parent; the sepals and petals light green, with a light brown area in the centre, made up of more or less confluent blotches; the limb of the lip prettily lined and marbled with violet-purple on a whitish ground; the large horseshoe shaped crest is yellow, with numerous violet-purple radiating lines, and the column is also of the latter colour.

Z. Sanderi (Perrenoudi x Mackayi) appeared in 1903, and received a First-class Certificate when exhibited by Messrs. Sanders at the meeting of the Royal Horticultural Society, January 27th. It was described as a very fine dark hybrid with fragrant flowers, the sepals and petals very heavily marked with dark purple-brown, and the greater part of the velvety lip purple, with darker nerves. Although Mackayi appears as the second parent, some authorities consider intermedium may have been used.

Z. Maxjorisi (maxillare x Jorisianum) was exhibited by Mr. R. I. Measures, of Camberwell, in September, 1904. The pretty flowers had green sepals and petals marbled with brown, and a white lip with some purple at the base.

Z. Clarksoni (crinitum x Clayi) was shown by Mr. H. S. Goodson, in 1909. The sepals and petals were described as dark dusky brown, and the greater part of the labellum violet-blue, with the crest and margin whitish.

Z. Brewii (Perrenoudi x rostratum) received an Award of Merit when exhibited by Messrs. Charlesworth and Co. at the meeting of the Royal Horticultural Society held July 16th, 1912. Our reproduced photograph (very kindly supplied by Mr. Gurney Wilson) gives a good idea of the formation of the flowers. The sepals and petals greenish, almost covered with a purplish - red tinge; the labellum whitish, heavily marked with lines of crimson spotting, the elevated crest at the base being blue, thus making an effective colouration.

Zygopetalum Brewii

The sepals and petals are greenish, almost covered with a purplish tinge; the lip is white, heavily marked with lines of crimson spotting

Z. Blackii (crinitum x Perrenoudi) was exhibited by the raisers, Messrs. Black and Flory, in the autumn of 1914. The sepals and petals are chocolate-brown margined with green; the labellum veined and tinged with violet-blue on a white ground.

Zygocolax leopardinus (Z. maxillare x Colax jugosus). Raised by Seden for Messrs. Veitch, and first flowered in 1886. Flowers 2 inches in diameter, sepals and petals whitish, spotted and marked with brown-purple; labellum three-lobed, indigo-blue sparingly mottled with white.

Zygocolax Charlesworthii (Colax jugosus x Zygopetalum Perrenoudi) received a First-class Certificate when shown by Messrs. Charlesworth and Co. at the meeting of the Royal Horticultural Society held December 21st, 1909; the sepals and petals cream-white, heavily barred with reddish-purple, and the labellum ruby-red shaded with purple.

Zygonisia Rolfeana (Aganisia lepida x Z. maxillare var. Gautieri) has a general resemblance to the Aganisia parent, but is much more robust than that species. Its flowers are cream-white, blotched with violet.

Zygonisia Sanderi (Aganisia lepida x Zygopetalum Perrenoudi) was raised by Messrs. Sanders and exhibited in the spring of 1909. It bore pretty flowers, cream-coloured, heavily blotched with violet, and, as anticipated, closely resembled Z. Rolfeana, to which it is closely related.—*The Orchid Review.*

Crocuses

THE Crocuses will soon be with us, a gold and blue advanced guard of the coming army of flowers. The name, of Eastern origin, refers to the "saffron," also an Arabic word, a product of the stigmas of the purple Crocus sativus, native of Greece and the Levant, now cultivated in Southern Europe and Asia Minor. There are many Crocuses both false and true, and they include both autumn and spring flowers, of which the true "saffron," like its false namesake, the "Meadow Saffron," is an autumn blossom. There are many complaints against the Latin names of botanists, but the English names given to our commonest flowers are surely equally confusing.

The true Crocus belongs to the Iris order, which is characterised by having only three stamens and an inferior ovary. The ovary of the Crocus can only be found by burrowing down to where it arises from the underground corm. Among the autumn-flowering species we have the beautiful C. speciosus, with bluish-purple petals and bright yellow stigmas. These are followed by winter-flowering species, and the spring commences with the lilac C. Imperati and Cloth of Gold (C. susianus), followed by biflorus, versicolor, and many others.

Crocus has a first cousin in Romulea, some of which hail from South Europe, others from the Cape; not very hardy. The blossoms, however, are on stalks above ground, the colour varying from red to purple, yellow and white.

The "Meadow Saffron," often called "Autumn Crocus," is a Colchicum, and belongs to a group of the Lily order distinguished from the Irises and all their order by the superior ovary and six stamens. The flowers arise from below ground as in the Crocuses, the petals form a tube in their lower part, and the style is divided into three from the very base. C. autumnale and other species with lilac and white flowers are autumn blossoms and appear after their leaves, but there is also a spring-flowering genus of the same group which is distinguished from Colchicum by having a single style dividing above into three stigmas; this is Bulbocodium vernum. Another cousin of Colchicum is Merendera Bulbocodium, which also resembles it and also blooms in the autumn, but has the petals cleft to the bottom of the ovary.

The beautiful Chilean Crocus has recently been discussed in GARDENING ILLUSTRATED. This is Tecophilæa, with flowers of brilliant blue, but these have stalks above ground and the plant is generally placed in another order, the Hæmodoraceæ, whose position and limits botanists are not quite agreed upon. It is more nearly allied to the Amaryllidaceæ, or Narcissus order, and has an inferior ovary, but the stigma is not split. It has three perfect stamens, but the others are represented by three barren filaments.

The yellow Lily of the Field, or Sternbergia, is another Crocus-like flower blooming in the autumn, but stalked like Tecophilæa and truly belonging to the Amaryllidaceæ, with inferior ovary and six perfect stamens.

Crocus	(Iridaceæ)	Blue, yellow, and white
Romulea ..	(")	Red, purple, yellow, and white.
Sternbergia ..	(Amaryllidaceæ)	Yellow.
Tecophilæa ..	(Hæmodoraceæ)	Blue.
Colchicum ..	(Liliaceæ)	Lilac and white
Merendera ..	(")	" "
Bulbocodium	(")	Purple.

J. K.

The Striped Crocus (Crocus versicolor)

The Striped Crocus (Crocus versicolor)

ONE of the earliest of the Crocus family to flower, this pretty species follows close upon the heels of C. Imperati and C. susianus to cheer the awakening floral year, and is worthy of a sunny slope in the wild garden or a choice nook in the rock garden sheltered from rough winds. The ground colour of the flower is white, but the outside is richly feathered with purple featherings, and the throat of the flower may vary from white to yellow. It has varied to some extent under cultivation, but it is said to be readily distinguished from any form of Crocus vernus by being perfectly smooth within, whereas the forms of C. vernus have the inside of the throat hairy. This species p ticularly appreciates deep planting, where mice are not troublesome will in re freely from self-sown seeds. It also mak charming plant for the alpine-house, an easily grown in large pans of loam, le mould, and sand. We have known corms flower four years in succession with no attention than an annual top-dressing fresh soil in the early autumn. The p were plunged into sand beds and left a after the leaves had died down, receiv top-dressing in the autumn, and were plunged in frames and watered occasion until growth appeared above the surface January, when they were removed to alpine-house to flower.

The Blue Marguerite (Agathæ cœlestis)

This is a very accommodating tender pl of a bushy-growing nature bearing myri of clear blue Daisy-like flowers. It is v suitable for filling small beds, or may be u as a groundwork for taller plants. If pot and grown in the open during the summ removing all flower-buds until autumn, forms an excellent winter-flowering plant the cool greenhouse. To get the best res it should be grown in the sunniest positi It stands drought well and can be ea raised from seed sown during January February, pricking off the seedlings w large enough to handle and growing on sturdy as possible. Pinch the points w the plants reach 6 inches in height. If a stock plants are wintered in the greenho in the same manner as Fuchsias cuttings be taken in spring. These root quickly wi a little bottom heat can be given.

W. E. WRIGHT

—— Blue flowers are scarce in win and any plant that will furnish them fr is worth looking after. All that one has do in the case of this Agathæa is to propag early enough in the year to ensure a lo season of growth. Pinching back the strong growth in order to induce a dwarf, comp habit should be practised up to the middle July, at the same time picking off all b that form until the first week in Septemb In this way nice specimens a foot in hei and well established in 6-inch pots will formed by the close of the growing seas In a temperature of about 50 degs. they yield a succession of flowers all through dull winter months. This Agathæa make good room plant, as, owing to its hard and wiry habit, it resists well the imp atmosphere of an ordinary constantly-he apartment. The flowers are also very s able for bouquets, etc.

The blue Sow-Thistles

Mulgediums are but little grown, though a little "coarse," are often usefu the large border, where their blue flowers welcome as giving a bit of a colour not m seen among the composites. They are ex lent for blooming during a good portion the summer.

Of the species known to botanists not m are in commerce, and it may be usefu mention two of these which can be ra from seeds, which are obtainable fr specialists in seeds of hardy flowers. Th are Mulgedium alpinum (the Alpine Thistle) and M. Plumieri (Plumier's Thistle). Both are tall and effective bo or wild garden plants of true perennial h and growing satisfactorily in any ordin soil and in sun or partial shade. Of the M. alpinum is rather dwarfer than Plumieri, but, as it grows 4 feet high, usefulness in a broad border or the wild

n will be realised. Its ally, M. Plumieri, the other hand, is about 5 feet in height d is more robust in every way. As already licated, these Mulgediums can be raised m seeds, which may be sown in sandy soil der glass in March or April, or in the open May or June. The seeds, if sown in the en, should be sown in shallow drills and seedlings well thinned out as soon as they be handled. They may be planted in ir permanent quarters in autumn. ilgediums may also be increased by divin of established plants. S. ARNOTT.

ALPINES

A reader's rock border and bog garden

THE accompanying illustrations are from photographs taken in early May of last year. The bed to the right of the path, en in the top illustration, had Forget-me-ts, Darwin Tulips, and Pheasant-eye arcissus, with a border of perennial Iberis. arlier in the year this bed was full of affodils and was later planted with single sters. The groups of white flowers attered about are Scillas (S. campanulata ba), which spread freely and are very autiful. The stone of the rock border is nglomerate, not usually met with, and has nice warm appearance. The mound is osely covered with various Mossy Saxifrages ith blue Campanula growing through later ith Ramondia, Haberlea, Helianthemum, ubrietia, and Alyssum. The illustrations ow the rock border and bog garden, the tter being supplied from rain-water tank. the bog garden there are Saxifraga eltata, the Japanese Irises, Primulas, and imulus. A. A. THATCHER.

"Silva House," Midsomer Norton, Near Bath.

Gold medal offered for Alpines

The Council of the Royal Horticultural ociety has decided to offer a gold Veitch emorial Medal for the best exhibit of lpines in pots and pans staged by an amateur the Society's fortnightly show on March rd, 1926.

Small Rock Gardens

The desire for a rock garden is surely no sheepish obedience to a fashion, but rather an expression of a general urge, the same urge which drives us so far afield on our holidays and is making the once grim solitude of the Alps almost uncomfortably crowded

MANY owners of small gardens, after viewing the great rock gardens at the Chelsea Flower Show, come away saying regretfully that such things are not for them; this is obviously and incontestably true, whether it is a matter for keen regret does not seem quite so certain. But it is a pity that the keen owner of a small garden (in these hard days any garden of more than two acres seems large) should get the impression, whether from Chelsea or elsewhere, that a rock garden is necessarily large and costly, or that it is out of place in all but the largest gardens, where it can be fitted into a special landscape of its own.

So sensitive a rock gardener as Mr. Farrer has written that the smallest backyard may possess a rock garden which shall not seem out of place. His way of making it is to dig a hole about 6 feet across by 3 feet deep, cover the bottom with broken brick, clinkers, or other drainage material, and sink three or four boulders in it so that at least three-quarters of their mass is below ground. The boulders are to be arranged so as to enclose a central space which is filled up with scree mixture after covering the drainage material at the bottom of the hole with a layer of turves. When it is planted it gives the effect of a single flowery boulder or an outcrop of the underlying rock, such as we often see in the alpine pastures. It has the advantage of displaying to the full the natural beauty of the rock and is a rock garden in the truest sense. If we are to keep its character we must, of course, plant it with the greatest restraint and keep to the slow, tight-growing alpines which will appreciate the scree and the chinks of the rocks. Such a garden has the disadvantage that it tries, in a way, to trick the eye, for outcrops of rock are not usual in English gardens, and if the subsoil be frankly chalk or clay their presence may offend the geologically-minded. We can get over this difficulty by enlarging the area of scree and reducing the boulders to a more or less inconspicuous fringe. We can then call it, if we wish, a "moraine garden," though it is more accurate to look on it as a patch of scree, framed with a few stones in the same way and for the same motive as we frame a picture.

A reader's rock border and bog garden near Bath in spring

The white flowers freely scattered about in the top illustration are Scilla campanulata alba, which spreads rapidly. A rock border under an old stone wall is seen in the lower illustration

We can play endless variations on the theme; make a naturalistic picture (which is not a mere imitation of Nature) of a certain stretch of scree with its appropriate plants, or we can make a "jewel garden" of high alpines selected for their brilliance from the mountains of all the world; make a group of alpine woodlanders in peat and leaf-mould; a group of the terrestrial Orchids of our chalk downs (Bee Orchid, Fly Orchid, Musk Orchid, Lady's Tresses, and Orchis ustulata), which will, of course, be obtained from the Continent through a nurseryman who stocks them and not robbed from their native home.

The arctic plants, some of which are rather difficult, have, in common, a peculiar charm, a certain wind-swept beauty, which is well brought out when they are grouped together

in a miniature garden of stony peat. Many other groupings will suggest themselves to the gardener, and, unless his garden is very minute indeed, he need not limit himself to one only.

The result will always be incongruous with the landscape. But, after all, is that a drawback? Sir Herbert Maxwell has written strong and hard words about the unseemliness of "mimic Matterhorns" and "miniature Andes in Berks and Bucks." Words with which the humble rock-gardening writer was disposed at first to violently disagree, even to the extent of splitting an infinitive. But reflection brought the conclusion (which might have been expected) that Sir Herbert was perfectly right. The grandiose rock gardens (perhaps they would be better described by their older name of "Alpine Gardens") are usually unsatisfactory because they pretend that they are part of the landscape and fail to carry out the illusion. Our miniature rock gardens make no such pretence, and let us hope that Sir Herbert will, therefore, look indulgently on these isolated pictures of alpine scenery in our back gardens, should any of them ever meet his eye. They are as foreign to the landscape of the home counties as our herbaceous borders are, but it is, I think, for that very reason that we value them, since they give us that element of wildness that we do not find in the scenery around us.

Sir Herbert suggests that rock plants should be grown in a dry retaining wall, and this is an admirable way for small gardens, for by adding another dimension to the garden it increases instead of diminishes our space. The stone for building it can, as a rule, be more easily procured than even the few weathered boulders needed for the first type of garden described. If there is any crazy paving about we can take it up and use it for this purpose should we happen to feel that craziness is not a quality that we desire in pavements.

Almost all alpine plants will thrive in a dry wall, for it provides the sharp drainage and protection from winter wet that all of them appreciate and many of them demand. It gives scope, though less than the miniature gardens, for individual taste, and we can cover the stones with a brilliant mosaic of colour or use them as a background upon which the slow-growing plants can mould themselves. When planting it is well to remember the winter beauty in leaf of many of the Stonecrops and Saxifrages. But Miss Jekyll has written particularly of the making and planting of these wall gardens in her book, "Wall and Water Gardens."

Sedum murale, a pretty Stonecrop worthy of a good place in any rock garden

In a recent number of GARDENING ILLUSTRATED Mr. A. T. Johnson has written of another kind of small rock garden made in stone sinks and pig troughs. These have the same use and value as the miniature rock gardens on the ground, with other advantages, and Mr. Johnson has pointed out how they save backache, discourage slugs, and provide easily for plants with special requirements. Furthermore, they frame the miniature garden so formally and emphatically that the eye does not seek to compare it v the rest of the garden, and the questior harmony or congruity does not arise.

Mr. Clarence Elliott, who was the firs think, to introduce this type of rock gar has described how they should be set brick or stone piers and before they are fi a little water poured into them to ascer that the drainage hole is at the lowest le He has also given directions, or rather s gestions, for planting, and has exhibited finished article. There is one word of wa ing to be added from experience, make supporting piers broad and solid so tha there are children in the garden, it canno pulled over.

Mr. Johnson prefers the pig troughs cause these give a good depth of soil make it possible to plant a dwarf conifer small shrub, such as Daphne rupestris, the rock garden, but, unfortunately, they not so easy to get as the stone sinks wl are usually to be found lying about in build yards. These are seldom more than 3½ inc deep (an extra inch may be obtained wit cold chisel and hammer), but it is surpris to find how well the plants do in the sca seeming depth of soil that they provide, I have seen clumps of Gentiana vc flourishing in a shallow sink three years a planting.

The sinks are specially suitable for r forming plants, such as Primula mini Arenaria verna, Globularia cordifo Douglasia Vitaliana, Gentiana verna, c etc., which are never so happy as when in woven with their neighbours. If the seems a little threadbare it may strengthened, at a pinch, with pieces of little Pearl Weed (Sagina procumbens) fr the garden path, for this does not mak bad turf, though it gets rather tousled towa the end of the summer. A small boulder perhaps two, will complete the picture, w if we like, one or two of the smaller Croc (Crocus biflorus var. pusillus, C. corsicus Olivieri, etc.) for the early spring.

If stone sinks, pig troughs, old drinl fountains, or sarcophagi are not procura an inferior substitute may be found in on the earthenware crocks in which eggs stored for the winter. There is one h sunk deeply in the ground and planted w Rhododendron calostrotum, Cassiope te gona, Nardostachys jatamansi, and Ru arcticus, which shelters its contents from local lime and is not altogether an eyesor

The smallest rock garden of all is made deep seed pan or "alpine pot" with onc two pieces of rock and one choice plant, Saxifraga Burseriana Gloria. This will b a home in the cold greenhouse, or in fra whence it may be brought into the housa the flowers open, for unless these ea blooming alpine plants are given some tection from the weather their flowers usually splashed and their foliage farnis by the spring rains, and we seldom see t real beauty.

Such a miniature garden, in the clean, brilliance of its colour and its sharply design, gives, to the writer at least, the ing of the mountains more truly than b largest rock garden that was ever made.

F. A. HAMPTO

Sedum murale

THE pretty Stonecrop commonly under the name of S. murale is prop a form of the native Sedum album, is quite distinct in appearance from colouring. It cannot be denied that the na murale suits it well, for it is an excell plant for any wall spaces or rockwork. group shown is on the rocky end of a rae bed in company with Ivy Geranium Mie Crousse, and with a greyish backing of

teresting plant Suæda fruticosa, a native of r seashores and worthy of being more own in gardens. The bloom of the Stonecrop is a mass of little pointed white stars, ightly tinted pink in the middle, and with tiny pinkish stripe down each petal. The flower-stems, about 6 inches high, and their little, fat, sausage-shaped leaves are also of a low-toned reddish colour. The non-blooming masses of leafy growth close to the ground are only 1 inch or 2 inches high. They have the same fat leaves, crowded at the top, where their colour is a dull deep green tinged with red. As the leaves near the ground they are set more openly and have a redder tint. The whole forms an unusual and delightfully harmonious colour mass, worthy of a good place in any rock garden. G. J.

REMINDERS FOR THE WEEK

Southern and Midland

Shallots

It is important where Shallots are grown have them planted at the first opportunity hen the soil is in a fit condition. To grow em well the soil should be deeply dug and ell manured during the autumn. Where e garden lies low and the soil wet it is ise to raise the beds 6 inches or so above e surface of the surrounding ground. A isting of soot should be lightly forked in, terwards making level and firm with the ick of the spade. One foot between the ws and 8 inches to 9 inches between the ts are suitable distances to plant. The ts should not be buried, but pressed into e soil, leaving the tips showing.

Leeks for exhibition

To have good Leeks requires a long season growth, so the seed should be sown without delay and germinated in heat. Old otting soil that has been passed through a inch sieve is suitable for filling the pots pans. When the seedlings appear they ust be kept growing near the glass, and hen they attain 3 inches in height prick em off either into boxes 4 inches deep or ngly into small pots of good rich soil, and row steadily on in warmth until the end of larch, when they should be hardened off in he cold frame.

Primula Eureka

This beautiful new Primula, that is closely elated to P. obconica, should be grown by all ho possess a greenhouse. It bears flowers n abundance on long stems, each bloom beng as large as a two-shilling piece and of a eautiful pink. Seed sown now will produce lants that will commence to flower in October and continue throughout the winter. oil that will grow other Primulas will suit hese, and the seeds must be germinated in cool house and the plants grown as hardy s possible, as these, like other Primulas, esent coddling.

Asparagus Sprengeri and A. plumosus

These are very useful for greenhouse ecoration and for cutting. They are mongst the easiest of plants to raise from eed, and if this is sown now in pans of light andy soil useful plants will be produced for he summer and autumn. The compost they njoy is a mixture of loam, peat, leaf-mould, nd sand. A. plumosus is very useful for ssociating with cut bloom, and may be rained with advantage to the back wall of he greenhouse, while A. Sprengeri is splenlid for suspended baskets.

Melons

Where an average temperature of 65 degs. o 75 degs. can be maintained it is none too early to make a commencement with these plants. Three-inch pots should be filled with a rather light compost and one seed placed edgeways in the centre of each. If the soil s fairly moist no water is necessary until the seed has germinated. The pots should be plunged in a hotbed or propagating-case and kept close. When the plants have come through they should be kept growing near the glass, watering carefully and guarding against drought.

The Rose garden

Where the Ramblers have not been attended to no time should be lost in getting the old wood and weak and unnecessary shoots removed and the remainder tied neatly in. Newly-planted trees should be gone over and any that are loose in the soil should be made firm. When the soil is in a fit condition planting may be continued, for the sooner this is done the better.

The lawn

Much can be done on the lawn at this season when it is not frosty. All hollows may be made level by lifting the turf and filling up with soil, and mounds lowered. Coarse weeds, such as Plantains and Daisies, are easily removed with a hand grubber. Poor lawns should have a top-dressing of well-rotted manure and soil that has been passed through a coarse sieve. This should be well worked in with the broom. The roller should also be used on all favourable occasions. W. E. Wright.

Stockton House Gardens, Near Rugby.

Scotland

Propagation

At no season is the propagating-case entirely empty, but at the present time it is one of the most valuable auxiliaries of the gardener who has annually to raise a great variety of young plants. At the moment such things as cuttings of Coleuses, Tradescantias, Panicum variegatum, Heliotropes, Pilea muscosa, and the double Lobelia Kathleen Mallard may readily be propagated to any extent. Hard-wooded plants from which cuttings are desired at a later date ought to be warmed up in order that succulent young shoots, which root readily at this time, may be available when desired. Some rely upon sand alone, or a mixture of leaf-mould and sand, as a rooting medium in the propagating-case, but, personally, I prefer Cocoa-fibre to anything else. This substance is easily kept at a proper degree of moisture, and, in addition, when 4 inches of fibre are used a gentle, genial bottom heat is engendered which materially hastens root formation.

Calceolarias

Whether the ordinary herbaceous Calceolarias or those of the hybrid type, such as C. Clibrani, are grown, the plants should now be in their flowering pots. For the herbaceous sorts, if telling pieces be desired, 8-inch pots are best, and in these specimen plants can be grown. In the case of the hybrid varieties pots of 6 inches are to be preferred, the resulting plants being light and graceful, and lending themselves admirably to house decoration. In rooms the hybrid type is superior to the herbaceous Calceolaria, which is not durable, and liable to be quickly spoiled by draughts. The very coolest treatment is essential to success with all Calceolarias, and the plants should be occasionally lightly vaporised in order that aphis, the bane of Calceolaria growers, may be kept in check.

Violets in frames

The severe frosts, which necessitated much covering, told against Violets in frames, but, until the frosts came, good pickings were available. With the return of milder weather let the plants be exposed whenever it is possible to do so, pick off all decayed or decaying foliage, and stir the soil between the plants. A good crop of blooms may be confidently expected as the days lengthen. The Parma variety, Marie Louise, and Mrs. J. J. Astor are good doubles; the Czar, Princess of Wales, and California equally good singles, although, perhaps, the Czar is the best of the trio as a single Violet for frame culture.

Tubers, &c.

It is a good practice, at this time, to overhaul the tuberous and similar plants which have been resting in sand or in Cocoa-fibre over winter. Begonias ought shortly to be boxed up and put to work; some of the newer Dahlias of which a good stock is desired can be potted up and placed in heat; Gladioli should be cleaned and graded, remembering that, in certain cases, the smaller specimens are equally as good as larger pieces; and Gesneras which have, by this time, been dried off, may be shaken out of their pots and rested for a month or two in sand.

Chrysanthemums

Young plants from the earliest batch of cuttings may require a move, and 3-inch pots will carry them along for a time. A cool house from which frost is excluded suits Chrysanthemums at this season. More cuttings should go in until the required number—making due allowances for casualties—has been obtained. While, in general, it is preferable to root Chrysanthemum cuttings under cool conditions, yet, in the case of rare varieties, or of those which produce cuttings but sparsely, a little gentle bottom heat induces the formation of roots more quickly, and, in such cases, may be justified.

Rose pergolas

In many places the heavy snowfalls resulted in the delaying of the work of pruning and re-training climbing Roses on pergolas. This should now be pushed on and brought to a completion as rapidly as is consistent with good workmanship. Where these Roses are well established the thinning ought to be of a drastic nature. Even if the pergolas, after treatment, appear to be bare and skeleton-like, no misgivings need be entertained. By midsummer the pergolas will be furnished quite comfortably, and it is always better to have a moderately good display of superior Roses than to have a tangled wilderness of shoots with crowds of inferior blooms.

Work out of doors

In the kitchen garden every opportunity must be embraced in order to overtake arrears of digging and trenching which, owing to the prolonged winter, have accumulated. Arrears of pruning, too, must quickly be made good, and the clearing away of spent vegetables ought not to be delayed. Tennis and croquet greens may need sweeping and rolling, and those who have to manage hard tennis courts will find that, after the frost and snow, a certain amount of surfacing and rolling will be needed. Hard courts are said to be labour-saving, but, to maintain them in good condition, I find they call for more attention than Grass courts. W. McGuffog.

Mabie Gardens, Kirkcudbrightshire.

Tomatoes: Cultural Notes

TOMATO growers generally will agree with me that success depends on the preparation of the soil. Slipshod work in this matter meets with the reward it merits. As a rule Tomatoes go away and look very well in their earlier stages of growth, but when the rooting medium has not received a thoroughly careful preparation the effect of this neglect shows itself in a more or less marked manner when the fruit begins to swell and colour, for if the roots are not perfectly healthy and working actively they cannot of course assimilate the additional nutriment given them. In the first place the rooting medium must be sweet, and this I am now (December 15th) ensuring by having the soil fully exposed to outside influences. I am taking advantage of the hard frosts and drying winds to have it turned over several times so that every particle is aerated and exposed to sweetening influences. I feel convinced that many failures would be avoided if it were made a practice to expose the soil to the action of the elements some time before it is used. This can always be done if the work is taken in hand early, and if it can be commenced in early autumn so much the better. Those who are lucky enough to command a heap of loam should not be tempted to use it until they are assured that it contains no wireworms, for I have known a crop to be quite ruined by this pest.

The effects of using compost in a more or less crude condition are more manifest when the fruit begins to colour. Tomatoes are naturally free growing, and will go away and look very well under quite ordinary conditions. It is when there are several trusses swelling, and there is consequently a great demand on their strength, that the lack of full vigour is apparent. The fruit ceases to swell freely and does not colour as it should do, and to the disappointment of the grower the yield is much wanting in quality. Failures in setting may be traced to over-feeding, for it should be noted that as a rule imperfect setting begins with the third truss, and just as there is a great demand on the energies of the plants.

Most Tomato growers use dung, and a certain amount of it is undoubtedly beneficial; but the very free application of a manure so highly charged with nitrogen may, I feel sure, be the cause of failure. A grower who was not experienced in Tomato culture dug in 6 inches of dung. The plants did very well in their early stages of growth, but in August they were a mass of brown rust with very few fruits; in fact the crop was a dismal failure. There may have been other causes, but I am convinced that the primary one was an excess of nitrogen. I have nothing to say against the moderate use of dung, although I do know that very good crops can be grown without it; but should any Tomato grower be afflicted with this disease without apparent cause I would advise him to try a season without it. There is plenty of good concentrated manures, and I have by experience proved that good crops can be obtained by their use alone. A liberal dressing of quite fresh dung is apt to promote a rank growth which is not favourable to the production of a heavy crop, as the trusses are too far apart and a very sappy growth does not favour the free setting of the flowers. I use a mixture of dung and Oak leaves which have formed a hot-bed the previous year. This is nice and sweet and does all that is needed. It gives the plants a good start, and when the fruits are swelling and beginning to colour they get a dressing of concentrated manure, with an occasional application of liquid manure. I am a firm believer in the virtues of wood ashes or charred soil and weeds, of which I try to have a good supply. I have grown my Tomatoes in the same place for 20 years, only taking out 2 inches or 3 inches yearly and replacing with fresh soil, but I could not do so last season and gave the soil a free dressing of burnt earth, and my crop was quite satisfactory. Apparently it is potash that Tomatoes need, and when this fails the plants are liable to droop and rust, which have never troubled me. Tomatoes love sunshine and air, and a confined atmosphere with much humidity is dangerous. Watering late in the afternoon is not prudent unless in very hot weather, and even then plenty of air should be given through the night; in fact from mid-June onwards, in my opinion, Tomato houses should never be closed at night. Many of the failures are due to much coddling. Grown naturally, only screening from the fluctuations of our English climate, there will be no danger of any serious attack from the enemies of the Tomato. It is safer to do the watering in the morning. BYFLEET.

The protection of Celery

It would be both instructive and interesting if cultivators would give their experience as to what extent protection to Celery is needed, or if at all. According to my experience the decay of Celery is more often than not due to other sources than frost. During a severe or prolonged frost a little protection is of great assistance, but the continual covering and uncovering of the rows which some people subject their Celery to cannot but be positively injurious. It is very annoying after trouble has been taken to have good Celery to find that at mid-winter the greater part has decayed. There is no doubt that the form of earthing which is adopted has much to do with early decay. By earthing too early the blanching is done much too soon; consequently, after a time, decay commences, let protection from frost be ever so efficient. I have noticed in Celery that is over-protected that fermentation sets in through want of air and close confinement. Celery, however, to keep well must be well moulded up. A careful workman will see that this is efficiently done, the sides well sloped up and made fairly smooth, the soil being also well worked around the tops of each plant, which should, when earthing is finished, be exposed about 6 inches. Heavy coverings of litter or Bracken laid along the tops of the rows cannot but have an injurious effect, and late Celery will be in a worse condition at the turn of the day than even if left freely exposed. The best plan, if the weather should become unduly severe and there is no covering of snow, is to lay some dry litter or Bracken Fern along the sides of the rows and then to shake a little of the very lightest and driest loosely along the top. If a heavy covering be put on and snow were to follow directly afterwards it would lie very close, and afterwards when a thaw set in it would become a wet and sodden mass, and the Celery would suffer accordingly. Damp is the worst enemy to Celery.

Whatever form of protection is used it must be so arranged that both light and air can have free access. Covering over with a cap by having two boards nailed together thus Λ has been frequently recommended. This season, if occasion should arise, I shall use a covering which builders place along the tops of walls for keeping out wet and frost. Instead of being of wood it is made of corrugated zinc. This being fixed so that the tops of the Celery are not bent over, there is no danger of either light or air being excluded. In time of severe frost with a covering of litter along the sides so as to facilitate digging up and a little laid over the opening I do not think there will be any fear of injury either from frost or damp. Celery that h been forced into a coarse growth by he applications of liquid manure and the too f use of artificial fertilisers will be the first succumb. T. C

The herb garden

Unfortunately, in many gardens herbs not get fair treatment, and old, worn-o plants are relied on for the supply. Wh possible a site should be chosen as near house as possible. This should be deeply d and enriched with manure. If small beds formed and crazy stone used to separate from the other this will be a great advanta

PARSLEY.—Possibly this is the most cal for of all herbs, and should be grown as edging. It is best grown as an annual, so ing the seed early under glass and planti out. It will be fit for use during the summ Seed sown during April will give the autu and winter supply, while a sowing m during August will come into use duri spring and early summer. In all cases seed should be sown thinly and finally thinn to 6 inches from plant to plant. Ample su plies of water and liquid manure are nec sary during the summer to obtain go fronds.

MINT.—This is a much sought after h during the spring and summer, and is us in various ways. The old roots should be d up during January and February and brok to pieces. One inch and a half of the s from the surface of the new bed should be moved. Lay the pieces of roots evenly o the surface and return the soil, finally maki level and firm with the back of the spa Cuttings of the young growth may be tak and struck under glass during summer.

SAGE.—This may be raised from seed so in April. Cuttings taken in spring autumn, or dividing the old plants, whi grow readily whether rooted or no, will so make progress.

THYME.—The common garden Thyme the one most called for, but the lemon or g den variety, which has broader leaves, is v useful for edging and may be cut hard bac Both varieties are easily raised from cuttin dibbled into pots of sandy soil during Aug and kept close under a frame or handlig until rooted. Another means of increase is lift the roots, divide, and replant.

MARJORAM and SAVORY are both eas raised from seed sown during April in dri 1 foot apart, thinning the plants to 9 inc apart while small.

TARRAGON can also be easily increased division of the roots in early spring.

FENNEL is a tall-growing plant with fi foliage, and if the herb garden is small or two plants will supply the usual requi ments. Fennel is easily raised from se sown in April in the bed where it is to grow

All these herbs may be cut and dried durin the autumn for winter requirements. Oth herbs that may be included in the herb ga den are Rue, Peppermint, Pennyroyal, Tans Thyme, Horehound, and Wormwood.

W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Digging in manure

Many gardeners are somewhat wastef when applying farmyard manure to the so During frosty weather manure is oft wheeled on to land and placed in little hea so that when digging is carried out later t manure is near at hand. Sometimes t manure is spread on the surface of the s ready for digging in, and left often for wee before it is finally turned into the so Neither of the above operations is the best practice. It should be remembered th

rmyard manure contains certain plant ods. One of these foods, namely, nitrogen, often lost into the atmosphere in the form ammonia. When the manure is spread the top of the ground and left for a long ne before digging it in this loss is greatest. hen little heaps are spread about over the hole garden we do not lose quite as much mmonia as when the manure is spread and t, but at the same time the ammonia lost considerable if the manure remains long out the ground. We lose least when the anure is left in big compact heaps until it is quired for digging in. J.

Register of growers of certified stocks of Potatoes in 1925

During the past season Inspectors of the inistry of Agriculture and Fisheries have amined many fields of growing crops of otatoes of varieties which have been apoved as immune from wart disease with a ew to the certification of the crops under e Wart Disease of Potatoes Order of 1923 being true to type and reasonably free om rogues. A list of the growers of these rtified stocks has been prepared and copies ay be obtained, price 1s., from the Ministry, ho will also be happy to supply on applicaon the names and addresses of growers of rtified stocks of any particular variety, tother with the numbers of the relative certiates. Growers are reminded that the only otatoes which may be planted on land incted with wart disease are those from crops hich have been so certified. The list also cludes the names and addresses of growers varieties not approved as immune from art disease whose crops were inspected hile growing and found to be true to type. he importance of planting true stocks is beming better realised by Potato growers, nd the extension of the system of inspection non-immune varieties has, it is believed, oved to be of material assistance both to owers and purchasers of seed Potatoes. he Board of Agriculture for Scotland has sued a similar register of Scottish growers approved immune varieties, and copies can obtained from the Secretary, Board of griculture for Scotland, York Buildings, ueen Street, Edinburgh, price 2s. net, post ee.

Purity of Parsnip seed

The Regulations made under the Seeds Act, 20, require, in the case of a sale of Parsnip ed, that the seller shall deliver to the purhaser a statement in writing containing cerin specified particulars, including (1) the ame and address of the seller; (2) a statent that the seeds have been tested in cordance with the provisions of the Act;) the kind of seed; (4) the percentage of urity if below 97 per cent.; and (5) the ercentage of germination; provided that if e percentage of germination is not less than e authorised minimum percentage (45 per nt.) prescribed in the schedule to the Regutions, a statement to that effect, which shall clude the authorised minimum percentage germination, shall be sufficient. Owing the structure of the Parsnip seed it frequently happens that the percentage of purity lls below the 97 per cent. prescribed in the eeds Regulations, the impurities being ainly "light" and imperfect seeds. The le of such seed is not contrary to the Regutions provided the actual percentage of urity is declared.

Seed Potatoes

Proceedings were recently instituted in the heriff Court, Glasgow, at the instance of e Board of Agriculture for Scotland, against a Scottish firm who supplied, through an English merchant, seed Potatoes described as of "Great Scot" variety, the crops from which were found to contain some 20 per cent. of rogues. The defendants pleaded guilty and were fined £3. The Regulations made under the Seeds Act require, in effect, that seed Potatoes described as of any specific variety shall be true to that variety as regards at least 97 per cent. In addition to the statement as to the variety of the seed the seller is required to furnish the buyer with written particulars as to the class and the size and dressing of the Potatoes.

FRUIT GARDEN

Apples that pay to grow

ALTHOUGH medium-sized Apples are most suitable for table it is not the case where the kitchen is studied, as for cooking they cannot be too large, and are more in demand than the smaller kinds, while for exhibition they are always to the fore. A few of what I consider are profitable to grow are the following:—

PEASGOOD'S NONSUCH.—This Apple, if grown well, is, to my mind, the largest and handsomest-shaped Apple in cultivation. It is a pale yellow with crimson markings, a splendid cooker, and during October and early November good enough for dessert. If possible it should be grown on a warm wall or otherwise as a cordon. For exhibition it is hard to beat.

REV. W. WILKS.—This is a very fine large Apple, pale yellow, splendid cooker, at its best during October. It is an ideal Apple for bush, pyramid, or cordon, as it is compact in growth. I found it do exceedingly well in South Wales, where many kinds were a failure.

WARNER'S KING.—This is one of the best for a standard, not particular as to soil and a sure cropper, while for a mid-season cooking Apple it is superb. It can be grown with success in any form and is one of the best market varieties.

POTT'S SEEDLING. For a small garden in a town this is a suitable Apple to plant. It is of compact dwarf growth, bears large Apples in quantity, and is in season during August and September.

EMPEROR ALEXANDER.—This is a fine large Apple that can be recommended as a good grower. It bears a heavy crop of fruit that should not be kept later than October as the flesh is soft and is apt to become decayed in the centre.

STIRLING CASTLE. This is a very profitable and reliable variety, excellent as a bush and as a pyramid. It is of close and compact growth, bears heavily, and is in use in October.

GRENADIER.—This is a fine Apple as a standard. It is a good cropper and one of the best cookers that turns in after the Codlins are over.

ROYAL JUBILEE.—This is an excellent keeping Apple of large size and a good exhibition variety. It is a sure cropper and is suitable for any form of growth. W. E. WRIGHT.

Stockton House Gardens, Near Rugby.

Melons

It is idle to attempt the early cultivation of Melons unless the requisite heat is at command, but those who are favoured in that respect may now sow seeds. It is generally admitted that for a first crop the scarlet-fleshed varieties are best, as they will bear more heat than the white-fleshed or green-fleshed sorts and possess a stronger constitution. For very early crops two old varieties still stand the test—Blenheim Orange and Sutton's A1. Sow the seeds singly in small pots and plunge in the propagating-case until germination takes place. Then remove to a position near the glass. There is nothing to be gained by planting out before the plants have attained to a certain degree of strength.

Of Catalogues

MY first recollection of a bulb catalogue was Sutton's, in which the Mme. de Graaff Daffodil was figured and listed at £15 15s. This must be nearly 50 years ago. Since then catalogues have grown both in size and number. To mention only a few, Kelway's, Sutton's, and Carter's. The two first, weighty books to hold, are works of art, but require a table or book-rest to enable one to look through them. Carter's is a handier size, and one can settle down before the fire and study its pages.

Of Iris catalogues there are those of Wallace, Bunyard, Orpington Nurseries, Perry, all well illustrated, and the smaller one of Lowe and Gibson—Carnations and Irises. Then we have the long narrow shape of Bath and Co. All these different shapes and sizes are not confined to English catalogues; the American sizes are in some cases just as large, but in many others go down to Prayer Book size.

Of Gladiolus catalogues these also vary in size of page and also in the quality of the paper and illustration.

By a recent mail I received a copy of a catalogue of Gladiolus bulbs grown at Buena Vista Gardens, in which the grower states:—

"I have tried to make it (the catalogue) a model of suitable size and arrangement for other growers to follow. It is 6 inches by 9 inches, which is a standard size for catalogue work. It is elaborately illustrated with clear cuts representing the form and style of the new varieties, and printed on good quality paper. The names of the varieties are set in bold type and overhang the descriptive matter, which is indented, thereby making the finding of the name of some particular variety an easy and quick method. A picture for every page is a good plan and one that the eye never tires of and which holds the interest of the reader to the end."

Certainly this catalogue (68 pages and cover) is well got up, with over 30 full-page illustrations, and well-written descriptions of nearly 300 varieties.

The author, who is the Secretary of the American Gladiolus Society, calls it a "Souvenir Catalogue," and writes:—

"This catalogue is good for several years, and I trust you will retain it, for I may never issue another."

In these days the cost of producing such a catalogue is not small, and it ought not to be necessary to reprint it every year. Some varieties no doubt will drop out in time, but the chief alteration is generally one of price, which could be met by a new list on the same-sized page giving simply the name and price in alphabetical order.

The production of such catalogues as are mentioned above entails much time, labour, and money, which have all to be added to the price of the article listed. The reduction of costs of garden seeds, bulbs, and plants is as necessary as in other trades.

Everyone, I suppose, appreciates the beautiful 1926 catalogues containing the exquisite coloured illustrations, but at the same time it is borne in upon us that they all have to be paid for. It is true a cheaply-produced catalogue soon finds its way to W.P.B., but an artistic one remains with us for years. X.

ROSES

Standard Roses

IN this district (Woking) probably the three most successful varieties for the above form of culture are Frau Karl Druschki, Caroline Testout, and Hugh Dickson; at least, these are met with the more frequently. The well-known white, first named, is represented by fine examples. The second, in pink, seems to be always in bloom, and is especially good towards autumn. The other, in crimson, appears to put on a better habit of growth on a stem than on that in dwarf bush form, and does not throw out so many long flowerless branches, which in the latter case require to be pegged down. If, however, the trio named are so very popular, this is not to say there are not many other kinds equally good. Superb, for example, is Betty Uprichard, the free-branching style of this pretty carmine sort lending to this form of culture. General McArthur makes a capital standard. Golden Emblem is just beginning to show itself in very nice samples, for it takes some years to get strength enough for the purpose. There is something quite classy about a well-grown standard of this in leaf as well as flower. Gruss an Teplitz is liked, although the blooms are neither large nor shapely. It is the constancy and freedom of growth that appeal in this instance. Lady Hillingdon, Lady Pirrie, and Lady Roberts are three that do exceptionally well, and all provide charming colouring; the first fawn-yellow, the second coppery-salmon, the third apricot. The old La France, where it does well, is among the best for standards. In years gone by it was remarkably well done at Downside, Leatherhead, in the Rose garden there. More modern is Los Angeles, and one does not want anything better in salmon-pink. The freedom of its growth commends it for the form named. Margaret Dickson Hamill, again, in straw-yellow, has capital foliage as well as bloom, and is a comparatively recent gain. A taking standard Rose is Mme. Abel Chatenay. It is so free in providing the lovely salmon-pink flowers for which the variety is famed. So, too, is Mme. Edouard Herriot; indeed, the terra-cotta-yellow blooms are richer, or appear to be, when well up in the air. Molly Sharman Crawford and Mrs. Henry Stevens are two whites less robust in growth, maybe, than the popular Druschki, yet in standard form the wealth of bloom each gives is considerable. A fine old sort is the light pink Mrs. John Laing, not so often met with as formerly, but by no means outclassed by more recent kinds. What can one say of Ophelia? It is my favourite of all as a standard. I should, perhaps, prefer the glorified form of it, known as Mme. Butterfly, in pinky-flesh colour. Anyway, either is most commendable. Pharisaer, in light pink, makes a first-class head of growth budded on the long stem, and the Queen Alexandra, like Golden Emblem, gives us something that is new and choice-looking. The pair are notable for distinct shiny foliage, the former for rich red blooms. Another modern variety is Wm. F. Dreer, in yellow and pink. This is a fine companion to Los Angeles, which probably came in the first place from the same pod of seed. W. R. Smith is a variety classed among the Tea-scented, and this would imply somewhat tender growth. Not so, however, for the branching is as free as the blooms, these being of faultless shape in flesh-white. A pretty old Rose, Wm. A. Richardson, seems specially at home on a standard Briar, a form of culture one would choose it for. Its apricot-shaded colour is now generally known.

Summer, or once-flowering Roses, have a fine example of a standard in Paul's Scarlet, and the free-growing Wichuraianas are pretty as standards. Alberic Barbier, Dorothy Perkins, Excelsa, Hiawatha, Minnehaha, Réné Andre, and Sander's White are excellent.

In these days there seems to be a difference of opinion as to the more suitable stock on which to grow the standard Rose. The Briar of the hedgerow and Rugosa have their followers among the expert producers of the trees for sale. The latter is certainly a free-rooting foster parent which apparently d well in any soil almost, but there is so thing about the Briar that seems to mak the more natural. Given a good one to st with, one that is not too old, I should be clined to give the preference to that we h known the longest. Anyway, one could po to specimen trees of Roses that have b growing a score of years and which are healthy. H. S

Surrey.

The Narcissus Bulb Embargo

THE U.S. Secretary for Agriculture has decided that the Quarantine Regulation No. 37 must take effect from January 1st, 1926, relative to Narcissus bulbs. We take the following from the "New York Times" of December 30th;—

Restrictions on the entry into this country of Narcissus bulbs, authorised by the department three years ago, will become effective on January 1 without modification. Other classes of bulbs, eight in number, to which the restrictions were to apply, will be permitted entry under permit and inspection pending further inquiry.

In commenting on his decision to adhere to the order of his predecessor restricting the entry of Narcissus bulbs, Secretary Jardine said that the information available in 1922 on the entry of pests on these bulbs undoubtedly justified the placing of the restrictions, and that the facts obtained since that time have emphasised the menace to agriculture then indicated. There was no question as to the seriousness of the menace of pests brought in by Narcissus bulbs to Alfalfa, Clover, and other important crops. He insisted that the restrictions are not based on motives of trade protection.

"It is unfortunate," said Secretary Jardine, "that in protecting our various crops against the pests and disease some interests must suffer. The evidence shows the danger to be such, however, that I feel no one charged with the safeguarding of American agriculture could do other than restrict the entry of these bulbs. I do not doubt the sincerity of those who have reached other conclusions, and I have considered their arguments carefully, but the weight of evidence seems to me to rest in favour of the retention of the restrictions.

"The evidence available at present," continued he, "indicates that none of the three important pests usually associated with the imported Narcissus bulbs has yet become so well established in this country as to make control measures useless. A review of the present situation indicates that even in the districts where they have gained a foothold they may be materially controlled and possibly eradicated, especially in the case of the two bulb flies. We are going to give these districts a chance to clean up. They have promised to do so, and the department will insist that this be done at the earliest date possible.

"With respect to the two bulb flies, their establishment even on the Pacific Coast is far from being general. Taking the plantings as a whole, the percentage of infestation does not amount to more than a fraction of 1 per cent. In the eastern section of the United States the infestation by the lesser bulb fly is still comparatively trivial, and there seems to be no clear record in this section of establishment of the larger bulb fly. At least it is evident that large producing areas in the Eastern United States—some of them going back to Colonial days—are altogether free from these pests. It would appear that these regions have a right to protection from them.

Important Onion pest

"The lesser bulb fly is an important On pest. In the Pacific North-West it already occasioned serious damage in On planting. It is important to note that it not yet reached our chief areas of Onion p duction. Producers in these areas, as w as all other Onion producers in the Uni States, have a right to protection from t hazard.

"There is no question as to the seriousn of the eelworm menace to our Alfalfa Clover crops. They have been attacked certain regions, but the evidence indica that most of the United States are still f from this pest.

"Of great importance, also, is the po bility of casual or accidental entry w Narcissus bulbs of insect pests, which n have little or no economy relation to the b industry, but may carry a serious menace other farm crops. For example, some different insects have been intercepted w importations of Narcissus bulbs alone, among these are such well-known injuri pests as the European earwig, already est lished and proving to be very troublesome Rhode Island and in the State of Washi ton, and also various wireworms very structive to cereals and other crops in Euro

"The public is naturally interested in question of the immediate or future av ability of the Narcissus bulbs. It was brou out at the conference that there are n planted and growing in the United Sta some 150,000,000 of these bulbs, nearly dou the quantity which is normally import Furthermore, the needs for this winte forcing and next year's planting have alre been met by importations of last year wh much exceed those of any previous ye There seems, however, no justification fo material increase in price."

"The Plant Quarantine Act," commen the Secretary, "is being administered will continue to be administered solely the protection against insects and disease, in no sense as a subterfuge for trade p tection. It is true, as often declared, t there is a Narcissus bulb industry in t country, part of it dating from Colonial tim part of it established since the regulati were announced, and that the restrictions bulb entry may, temporarily, at least, ben this industry. This fact, however, cannot considered one way or the other in adminis ing the law."

Other subjects

The restrictions on the entry of eight ot classes of bulbs transferred from the restric to the free list in 1922 for a three-year per have been postponed by order of the Secret to give more opportunity to determine the r in connection with their entry, the Dep ment of Agriculture said to-day. Such en will, therefore, continue to be permitted un permit, but these bulbs will be subject to spection and the enforcement of such ad tional safeguards as may be found necess

volume of entry of these classes is re-
vely small and the inspection which it has
n possible to make of them has not dis-
ed a risk which would seem to warrant
enforcement of the restrictions at this
e, the department added. These eight
ses are:—Chionodoxa (Glory of the
w), Galanthus (Snowdrop), Scilla (Squill),
illaria imperialis (Crown imperial), Fritil-
a Meleagris (Guinea-hen Flower), Mus-
(Grape Hyacinth), Ixia, and Eranthis
nter Aconite).

The application of sulphate of ammonia

is in springtime that sulphate of am-
nia is best applied to the garden. It is a
ck-acting manure suitable for growing
ps. At the time of seed-sowing it can be
lied with safety. Growing plants are
dy to receive nitrogen, and especially by
time warm weather comes.

owing to the steady supply of this readily
milable food the young plant is en-
raged to make sturdy growth, and is
bled to resist attacks by the numerous
ect pests and fungus pests which are
able of playing such havoc with the grow-
crop.

s a top-dressing sulphate of ammonia is
al. By reason of its excellent physical
e there is no difficulty in obtaining even
ribution, and patchy growth is entirely
rcome.

o obtain the best possible results from the
of artificial fertilisers it is desirable to
ct a proper "balance" by applying a
ssing of phosphatic manure, such as super-
sphate, and, if necessary, a potash
nure. This will prevent rankness, and,
ides hastening maturity, will result in a
neral improvement in quality as well as
antity.

Nitrogen, so essential for plant growth, is
sent in substantial quantity in sulphate of
monia. When it is applied to the soil re-
rkable changes are effected through the
ion of the germs in the soil, which trans-
m the ammonia into a state so that it can
utilised by the growing plant. Plants
not as a rule absorb sulphate of ammonia
ectly, but under the influence of warmth
l moisture the organisms present in the
transform the ammonia into nitrates, in
ich form the nitrogen can enter the plant
l be utilised as a foodstuff. Although sul-
ate of ammonia dissolves completely in
ter, it is said water draining through the
does not carry it away. The ammonia is
d up by the soil, so that even if a spell of
t weather occurs after the addition of sul-
ate of ammonia to the soil there is no
son to fear any loss of ammonia. It is
ll known that this phenomenon does not
ply to a nitrogenous fertiliser when nitro-
n is present in the form of nitrate.
rates in soils are liable to be washed out,
l there may be a great loss during a spell
excessively wet weather.

Herein lies one of the many advantages in
use of sulphate of ammonia. The am-
nia is stored up in the soil, and under
ourable conditions of temperature and
isture is transformed into nitrate just at a
e when the growing plants are capable of
ng it; thus the tendency of the loss of
rogen is very much reduced. It may be
phasised here that the change from am-
nia to nitrate takes place most rapidly in
presence of lime. Consequently, sulphate
ammonia gives the best results where there
a sufficiency of this important medium
ilable. Since lime is an essential ingredient
maintaining the condition of a soil suitable
plant growth, and is of first importance
t only for the successful utilisation of a nitrogenous fertiliser, but even for the successful growing of crops), every effort should be taken to ensure a sufficiency of lime in a soil.

To sum up, sulphate of ammonia is best applied at sowing time in spring, as there will be growing plants ready to receive the nitrogen by the time the formation of nitrates has commenced.

BOOKS

Flower scent*

ALTHOUGH there have been many references to the colours of flowers in botanical and horticultural works, the question of fragrance has been neglected. Even our hybridists and plant raisers have, till quite recently, presented us with a number of scentless flowers, particularly in the case of Roses. A book dealing with the question of scent was much needed, and we are glad to record that this want has now been supplied by this book.

In the first chapter the author tells us about the organs with which we can perceive scents and how they can get fatigued and rendered insensible to even a powerful odour if exposed to it for some length of time. The author classifies the various flower scents, which he divides into groups, such as the aromatic, the Violet, the Rose, the Lemon, the Musk, the fruit, and the animal. He gives us some very interesting facts concerning each group. Another chapter deals with the extraction of scent from plants and the manufacture of perfumes. But to the gardener the chapter devoted to "Scent in the Garden" will be read with the greatest interest. Dr. Hampton here points out how it is possible even in such a cool climate as that of England to have scented flowers in the open all the year round, beginning with Chimonanthus fragrans and Lonicera fragrantissima in January, followed by the yellow-tasselled flowers of Hamamelis mollis or Witch Hazel. In the appendix there is a useful subsidiary list of some of the scented plants suitable for a garden of one acre or less. We should like to have seen the Madonna Lily, Lilium speciosum, and L. auratum included, but the writer evidently thought that no garden lover needed any reminder to include these precious flowers.

The author believes that the scentless new Roses will soon be superseded, and he points out that the scent tends to reappear in the second and subsequent crosses of scentless Roses, and tells us that Frau Karl Druschki has produced some sweet-scented seedlings. He also mentions the hybrid "Rose à parfum de l'Haye," which was raised specially for its scent by Jules Graveraux from R. Damascena, General Jacqueminot, and R. rugosa for the Rose-water industry in the South of France. Mrs. H. R. Darlington has very kindly provided a classified list of fragrant Roses.

On the question of bees and flowers the author quotes Frisch to the effect that scent appears to be secondary to colour in attracting these insects, but when we remember how they swarm round the inconspicuous blossoms of the Lime-tree it looks as though scent was here predominant and not colour. Had bees been as much attracted by colour as moths and butterflies these insects would have been as brightly coloured as the last-named. Purple and blue appear to be the bee's favourite colours, and, this being the case, Dr. Hampton points out, "it seems strange that very few scented flowers of pure blue are to be met with, and owing to the rarity of the combination it is always a pleasant surprise to meet with fragrance in the blue flower." We find it in our native Bluebell and wonderfully rich in the bedding Hyacinth and in the Lupin. Perhaps we may be allowed to include the Chionodoxa, some Violas and Sweet Peas, Lavender and Rosemary amongst these scented blues.

Mr. Kingdon Ward, in a private communication to the author, sent him two blue species of Meconopsis, and added that he had recently discovered a third, all of which were delicately scented like a Tea Rose.

Lord Avebury, in his "Ants, Bees, and Wasps," refers to the same fact and accounts for the fewness of blue scented flowers by assuming (no doubt correctly) that all blue ones have descended from ancestors in which the flowers were green, and that they have passed through stages of white or yellow, and generally red, before becoming blue. The flowers of Viola tricolor alpestris are yellow when they first open, and gradually become more and more blue. In this case the individual flower repeats the phases which in past times the ancestors have passed through. The flowers of the Myosotis vary from pink to blue, as do those of the Pulmonaria.

Those who wish to explore more deeply into the facts that the author has collected must obtain the work and read it for themselves. If they wish to probe more deeply still into the mysteries of "the scent of flowers and leaves" they will find short bibliographies at the end of each chapter.

*"The Scent of Flowers and Leaves: Its Purpose and Relation to Man," F. A. Hampton, M.A., B.M.Bob. Oxon., Published by Messrs. Dulau & Co., Ltd., 34, Margaret Street, London, W. Price 6s.

Ornamental trees and herbaceous borders*

The new series of gardening handbooks for the amateur, published by *Country Life*, in which Rhododendrons, hardy bulbs, and shrubs have been already dealt with, is now extended by the appearance of two further volumes, "Ornamental Trees for Amateurs," by W. J. Bean (the author's companion to his earlier handbook on shrubs), and "Herbaceous Borders for Amateurs," by R. V. Giffard-Woolley. In the former very practical and concise chapters are devoted to cultivation, transplanting, pruning, and propagation, as well as to the care of old ornamental trees. By far the most important section of this work, however, is the list of over 400 of the most interesting ornamental trees, accompanied by descriptive and cultural notes for each genus. Select lists of trees for specific purposes are also compiled, such as trees for shelter or screens, trees that flower after June, weeping trees, flowering trees for a small garden, good evergreens for the same, trees with handsome fruits, and trees with coloured or variegated foliage. One shares the author's plea that Poplar and Sycamore should cease to dominate and impoverish so many small gardens. Certainly with the wide choice of alternatives and the full information about them he has placed at the disposal of the readers of this excellent book they at least may be relied upon to plant trees of distinction and grow them to maturity. Conifers, it should be noted, have no place in the book. No doubt these will form the subject of a later work.

In the second volume under review appear a number of most useful tables grouping plants for the summer border in their respective colours and showing times of flowering, height of growth, distances of planting, and cultural notes. This would prove indispensable to an amateur for guidance as to succession of flowers, colour schemes, and massing. Spacing and backgrounds, preparation of the ground, arrangement for

*"Ornamental Trees for Amateurs," by W. J. Bean; "Herbaceous Borders for Amateurs," by R. V. Giffard-Woolley. *Country Life*. 5s. net each.

effect, autumn borders, planting and after-care, and maintenance all receive adequate treatment, and there is included a very helpful list of genera and their peculiarities. Several border plans for various aspects and seasons are also included. The author has wisely emphasised that a successful border depends not merely upon what is planted in it, but upon how such plants are disposed. His book serves as an exceptionally valuable guide both as to the matter and manner of border planting.

Like others in the series, the above are well printed and fully illustrated. A. G.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, 8, *Bouverie Street, London, E.C.* 4. *Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FRUIT

Male and female Melon blooms (Amateur)

THE difficulty of distinguishing the male and female blooms of a Melon often troubles amateur gardeners, and we therefore give an illustration which will help them far more than any written description could. The large bloom on the right of the illustration, with an embryo fruit at the base, is the female, which bears the fruit. The small bloom on the left is the male, from which the pollen must be conveyed to the female. During the summer the work is performed by the bees or other insects, but in the dull months of the year it must be done by the grower. The male flower should be plucked off and the calyx split open by tearing apart the sepals. It should then be held over the female flower and tapped so that the pollen may fall into the female bloom. Or the whole of the petals may be removed and the remaining portion put into the female flower. The pollen may, if the operator desire, be transferred from the male to the female by means of a camel's hair brush.

Winter moth

I have put grease-bands on my Apple-trees for three years in succession in November. Last year there was no improvement. Would you tell me how many years before I should expect any improvement, as my Apples were very badly affected? Would you tell me if there is a possibility of the male moth carrying the female from butt of tree to branches, thereby escaping the grease-band? F. E. F.

[Grease-bands certainly catch a great number of the female moths when on their way up the stems of the trees, but they do not account for all, as many are, without doubt, carried by the male moth to the branches of the trees. If grease-bands are securely fastened to the stems the female moth cannot, if the grease is not allowed to harden, pass over it, and having but abortive wings she cannot fly, therefore there is no other means of her reaching the branches than as indicated above. It is for this reason that we advocate spraying with caustic alkali solution, even when grease-banding is practised.]

Treatment of Mulberry tree

(Jobber).—Mulberry trees succeed best when allowed to grow unrestricted, the only attention required being to thin the wood now and again to prevent the heads from becoming too full of growth and to relieve them of dead wood. This, we should say, is what your tree is needing. We have seen several fine specimens at various times which cropped abundantly, but have never seen one pruned in the manner you seem to think yours has been. The tree will no doubt fruit freely as it becomes older.

Treatment of fruit trees

(Jobber).—If the wall-trained Pear-trees in question are established and furnished with a full complement of spurs, and if the growths mentioned are spur growths, cut them back to one bud. If, on the other hand, the branches are not furnished with spurs throughout their entire length leave growths where they are needed and cut them back to two buds. If a surplus remains these may be dispensed with on such portions of the branches, otherwise cut spur growths to one bud as advised above.

Male and female flowers of Melons

Hardy Melons

Can these be successfully grown in a cold house, and are they best grown in pots or planted out? Is the Cantaloupe hardy and easier to grow than, say, hardy Melons? Last year I had six plants, but failed to get any fruit grown in border. How can one distinguish between the male and female flower? "AMATEUR."

[We think for a cold house the Cantaloupe Melon would answer the purpose best. In Messrs. Sutton and Sons' list of seeds you will find an improved variety of this particular type of Melon mentioned. A half-hardy kind is also listed by the same firm. At one time a variety suited for cool house culture, named Munro's Little Heath, used to be grown, but it is, we fear, now out of cultivation. The plants should be grown either on small hillocks of soil or in a narrow bo consisting also entirely of soil. This ma 9 inches in width and depth to start w and the sides of the border, both back front, should be built up of pieces of which will keep the other portion of the bo in place. For the foregoing purpose use heaviest loam obtainable, and whether elect to grow the plants on hillocks or border the soil must be made as reason firm as it is possible to get it. This is a essential detail, as firm soil ensures a and fruitful growth. No addition in shape of manure to the plant is needed, a that is required in this direction can be plied either in liquid form or with the dressings after the fruit is set and swel off. We think you would do best to g the plants on the extension principle ra than the single stem or cordon system, you would, of course, confine the plant single stems until after they reach the trel

ALPINES

Rock plants under a stage

(E. B. Lister).—We are afraid the posi you describe under the staging in your gr house is a hopeless one for almost any plants. Although you say there is no hardly any, drip the place would not be l enough to suit such plants, but there a few exceptions that we have known to th under similar conditions, and you might them a trial. An average temperature o degs. would be too high to suit rock pl proper; they would get drawn in such p tion and become unsightly and flower differently or not at all. Plants that w succeed in the box with your Ferns are S fraga sarmentosa, commonly known Mother of Thousands, or Travelling Sa and its very pretty variegated form, sarmentosa tricolor, Nertera depressa, coral-berried Duckweed, Helxine Solier Linaria Cymbalaria in purple or w flowered forms, the pretty silver varieg Caladium argyrites, Carex japonica va gata, and Ophiopogon Jaburan. These w give you a pretty variety to associate your Ferns, and, of course, you could ad these the dainty Club Mosses, such Selaginella Kraussiana and S. helve which would do in the most shaded port and add soft green or bronzy effects comb with most graceful of foliage. You wi obtain most or all of these from any nur at low cost, and they should certainly s to give colour and variety, but it woul hopeless to attempt brighter-flowering pl The little creeping Fuchsia procum occurs as a further likely plant, and course, the trailing Tradescantia in gree a variously variegated form would do well, and you might like them to trail the front edge of your box.

GREENHOUSE

Failure of Camellias

(Yorkshire).—The cause of failure wi found at the roots; the soil is probably hausted and sour. We should remov flower-buds, as the plants are in a bad co tion, and all the old soil down to live r With care quite a lot of soil could be pi from among the roots, but with such trees we do not think very drastic meas should be taken, such as lifting the trees entirely remaking the border. The policy, therefore, would be a thorough amination of the border. Take away much old soil as is possible and repla with good quality compost of a peaty na They will also succeed in an open loa which are added sweet leaf-mould an small proportion of peat. Good drainag essential, and at no time must the root become dry. Thoroughly cleanse the plan

le, a number of which were on the foliage t. After affording fresh soil syringe the es daily with tepid water until growth is ll started.

r-leaved Pelargoniums failing

enclose some leaves of Ivy-leaved argoniums, and would be much obliged your letting me know, through your paper, at is the matter with them and what is remedy. My greenhouse is a large new (5 feet by 16 feet), so if the enemy could attacked by spraying I would prefer it to nigation, as all the other plants seem per- tly healthy. TIPPERARY.

The specimens sent were quite free of in- t pests, so neither spraying with an ecticide nor fumigation would be needed. e weakness and discoloration of the leaves caused by some defect in cultivation, such lack of light, and the plants being too wded, or they are grown in too close an nosphere. Plenty of air is needed during ld weather, a temperature of about 50 gs., and at this season all the light possible. the plants do not improve cut a few of m back, and when new growth begins ot in fresh soil. Remove all the old com- st from the roots. The rooting medium ould consist of fibrous loam three parts and e part leaf-mould with a little sharp sand ded.]

umbago capensis

(G. A. Walker).—This should be kept dry ring the winter and in spring cut hard ck. Shake the plant out and repot in soil mposed of good loam with a little rotten anure and some sharp sand. When the ung shoots have made 2 inches or 3 inches growth pinch out the tips. Given this eatment they will make bushy little plants hich need no staking, and thus managed ey are very effective. To see this plant at best one must have it planted out.

ld bulbs of Begonias

(G. A. Walker).—You can divide your egonia tubers when they start into growth. lace the tubers in a shallow box of light mpost, such as leaf-soil and sand or ocoanut-fibre and loam, and cover them to out three-quarters of their depth with the me compost. This compost should be in a oist condition, and when there are signs of yness it should be watered. A sunny posi- n in a temperature of from 50 degs. to 60 gs. is the best for starting the tubers. The es will very soon push out from the tubers, hen these may be lifted and divided with a arp knife, leaving one or two eyes to each rtion of the tuber. Sprinkle the cut por- ons with silver sand and pot the divisions in light sandy compost, growing them on in eat. Some growers object to dividing the bers and, instead, take off the young shoots ith a small heel of the tuber attached to the oots, cutting the portion out with the point a sharp knife and growing on as described ove. In case of failure it would be well to ise a batch from seed, these being more tisfactory in every way.

lants to bear flowers for market purposes

(Doubtful).—Propagate now cuttings of hrysanthemums of the late or Christmas owering varieties growing on the resul- ant plants outside through the summer. ndeed, it would be good policy to grow hrysanthemums that will flower from lovember to mid-January. The cost entailed not great. Then, of course, Narcissi, ulips, and Hyacinths should be grown. inerarias, Cyclamens, and Zonal Pelargo- iums in pots would command a ready sale flowered in 5 and 6-inch pots. In April ou may raise winter-flowering Stocks, grow- ng in pots outside, and housing in the autumn. White flowers are always in demand. We are presuming your greenhouse will be heated, a little at least.

White Chrysanthemums

(Mrs. S., Ireland).—We recommend The Favourite, Enfield White, Heston White, Loucie Louppe, and Lynette. These may all be obtained from Messrs. Keith Luxford and Co., Sheering Nurseries, Harlow, Essex. With regard to the Pelargoniums, we suggest you apply to Messrs. J. W. Cole and Son, Midland Road Nursery, Peterborough.

FLOWER GARDEN

Treatment of Passion-flower

(G. A. Walker).—This is a sun and warmth loving subject. If you bear this in mind you will not go far wrong. In this country the Passion-flowers cannot have too much sunlight and warmth. If planted out in a well-drained bed of light loamy soil they can hardly fail. Give water freely during the summer, keep moderately dry in winter, and prune moderately each spring just before new growth commences. In pots Passion-flowers are far from satisfactory.

Hardy Ferns

(Amateur).—The Male Fern (Aspidium Filix-mas), Hart's-tongue (Scolopendrium vulgare), Welsh Polypody (Polypodium cambricum), Prickly Shield Fern (Polystichum aculeatum), Black-stemmed Spleenwort (Asplenium Trichomanes), French Fern (Asplenium Adiantum nigrum), Hard Fern (Blechnum Spicant), Scaly Spleenwort (Ceterach officinarum) should answer your purpose, the first three varieties being of strongest growth, while with a copious water supply the Royal Fern (Osmunda regalis) should also flourish.

TREES AND SHRUBS

Eucalyptus failing

(B. Kenion).—Your Eucalyptus leaves arrived in such a dried-up condition that to really say what fungus is present will be difficult. However, we are incubating the leaves in the hope the fungus will start to grow again. At present miscroscopic examination shows that a mould is present, but there is no sign of spores, which alone will allow us to identify the disease. Watch this column for the result of the incubation. If readers would always send diseased portions of plants in tin boxes it would help us considerably in finding out their troubles.

Cutting down Yew hedge

(I. J. Ogden).—The cutting-down ought to be done in April. Old-established plants like those you evidently have often suffer from dryness at the root, and if it is so in your case you will find an occasional soaking of water very beneficial with, after you have cut the hedge down, a top-dressing of rotten manure.

MISCELLANEOUS

A plague of earwigs

Last season we had a terrible plague of earwigs which destroyed nearly all the Roses, Carnations, and other flowers. In the heart of each bloom two or three earwigs would entirely eat away all the stamens, and they seem to swarm everywhere. Could you give me advice in the columns of your valuable paper how to prevent the same thing occurring again, and whether there is anything that would entirely destroy them? Would the fact of it being a newly-made garden account for it? A. D.

West Hove, Sussex.

[These insects hide during the day and feed at night. They possess wings and can fly from one garden to another. It is almost an impossible task to entirely get rid of them. But their numbers can be lessened and kept down by trapping. Small flower pots filled with dry moss or dry paper; loose boards placed together but not quite touching each other, anything that will provide traps. The traps should be examined every morning and the earwigs caught and destroyed. The faded flowers can be placed in the axils of branches or leaves and branches, to act as traps, to a limited extent. They serve the purpose well in the case of Dahlias, also destroy the pests in the evening on the plants.]

Moss in bowling green

(Constant Reader).—The best thing you can do, provided the Moss is not the result of the soil being waterlogged and requiring drainage, is in the autumn to scarify the surface with an iron-toothed rake, removing as much of the Moss as you can. Then give the lawn a thorough dressing of fine rich soil of which loam should form one-half, well-decayed manure one-quarter, and leaf-soil one-quarter. Mix these altogether and pass through a ¾-inch sieve to get rid of any stones. Just before you apply it to the lawn mix 1 cwt. of bone-meal with it and spread it evenly over the surface of the lawn. Sow some good Grass seeds early in April, which rake in and roll firmly.

SHORT REPLIES

Amateur.—(1) Your best plan will be to consult a horticultural builder, who, by seeing the boiler, could tell you if it was possible to repair it. (2) We cannot call to mind any book on the subject you refer to. There is an American book, "Plant Breeding," a copy of which may be found on a secondhand bookstall.

NAMES OF PLANTS

F. B.—1, Centaurea gymnocephala; 2, Cupressus (Retinospora) pisifera squarrosa.

B. W. J.—Cytisus proliferus, native of the Canary Islands. Although recommended as a fodder plant in California it is very handsome, and we are interested to hear that it is now flowering in your garden at Kingsbridge, S. Devon.

GARDENING APPOINTMENT

Mr. F. G. COUSINS, formerly Superintendent of the Botanic Gardens, Regent's Park, has been appointed Park Superintendent at Torquay, and will take up his new duties about the middle of February.

Benn Brothers' Other Journals

The Cabinet Maker.—Special London Number; The London Trade; London's Retail Advertising; Preliminary Review of the Wholesale Furniture Exhibition at Olympia; Round the London Trade.

The Chemical Age.—Special Chemical Plant Number; New Developments in the Stream-Line Filter; "The Evolution of Colloid Mills," by Dr. S. P. Schotz; "The Psychology of Design: Its Bearing on Chemical Plant," by Dr. G. Weyman.

The Electrician.—Transformers and Biscuits (An Interesting Strowger Installation); "The Testing of Static Transformers," by J. L. Thompson and H. Walmsley (I.E.E. Paper); "High Voltage Insulators," by W. Ure.

The Fruit Grower.—Fruitfulness in Trees; Retailers on Weights and Measures; Statistics of Fruit Production.

The Gas World.—Laying a Gas Main Across Country; Equipment of a Showroom; Wet Purification of Gas.

The Hardware Trade Journal.—Preparing for the Spring Offensive; The Cutlery and Plate Trade: A Novel Cutlery Cabinet; Two Centuries of Brushmaking; Hardware Buyers Who Will Shortly Visit the United Kingdom.

Royal Horticultural Society

A hall crowded with exhibits and visitors

THERE was an air of spring about the fortnightly meeting of the Royal Horticultural Society held on January 26th. The spring-like atmosphere was due, no doubt, to the presence of alpine flowers in pans and in rock gardens, to early-flowering shrubs, as Forsythia and Prunus, and to a remarkably good collection of forced bulbs all flowering in the height of perfection. Orchids were again well represented, and there were groups of exceptionally well-grown Cyclamens and Carnations. The attendance at the Hall was unusually large for a January show—what will it be like when spring arrives?

There were many rumours going round relating to the secretarial appointment, which, we understand, has not yet been settled in Council. We were very sorry to hear that our friend and contributor, the Rev. Joseph Jacob, is very ill with pneumonia, and readers will join with us in wishing him a speedy recovery.

There was a scarcity of new plants on this occasion, and the only plant to receive an Award of Merit from the Floral Committee was Strelitzia Kewensis, a floriferous and vigorous-growing hybrid Bird of Paradise flower raised at Kew by crossing S. regina and S. augusta. The hybrid, a very handsome plant, is intermediate between its distinguished parents and not so brilliant in colour as Strelitzia regina.

The dark mauve and yellow flowers of the tall and beautiful Iris tingitana were shown in a good many exhibits. The form now in cultivation is obviously a good plant for forcing. It was remarkably well shown by Messrs. Carter, of Raynes Park, who also had a fine display of their pink and white strains of Primula stellata.

The only gold medal was awarded to Messrs. Sutton and Sons for a superb and comprehensive collection of forced bulbs all grown in bowls. The collection comprised Hyacinths Prepared White and Christmas Pink, and Cynthella Hyacinths in red and white. The Narcissi included Cervantes, still one of the best for early work and held in high esteem at Reading, Golden Spur, and the Polyanthus varieties Soleil d'Or and Paper White. Tulips included Ibis, the golden-yellow Montrésor, and white and scarlet Duc van Thol. The Lilies of the Valley in this collection were deserving of highest praise.

One of the most striking exhibits was a collection of well-flowered Cyclamens in white, red, and pink, shown by Messrs. Blackmore and Langdon, Bath. The varieties, Giant White, Giant Crimson, and Scarlet King, were in 5-inch pots, and the plants were of exceptional size and flowering with great freedom.

It was gratifying to see such good collections of home-grown Apples. Messrs. Cheal and Sons, Crawley, who also had a choice collection of flowering alpines in pans, showed the following cooking Apples in splendid form:—Hollandbury, Chelmsford Wonder, Crawley Beauty, Lane's Prince Albert, Encore, Lord Derby, Bramley's Seedling, and Lady Henniker.

Messrs. G. Bunyard and Co. again showed a representative collection of Apples in season. The pick of the dessert varieties shown were Cox's Orange Pippin, Adam's Pearmain, Heugen's Golden Reinette, Christmas Pearmain, and Claygate Pearmain. Other varieties excellent for dessert or cooking were Lord Hindlip, High Green Blenheim (very distinct from Blenheim Orange, which was also well represented), Norman's Pippin, and that excellent variety Belle de Boskoop.

Other features of this meeting were forced Roses, including Mme. Butterfly, The Queen Alexandra, and Mrs. Herbert Stevens, shown by Messrs. Elisha Hicks, Ltd.; Saxifragas Brookside, Burseriana, and Haagii from Messrs. Tucker and Sons; miniature rock gardens by Mr. F. G. Wood, Ashtead; Hamamelis and Rhododendron præcox from Messrs. Wm. Cutbush and Son, Ltd.; and Forsythia spectabilis, particularly well flowered, by Messrs. Waterer, Sons, and Crisp.

Messrs. Barr and Sons sent a very interesting group of plants in which we observed several Croci, the true Narcissus minor, N. minimus, and Bulbocodium vernum.

Carnations by Messrs. Allwood Bros., to which we always look forward, were again well shown. A lovely red Carnation Rouge was shown by Messrs. Engelmann and Co., while the violet-purple Sybil and Saffron Yellow were prominent in the group of Messrs. Stuart Low and Co.

The blue-flowered Pycnostachys Dawei was shown by Messrs. L. R. Russell.

Mr. G. F. Moore, of Bourton-on-the-Water, who gained a gold medal at the previous meeting for a magnificent display of Cypripediums, showed on this occasion a very fine new seedling Cypripedium named Sir Trevor, which gained a First-class Certificate and the Lindley Medal.

A First-class Certificate was awarded to Miltonia Lacæna, probably the best Miltonia so far produced. The very large flowers are white with reddish markings. Shown by Messrs. Charlesworth and Co. H. C.

Royal Caledonian Horticultural Society

Mr. Robert Fife presided over the annual general meeting of this Society held in Edinburgh on January 13th. The report of the Council stated that the monthly meetings continue to be well attended. The spring show, which was held in April last, was not the success the Council had hoped for, and it had been decided to discontinue that show in the meantime. As regards the International Show, it was reported that it was most satisfactory from the point of view of the exhibits received. It was found impossible to accommodate all the trade exhibits offered, and quite a number had to be refused, while the space asked for by others had to be much curtailed. Even thus it was, unfortunately, found to be impossible to accommodate all the competitive exhibits inside the Hall, and the vegetable classes had to be placed in a marquee outside. Notwithstanding the unfavourable weather the attendance of the public was satisfactory. It was stated that it is proposed to hold an autumn show in the Waverley Market on September 8th and 9th, 1926. The following office bearers and councillors were elected, namely:—As Honorary President, the Right Honourable Lord Elphinstone; as President, in place of Mr. Robert Fife, who retires, Mr. W. J. Thomson (Messrs. Wm. Thomson and Co.); as Vice-President, Mr. J. H. Alexander (Messrs. Dicksons and Co.); for the vacancies on the Council, Mr. R. L. Scarlett, C.D.A., Mr. William Fife, Mr. R. L. Harrow, and Mr. E. P. Laird. The Syllabus of Lectures, etc., for 1926 has been issued, and the schedule for the show in September is now in the printers' hands.

Obituary

MR. F. BEDFORD

It is with deep regret we have to mourn death of Mr. F. Bedford, who died sudde on January 19th last at the age of He was for 48 years gardener at Straff House, Co. Kildare, having entered the s vice of the late Major and the Hon. M Barton in November, 1875. After serving third generation of the Barton family he tired from active work in 1916. Stove pla and fruit were the features of Straffan, a these Mr. Bedford successfully grew. Ha things, too, were largely grown, bulbs, m especially Daffodils, being carefully tend These were grown in the moist soil on banks of the Liffey along with Snowdro the soil in which they were grown being v often deeply flooded. We can call to mind handsome boxful of Daffodils that on occasion Mr. Bedford sent to this office, flower-stems reaching a height of 2½ feet, handsome blooms poised on stout, vigoro stems. He was also very successful w Disas, while the fruit-trees, which he perso ally tended, showed the loving care he d played in their training. In the death of M Bedford one of the old school of garden has been removed from our midst, and tender to his family our deepest sympathy. T.

Trade Notes

We are glad to point out that our reade can show their admiration for the war-blind men at St. Dunstan's in practical form placing orders with them for the wide ran of nets and netting which these sightl craftsmen produce. The very best tann hemp in place of tarred cotton cord is alwa used, and this alone ensures extreme du bility. When three years' wear (a rece testimony from a famous club) is allied to t knowledge that the best form of help is bei given to "very gallant gentlemen" we ha little doubt that our readers will respond the appeal made by St. Dunstan's Nettin Department to send along all possible order Such inquiries should be addressed to t Netting Department, St. Dunstan's Hea quarters, Inner Circle, Regent's Par N.W. 1.

Expert greenhouse building

"The building of glasshouses is to-day e phatically a business demanding expert kno ledge, both of materials and methods of co struction, and requiring highly-skilled labo in their amalgamation." This quotation from the introduction to Carter and Howard new catalogue just received, and which w be read with great interest by anyone lookin for a firm who build greenhouses of pe manency and distinction separate from fan prices. Other items in this firm's metho worth noting are:—Specifications, plans, a estimates free; customers invited to inspe woodwork before paint is applied (two coa at works and two further coats mixed up a applied on delivery. It is wisely pointed o that the life of a greenhouse is prolonged on by periodic painting with the best of protecti mediums. This work is also carried out the firm who construct artistic outbuildings every description and garden furniture. I quiries to Kingston Road, Raynes Par London, S.W. 20.

CATALOGUES RECEIVED

Robert Sydenham, Ltd., Tenby Stre Birmingham.—List of vegetable and flow seeds.

Anthony C. Van der Schoot, Ltd Hillegom, Holland.—List of hardy plants a Roses.

GARDENING ILLUSTRATED

o. 2448—Vol. XLVIII. FEBRUARY 6, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

atum, cultivation 92
le Emperor Alexander 80
le High View Pippin 79
le Wellington ... 82
JNFELSIA 86
nations, Perpetual, the early year ... 86
ysanthemums, rearg young 91
ysanthemums, the rdiest 81
ohia Cotoneaster ... 85
sus proliferus ... 81
Dahlias from seed, raising 80
Dahlias from seed, single 92
Erica carnea and its varieties 81
Ericas, treatment of ... 92
FLOWERS AT VINCENT SQUARE, EARLY 87
Fruit trees growing too strong 91
Fruit tree spraying ... 88
Fruit trees, the renovation of old 89
Fuchsia, seeds of ... 92
GARRYA ELLIPTICA 58
Gladioli and bulbs, books on 92
GLADIOLUS REVIEW, A 83
Jasmine, yellow, in pots for house decoration... 80
Lapageria rosea against north wall in Worcestershire ... 80
Luculia gratissima ... 80
Marigolds, pot (Calendula officinalis) ... 80
Myrtle leaves, insects on, and green-fly ... 92
NARCISSUS CERVANTES 80
OLEASTERS, TWO INTERESTING ... 81
Pear failing 91
Plants in bloom in the open on January 31st in a Cornish garden 81
POPPIES, ALPINE ... 82
PYCNOSTACHYS DAWEI, A REMARKABLE BLUE WINTER FLOWER... ... 79
Raspberry Lloyd George 82
Rock garden, the 82
Report on condition of horticultural crops on the 28th January, 1926 92
Rose Etoile d'Hollande 81
Roses for Southern and Midland gardens, reliable 88
Royal Horticultural Society's new hall, the 87
Sowings, February ... 79
Strawberries, bone meal for... 92
Sumach, the purple Venetian 85
Sweet Rockets 82
Trees and shrubs, ornamental fruiting ... 84
Vegetable Marrows on heaps 90
Vegetables for Scottish gardens 89
Vines, disbudding ... 92
Walnuts not bearing... 91
Weather, effects of variable 92
Willow, the Golden ... 85
Wistaria, the new Freesia 80
WITCH HAZELS, THE CHINESE, AT KEW 84

February Sowings

TO those who have a heated greenhouse, February will begin a new series of tasks, not the least of them being a few ly sowings of both flower and vegetable ds. The obtaining of an early start with ne plants means much in the way of sucs later on.

IAKING PREPARATIONS.—Seed-boxes should ready, but if, by any chance, they have n overlooked make a sufficient supply at e. Shallow boxes 4 inches p are best, and they should e a number of holes bored for inage. The materials for a table compost, too, need to be red inside where they can be ndled with greater comfort. am, leaf-mould, and sand are principal ingredients I refer but if fine charcoal and peat obtainable they come in very ful for making up special nposts. Sterilise such as loam, f-mould and sand, if considered essary, by moistening with a ution made of ¼ pint formalin a gallon of water. This, of rse, destroys any weeds which almost sure to be dormant in soil, and it should be done be- the compost is required. ating the soil on a shovel over fire is a simple way of sterng it. When the above preations are completed, the next ng is to order the seeds, of ich the following are suitable February sowing:—Gloxinias, erous - rooted Begonias, ichsias, Petunias, Pelarniums, Streptocarpus, Vernas, Balsams, and tirrhinums. Vegetable seeds lude:—Brussels Sprouts, uliflowers, Mustard and Cress, cumbers, Lettuce, Tomato, Ailsa Craig Onions.

OWING.—For general purposes the flower-seeds can be sown in a compost equal parts leaf-mould, loam, sand, and a e fine charcoal. Sift part of this through ne-meshed sieve and use the rough portion the bottoms of the boxes. Fill up to hin an inch or so of the rim with fine soil press level with a flat board. If the soil uires moistening do this before the seeds sown, using tepid water. Scatter the ds evenly over the surface and cover with hin layer of fine soil. A temperature of degs. is advised for successful germination, a sheet of glass placed over the boxes during the early stages will assist growth by keeping the air close and conserving the moisture. Wipe excess condensed water off the glass each day and remove altogether when the seedlings make their appearance.

Vegetable seeds could be sown in a similar compost to that described above, leaving out charcoal. Brussels Sprouts do not require heat and could be raised in a cold house or frame. Cauliflowers do best in boxes on a gentle hotbed, or in a temperature of from 45 degs. to 55 degs. Mustard and Cress both like a warm atmosphere of 55 degs. to 60 degs. and should be sown thickly. Lettuces do not want much heat; indeed, they do well in cool houses. Both Tomatoes and Cucumbers must have a brisk heat of 55 degs. to 65 degs. Shade all vegetable seeds until seedlings show.

Both flower and vegetable seedlings should be watered very carefully, and as soon as is practicable they must be transplanted and grown on near the glass. Spindly, overdrawn, and weakly growths are inevitably the result of drastic changes of temperature, or from being too far from the light.

Great care must be taken when watering. The soil on the surface may look to be damp enough while down near the crocks it may be quite dry. It is all-important to prick out the seedlings when strong enough so as to prevent damping. L. D.

A remarkable blue winter flower
Pycnostachys Dawei

Notes of the Week

A remarkable blue winter flower (Pycnostachys Dawei)

BLUE flowers—even in the greenhouse—are always welcome, and by no means plentiful. It was therefore all the more pleasing to see this plant from Uganda so well represented at the meeting of the Royal Horticultural Society on January 26th. Considering the great beauty of this blue-flowered greenhouse subject and the immense interest displayed in it, the surprising thing is that it had not been brought to the fore at a much earlier date. Pycnostachys Dawei first flowered at Kew in 1906 from seeds collected the previous year by Mr. M. T. Dawe, who has since been appointed Commissioner of Lands and Forests at Sierra Leone. The labiate flowers of Pycnostachys Dawei are borne in a compact globe crowned with a cone of unopened buds.

In some ways this plant is reminiscent of the blue-flowered Coleus thyrsoideus. Both are winter - flowering greenhouse plants to be used with good effect for grouping, especially in striking contrast to scarlet Poinsettias. The Pycnostachys flowers had escaped injury from the dense fogs this winter, which is more than can be said of the blue-flowered Coleus. When grown from cuttings plants may be had in flower at heights varying from 1 foot to 5 feet. It is also readily raised from seed. H. C.

Apple High View Pippin

We have received from Mr. F. Fitzwater, The Gardens, High View, Oatlands Drive, Weybridge, Surrey, two fruits of the new

High View Pippin, raised by crossing Sturmer Pippin and Cox's Orange Pippin. The fruits are on the small side, but of good flavour. The flesh is white, sweet, crisp, and firm. We have formed the opinion that it should prove a very valuable dessert Apple for use near Christmas.

Luculia gratissima

Although this fine old plant, so popular in former days, succeeds best when planted out in a prepared border in the warmest part of the greenhouse, yet it does quite well in pots, and when so grown it is very useful after the Chrysanthemums have gone. The flowers, which are produced in large terminal trusses, are of a rose colour and individually about 1 inch across. A compost of loam and peat in equal parts, with sufficient silver sand to make the mixture porous, suits L. gratissima. An added recommendation is the delightful perfume given off by plants in flower. In 1903 or 1904 there was a magnificent specimen of this plant in No. 4 greenhouse at Kew—the best which I have seen anywhere. This particular piece was planted out in a border which had a good exposure to the sun.

Mabie. W. McG.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Narcissus Cervantes

IN your issue of January 23rd, on page 48 there is a communication from Lady Winifred Lowry Corry in Enniskillen, in which occurs the following sentence, "Why do not British nurserymen keep Cervantes Narcissus?"

Although your correspondent had searched 10 catalogues in vain for it, it is obvious she did not look at ours, as we not only offer it, but illustrate it. SUTTON AND SONS.

—— In reply to Lady Winifred Lowry Corry, who asks (January 23rd, page 48), "Why do not British nurserymen keep Cervantes Narcissus?" it may interest her to know that this excellent and very early variety is catalogued by Messrs. Dickson and Robinson, of Cathedral Street, Manchester. I grew it last season and again this, and have had it in full bloom the same time as your correspondent (mid-January) with only moderate heat. With a higher temperature it could probably be forced by New Year, if not by Christmas. I shall certainly depend upon it in future for early blooming, but although so much earlier than the popular Golden Spur, the latter is still indispensable for its rich colour combined with earliness.

G. H. M.

Apple Emperor Alexander

I noticed in a recent number of GARDENING ILLUSTRATED that a writer spoke of this Apple as not keeping after November. I have, on January 30th, used the last of a supply which was gathered about October 30th. They were large, well coloured specimens. Each was wrapped in paper, packed in a basket, and stored in a cool place. They were not opened until Christmas, when some were used to decorate the table. They were perfectly sound and continued so until the last was used. J. M. S.

Willaston, Wirral, Cheshire.

Yellow Jasmine in pots for house decoration

In the issue of January 23rd, p. 49, Clarence Elliott refers to the usefulness of the above for house decoration. Whereas his experience goes back some years, mine has been attained quite recently. Three years ago, in February I rooted four cuttings in heat. They were wanted for covering a bare wall, but they were not used, and ever since they have been kept in 6-inch pots, my idea being to keep them as bushy as possible and use them for decoration. I have succeeded, and am very pleased with the results; more so because they have had very little attention. They have never been repotted and have often gone dry for weeks on end. I have recently taken one into the house and it is now smothered with blossoms and very much admired. The other three are still outside and a mass of buds, which were showing at least two months ago, and I should have had no difficulty in having them in bloom for Christmas. I kept them bushy by pinching back the long shoots in late summer and removing the old wood after flowering. They no doubt would have been very fine now if they had had more attention in repotting, etc. C. Elliott mentions that he was very sorry to lose his small tree while on holiday some years ago, and that he now has no yellow Jasmine in his garden. If he would like two of mine I should be very pleased to send them to him as I do not want to discard them after keeping them so long, and he can once again have the pleasure of growing them in pots. Will he, please, forward his address?

R. PHILLIPS.

The Lodge, Wickenford, Worcester.

Narcissus Cervantes in flower at Christmas
It is one of the very earliest varieties

Raising Dahlias from seed

Miss R. E. Twinn's timely and useful article on raising seedling Dahlias (issue January 23rd, page 52) reminded me of something I saw worth noting when on holiday last September. I called on an old gardening friend, Mr. C. Orchard, at his bungalow, The Retreat, Milton Road, Bembridge, Isle of Wight, where he is living in retirement. Among the many other good things in the well-kept garden was a nice row of single Dahlias in full flower (mid-September) that were sown where grown, out of doors, about mid-April from seed of Mr. Orchard's own saving and selection. These contained many beautiful flowers of good form and substan The plants, which had evidently been blo ing for some time, bore evidence of a bat ing by the high winds that prevailed a days before, the situation being open and a hill. The soil was rather heavy. W interested me was the fact of their be sown in the open ground, so that anyone w no glass convenience could raise them time to flower in August for the same y Select tubers of the best sorts to store flower earlier the next year if desired, an this way keep the dwarf Coltness varie for bedding where there was no convenie for wintering Pelargoniums, etc. Orchard, though aged 82, is fairly active as enthusiastic as formerly. S. I

Beckenham.

The new Freesia Wistaria

This is now (January 30th) in flower me in a house whose temperature is allowed to rise above 55 degs.

A good deal was written about it in gardening Press when it obtained the Fi class Certificate of the R.H.S. last spr and my personal experience now confirms good impression it then made. It is all, more than all, that was written of it. Am all the Freesias I have grown I never such a strong, stout plant, and earlines another point in its favour. The growtl the foliage is reminiscent of a small Flag The stems are strong, thick, and rigid, flowers large, solid, and lasting, in co resembling almost exactly Wistaria siner after which the plant is named.

If not given undue heat the plants req no supports whatever, a great point. short, I predict a great future for it, for cut flower or as a pot plant it has no among our newer Freesias. I exten hearty handshake to my friend, Mr. G. Dalrymple, of the Nurseries, Bartley, Ha for having raised such an outstan acquisition to our greenhouse plants.

Rye. F. HERBERT CHAPMA

Lapageria rosea against north wa in Worcestershire

This is probably the last place one w expect to see this interesting plant grow and flowering. I have seen it so in the dens at Spetchley Park previous to the I have been there since, but I have no r lection as to whether it was still there or It was planted in a raised border at the of the wall and trained to it. This small was carpeted with Mimulus mosch This Lapageria, if I remember rightly, a attained a height of 4 feet or 5 feet, a often admired its big red waxen bells was impossible for one ray of sunshin reach it. The wall is about 12 feet high

Worcester. R.

Pot Marigolds (Calendula officinal

There are numerous items in the exc ingly valuable article on "Restoring Garden with Annual Flowers," in your of January 23rd (p. 37), and among the p mentioned I am glad to observe that annual, the Pot Marigold. As you rem these Marigolds are very popular in Sco gardens, and at numerous local shows p are offered for these, which are gene arranged on flat stands. In some exhibit where it is stipulated that the flowers be shown in vases, the Pot Marigolds staged in vases, but, it must be said, the not well adapted for exhibiting in this In truth, the Pot Marigold is more a flo for the garden than for the home. In former the glowing orange-coloured flo of the best forms are of much value nea front of a border, but the odour of the flo

npleasing to many when they are cut and the house. At one time the variety known Meteor, which has its petals chequered nost as some of the Meadow Saffrons, but shades of yellow, was exceedingly popular exhibition, but of late it appears to have en into the background, and a deep orange called by some Prince of Orange has been re popular. The old standard of an exition Pot Marigold, which must be perly double without showing any "eye," not been rigorously adhered to, and I e seen prizes awarded to flowers which the grower would have been ashamed to own. rt from this question of fitness for exhibi-, which is a small one, the Pot Marigold most useful hardy annual, giving a dwarf nt in autumn with a colour not too mon. A SCOT.

Two interesting Oleasters

LÆAGNUS ARGENTEA (the Silver Berry) is an attractive and easily-grown shrub thriving almost anywhere exceptin the shade. Its charm is its silver ting covering its stems, leaves, and fruit. he flowers are very small and yellow in our. Its home is Canada, where it grows arge drifts.

hepherdia canadensis (the Buffalo Berry) ely resembles the above, is not so silvery, equally attractive. Its yellow flowers are owed by vivid scarlet fruits. It likes isture and is happy by the waterside. h these shrubs are raised easily from seed attain the height of 10 feet to 12 feet.

horpe, Hull. R. MOORE.

The true Silver Berry, Elæagnus argentea, often confused in gardens with Shepherdia entea. As our correspondent points out, se plants closely resemble one another, ugh Elæagnus is a finer shrub. There is, vever, a simple distinction between them ich may be put to the test in every garden nursery—the Elæagnus has alternate ves and the Shepherdia opposite ones. identally, E. argentea is the only North erican species. In the delightful island Majorca, to which we have referred retly, the beautiful E. angustifolia (syn. E. tensis) grows to a shapely tree about 40 in height. At the time of our visit, June, the tree seen in the illustration s in full bloom, the air being filled with heavy honey-like fragrance of the flowers. s no exaggeration to say that the powerful ur of the tree was perceptible half a mile y. This tree is known to the natives as Tree of Paradise. It is a very striking with narrow silvery leaves, and a kind herbet is made from the yellowish mealy ts.—H. C.]

The hardiest Chrysanthemums

t is over 40 years since I took up the cul of Chrysanthemums. In the seventies paratively few troubled to grow them in s, and it was not until about the early ties that enthusiasm began to be manied concerning them. Cottage Pink has referred to as a hardy outdoor sort. I ember it well, and, if my memory does lead me astray, it was also known as tage Maid. I saw it a few years ago in a ge garden. It would not compare with sent-day varieties in beauty, but I recolvery well that it bloomed in the open on into November when it was mild. hose days Chrysanthemums were allowed grow as they liked; there was no king" of crown buds, and usually inal buds were thickly clustered. Bes Cottage Pink, which presumably beged to the Japanese section, there was a lish sort, and Pompons were represented a yellow button-like variety, and a wnish-crimson after the style of the one know as Little Bob, only of taller growth. There was a purple, too, that flowered very well, especially when given the protection of a wall. I can confirm all Mr. Cornhill says about the perpetuation of these old sorts, as many whom I knew who used to grow them simply divided the roots with a spade about April. We have an excellent assortment of early-flowering varieties to-day. What we want is an extension of blooming time, and that is only possible by evolving a hardier race. LEAHURST.

Erica carnea and its varieties

We have followed with much interest the correspondence with regard to Erica carnea and its period of flowering.

As Mr. Arnott points out (issue January 30th, page 64), we introduced, some years ago, a collection of E. carnea in several varieties, the earliest of which is King George. (Mr. Arnott named this King Edward, and similarly he mentioned Queen of England, which should be Queen Mary. We hope he will not mind our correction.)

King George shows colour in bud towards the end of October, the colour becoming in-

Elæagnus angustifolia in the delightful Island of Majorca

tensified through November, and begins to flower in December. By January it is in full bloom. Queen Mary is slightly later, and Prince of Wales is later still—February and March.

In the nursery beds the show of colour is extraordinarily fine and the drifts planted in the rock garden give that splash of colour which is so welcome at this time of the year.

The flowering periods mentioned above refer to this locality, but we do not doubt that it varies considerably according to both soil and locality.

BACKHOUSE NURSERIES (YORK), LTD.
A. S. HAMILTON,
Director.

—— I can again bear out what Mr. E. Markham says. Last year I pointed out that here E. carnea was not in flower until well after E. mediterranea hybrida. This year I have the latter only just beginning to flower now instead of early November, and no sign of a flower on E. carnea, only buds which look as if they will not open for at least a month. Three of the E. carnea named sorts are in flower. It seems that the position of Mr. Markham's group of E. carnea has something to do with its early flowering, or can it be an extra early form distinct from the type? I conclude the cold weather this winter accounts for the lateness of the flowering of E. mediterranea hybrida, which both Mr. Markham and myself have noticed.

G. H. DALRYMPLE.

Bartley, Near Southampton.

Plants in bloom in the open on January 31st in a Cornish garden

Abutilon vexillarium.
Acacia Riceana.
Ampelopsis sempervirens.
Andromeda (Pieris) formosa.
Andromeda (Pieris) japonica.
Arabis.
Arbutus Unedo.
Aubrietias.
Berberis Bealli.
Berberis Darwini.
Camellia japonica.
Carnations (perpetual border).
Chimonanthus fragrans.
Christmas Roses.
Chrysanthemums (Rene Turner and H. W. Thorp).
Daphne Mezereum (red and white).
Drimys Winteri.
Eranthis hyemalis (Winter Aconite).
Exochorda grandiflora.
Genista fragrans.
Haequetia Epipactis.
Hamamelis mollis.
Hydrangeas.
Hypericum calycinum (Rose of Sharon).
Iberis sempervirens.
Iris reticulata.
Lapageria rosea.
Laurustinus.
Lonicera fragrantissima.
Lonicera Periclymenum.
Lunaria biennis (crimson and white).
Narcissi.
Olearia Haastii (opening).
Omphalodes verna.
Periwinkles (4 kinds).
Petasites fragrans (Winter Heliotrope).
Polyanthuses and Primroses (in great variety).
Prunus Pissardi (just opening).
Ribes sanguineum var. albidum.
Rhododendrons (R praecox and many others).
Roses.
Sarcoccoca (humilis and ruscifolia).
Snowdrops.
Sweet Rocket (Hesperis matronalis).
Sweet Williams.
Vaccinium pennsylvanicum.
Valerian.
Veronica salicifolia.
Violets.
Wallflowers.

E. A. S.

The Gardens, Carclew,
Perran-ar-Worthal, Cornwall.

Cytisus proliferus

I am sending flowering sprays of Cytisus proliferus, which is growing here in the open in the kitchen garden facing north. It was planted when quite small about five years ago; it is now about 15 feet high and has been blooming for about two months and likely to go on for some time.

The frosts we have had this winter have in no way affected it; it is now (January 26th) making a lovely show, the white flowers showing up well against the green foliage.

We have given it no protection against frost whatever.

It is easily raised from seed, which it produces freely. B. W. JEFFERY.

The Gardens, Horswell House,
S. Milton, Kingsbridge, S. Devon.

Rose Etoile d'Hollande

The controversy in your columns which has raged around the merits and demerits of Rose Etoile d'Hollande has interested me, as I have recently planted 48 of that variety in a bed. As I found Hadley "blued" a few hours after opening I determined last spring to search carefully for a red Rose which kept its colour, and I thought, after seeing Etoile d'Hollande at several shows and making inquiries of many Rose growers, that I should find in that variety the Rose I needed. One authority over the border wrote me that he was glad to learn that we in the south were at last appreciating what a good Rose Etoile d'Hollande is. Now that I have taken the plunge I learn from two of your correspondents that it is pretty well all that a Rose should not be. My faith is, however, not shaken in Etoile's good qualities, and only shall I believe it is bad when it has proved itself so in my garden. On reading W. E. Wright's letter in your last week's issue I turned to the R.H.S. Journal for January, 1926, to see if there was anything about Etoile in the report on Roses at Wisley, hoping to find an impartial opinion on it by the Rose Committee, but I could not find it among the Roses on trial. It surprised me that such Roses as Mermaid, Alberic Barbier, Hadley, and other well-known varieties are also missing from the

list. It may be that the difference of opinion on this Rose may have arisen from its being grown on different stocks or in different soil. All I can say is that the specimens of Etoile I have seen have been all that one can wish.

B. NEWBURY.

Sweet Rockets

When I bought a garden in 1912 I found a quantity of Rockets (Hesperis matronalis) blooming. After three years or four years I lost the plants entirely. Last summer (1925) in different parts of the garden they reappeared in very large clumps, some 5 feet to 6 feet high, with graceful sprays for cutting. No neighbours grow them. Where were the seeds in the interim? NORFOLK.

Apple Wellington

In the issue of GARDENING ILLUSTRATED dated January 30th Mr. Thackeray Turner states that the finest late eating Apple is undoubtedly Wellington. For cooking it is all that the writer describes it, and it will keep well into early summer. This Apple to-day is very much more known under the name of Dumelow's Seedling than Wellington. It is also described and sold as Normanton Wonder by some nurserymen. It is not a very strong grower, and as far as my experience of it goes it is none too prolific. It is best grown as a pyramid in soil that suits it. If planted on brashy soil it is almost sure to be a failure. W. E. WRIGHT.

Stockton House Gardens, Near Rugby.

Raspberry Lloyd George

If "A Scottish Gardener," in the issue of GARDENING ILLUSTRATED dated January 30th, p. 65, expects to obtain the same flavour in Lloyd George as is to be found in Superlative I can assure him he is doomed to disappointment. Lloyd George is an excellent grower, bears freely, and is very accommodating, as it may be grown either as a summer or autumn fruiting variety. In the latter case the canes should be cut down to the ground during February. As to flavour, it is not unlike the Loganberry. For preserving and cooking generally it is an exceedingly profitable fruit to grow. The best-flavoured Raspberry is Park Lane. It is also a good grower and a heavy cropper. For a large fruit with a fairly good flavour Pyne's Royal can be highly recommended. Yellow Superlative, I find, has quite as good a flavour as the red variety. W. E. WRIGHT.

Stockton House Gardens, Near Rugby.

—— I have grown Lloyd George for the past six years and find it the most profitable Raspberry to grow on the soil here (Windsor Forest, Berks). The soil is a deep stony loam, and this variety has canes 7 feet and 8 feet long, and would fruit the whole length if I let them, but I prune them to about 5 feet and get fine results. It is much more free than Superlative, with longer berries, but not quite so good in flavour. It is an excellent cooker, and when other varieties fail I can get a good supply of berries from Lloyd George. The first season I planted it I pruned it to 2 feet from the ground and had a good crop. I think "Scottish Gardener" should get a good crop this season.

GEO. WORSFOLD.

The Gardens, Forest Farm, Windsor Forest.

The Alpine Poppy at home in the Vergy range, Savoie

ALPINES

Alpine Poppies

EVERYBODY knows the Iceland Poppies which are found in the whole Arctic and northern area in Europe and Asia, to Greenland, Labrador, the Rocky Mountains, and the Himalaya. It has a number of varieties, radiatum, labradoricum, Kamtschaticum, and Columbianum, which, cultivated together, turn after a few years to a common type. The botanist, Fedde, in the Papaveraceæ Monography published in Engler's Pflanzenreich gave no less than 37 different varieties of Papaver nudicaule. The Papavers, generally speaking, are very variable and cross with the greatest facility.

In the Alps and in the high mountains of Central and South Europe the genus Papaver is represented by a delicious little plant which is a most graceful and delicate alpine flower. It varies, too, and has several forms according to the nature of the soil or rock. The type is Papaver alpinum, with smooth and glaucous leaves, finely cut into narrow leaflets, with big pure white flowers w delicious smell, and in the centre a shea golden stamens. I can but compare it t liliputian Romneya. It grows here and th among the flints of the chalk alpine ch and is far from common. You may find i the Alps of Savoy near to Bonneville, t on the Dent d'Oche, in the Préalps Fribourg and of Berne, and in some rock the Tyrol and in the Carpathians. Its var Kerneri has larger flowers and thinner lea and the flowers are yellow. It is a plan the Austrian Alps. P. suaveolens is the of the yellow-flowering section. It is dv and hairy, and bears a great number of la yellow scented flowers. It is someti called P. Burseri. It grows in the Pyré (Val d'Eynes, etc.) and the Spanish Sier always on calcareous débris. Pap pyrenaicum is a nice little plant near suaveolens, but quite covered with w yellowish hairs and dwarfer. The flov are sulphur-yellow and sometimes orange- P. aurantiacum grows in the débris of li stone here and there in the Pyrénées (F quete d'Aure, Col de Nouri, Pic d'Aiguil and in the west French alpine chain. abundant on the famous Mont Ventou Provence, where it covers the large m road leading to the summit. It can be fo in the Maritime Alps (Mont Mounier), on Apennine, and even on the Carpathian Transylvanic Alps. In the Rhœtian (Engadine, Poschiavo) it covers large ar always on moraines or rocky places. there P. Rhœticum, with larger-leaved ments, a richer hairy aspect, and lig yellow flowers very fragrant is found. If would see it at its best go to the base of Cambrena glacier, in the delta of the mora There it grows by thousands and adorns whole land, making at the border of glacier a real golden frame.

In the Styrian Alps there were found, s 30 years ago, a bright red flowered forr Papaver alpinum, which was raised f seeds and brought to our rockeries, a be ful group of new shades from light pink to the deepest red. We have now, in alpine garden near St. Cergue, in the J two large beds of these forms of Pap alpinum in all shades of colour except l We do not dare introduce the Iceland Po as, if we had one only, the whole lot of alpine Poppies would, after a few years, all the graceful and delicate forms of the alpine one.

The same thing can be said of the Co bines. We plant the true Aquilegia alpina the true A. pyrenaica, too, because those plants cannot hybridise, not flowering a same time. We grow Aquilegia glandu and Transylvanica in another garden miles from the first one, at La Violette Arzier, which the bees of St. Cergue ca easily reach. H. CORREVO

Floraire, Geneva.

The rock garden

When time permits (and, indeed, ought to be "made"), the rock garden c to receive attention. It will probabl found that the snow and rains of the two months have washed away a propo of the soil in sloping situations. This c to be made good, and if the stones o slope can be given a slight cant upwarc will prevent, to some extent, further was Those who may have been induced to Anthemis macedonica in the rock garde account of its rather attractive gr foliage ought to root it out remorsele It is not worth its place anywhere, and are many equally effective and less ran plants whose foliage will give the de effect.

A Gladiolus Review

eprinted from "Horticulture," Boston, U.S.A.

iis article should be read in conjunction th the recent observations by our con- butor "Smilax." It is well to know that opinion of many varieties is backed by an independent writer in America

OW are the mighty fallen! Here is the Henry Ford Gladiolus, which last year was being sold at $100 a bulb, now be- put out for a dollar. That is the way, ever, with all varieties of Gladiolus, ex- t a few which are very slow to multiply. st kinds increase so rapidly that a large k is soon available, and the price neces- ily drops abruptly. But this is not the y explanation of Henry Ford's sudden cent. The flower has not proved to be te as extraordinary as was first believed. ndeed, only a small number of varieties ich are introduced year by year with great it prove to be masterpieces. Yet each r the number of distinctly worth while ieties is increased to such an extent that iously there must be a steady weeding out the older and less desirable kinds.

here are some of the standard varieties ich never seem to be improved upon. No who is making a collection of Gladiolus afford to overlook Europa, with its enor- us white blooms, for this flower has never n surpassed as an exhibition Gladiolus. lden Measure likewise maintains its remacy because of its enormous yellow oms, with spikes that loom far above most ieties. It may not be so refined as Gold, it surpasses it as an all-round Gladiolus. Mrs. Frank Pendleton, in spite of the fact it it sells for 50 cents a dozen, is a lovely wer, with its shell-pink blooms, and Mrs. . Norton, at a dollar a dozen, deserves a ce in every collection for its harmonious nding of cream and pink. Peace (white), ik Wonder (pink, with a yellow throat), réchal Foch (salmon-pink), Alice Tiplady e best-known of all the Primulinus brids), and Baron Hulot (still the best ple) are among the kinds without which collection is complete. All of these varie- s were exhibited in large numbers last sea- and none of them lacked admirers. It is essary to go much more carefully when ecting a list of the newer kinds, which e borne the test of at least one season's ibition. No matter who might make a ection, his choice will inevitably be open criticism.

There seems to be little question, however, out the merit of Mrs. F. C. Peters, with rose-lilac petals and crimson blotch. Per- s no Gladiolus of recent introduction has n so widely recognised. Several other d Gladiolus varieties originated by Eugene Fischer are attracting attention and pro- se well. Rose Mist is one of them and nnymede is another. Rose Mist is not to confused with Richard Diener's Rose Ash, ich is a very popular variety in California, l has been raised successfully in the east. se Mist is a Primulinus Hybrid, old rose colour, but edged with neutral grey. Rose h has larger flowers which in colour are cribed as corinthian-red, whatever that y mean.

Sunnymede is orange-yellow in colour. e most delicate colours among the Primu- us Hybrids are in demand, and Selbach's im takes its place among the newer kinds merit. It is tall and slender, with peach- l flowers which change to strawberry-pink o use the somewhat colourful description the catalogue-makers.

It is a matter of regret that the originators new varieties are not more accurate in ir descriptions. Kunderd's Gold Drop, for example, is not really golden at all, but pale lemon-yellow, a really good variety but poorly named. Souvenir is a little deeper yellow. In fact, it is one of the best yellow varieties seen at any of the shows the past year. It is a Primulinus Hybrid with good-sized flowers, and not to be overlooked by anyone who wants a deep intense yellow for decorative purposes indoors.

Mrs. Frederick C. Peters — Ethelyn, a Primulinus Hybrid

Two new and promising Gladioli

Sidney Plummer is still another yellow variety, but softer and suffused with pink, as well as having an amber lip. This is an introduction of Carl Salbach, the Californian hybridiser, and introduced within the last two years. Wherever seen it has made a sensation, and if it continues to prove as good in future years it will certainly be one of the standard and indispensable varieties.

Orange Queen is a Primulinus Hybrid of exceptional size and extremely deep yellow in colour. This has been given one of the highest ratings of all the yellow or orange coloured varieties. Fischer's Ethelyn comes in between these two. It has proved a good garden subject, excellent for cutting and of large size. A peculiarity of this variety is the large number of side spikes which it throws, these spikes being almost as large as the main spike.

While yellow varieties are being discussed a word may be said of Salmon Beauty, an unusually large-flowered Primulinus Hybrid which is deep salmon in colour with a rich yellow throat.

Kunderd's Dr. van Fleet is a curious combination, a brilliant red being rayed over a yellow surface colour. This is among the kinds to be recommended for early effects, and in spite of its early blooming habit it grows unusually tall.

It is appropriate that a Gladiolus suggesting stateliness of character and exceptional brilliancy should be named Dr. F. E. Bennett, for the energetic President of the St. Thomas Horticultural Society. The Dr. Bennett Gladiolus has very large flowers of a most intense red. The bulb is still held at a high price, but the variety is expected to take its place as a leading red kind.

Several forms of the Gladiolus resembling Orchids have been originated in the last few years. One of them, which has been named Orchid, comes from California. It was seen at one or two shows the past year, but not in sufficient numbers to form any satisfactory conclusion about it. It seems to represent a new and desirable type.

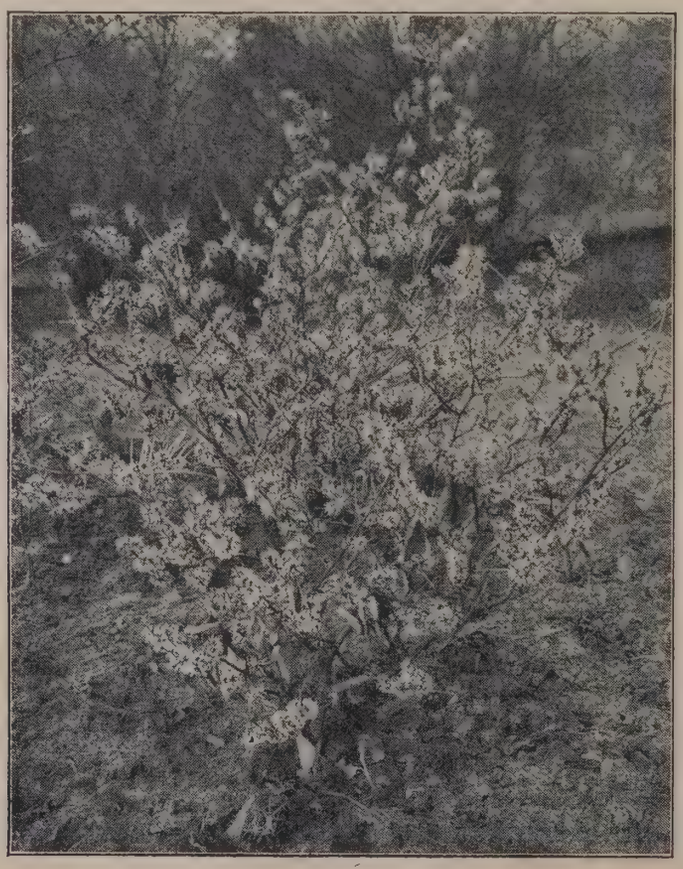
Orchid Lady is somewhat similar. This Gladiolus is a seedling raised by B. Halsey Spencer, of Long Meadow, Mass., and has won the American Gladiolus silver medal. The flowers are Orchid-like in character and

lavender in colour, with a silvery sheen and a small touch of cream deep in the throat. It makes a graceful spike and blooms in from 50 to 60 days. The flowers created a good deal of interest where seen last summer.

TREES AND SHRUBS

Ornamental fruiting trees and shrubs

AMONG those whose autumnal beauty depends upon the bright hues of their different fruits, the first on the list must be the Mountain Ash or Rowan (Pyrus Aucuparia), which, when laden with its berries, is very beautiful, and rendered still more attractive by the sombre hues of many of its surroundings. There is also a yellow-fruited variety which is quite distinct from the normal orange-red form. The Service-tree (Pyrus Sorbus) is a good deal like the Mountain Ash, but with brownish fruits. The foliage of both frequently dies off a pleasing yellow in autumn. The White Beam (Pyrus Aria) bears its brownish-red fruits in such numbers as to add quite a feature to the tree. The different forms of Pyrus that are grown for their fruit alone, such as the Apple and Pear, are all highly ornamental in the autumn, as also is the small Cherry-like Siberian Crab. Many of the Thorns are also in autumn laden with fruit, among them being the Scarlet Thorn (Cratægus coccinea), a large free-growing kind with medium-sized scarlet berries. The common Hawthorn when well fruited is quite as effective as when in bloom. There are varieties with red and yellow fruits and some with black. The Tansy-leaved Thorn (C. tanacetifolia) has berries of a yellow colour, very large; indeed, the largest of the Thorns. No notice of the different kinds of Cratægus would be complete without mention of the Pyracantha and its varieties, crenulata and Lalandei, the latter of which is superior to the others in growth, hardiness, and in the colour of the berries. Benthamia fragifera is a handsome tree at all times, especially when laden with its large Strawberry-like fruit, but, unless in the south and west of England, it is not hardy enough to survive the more severe winters. From their fine glossy evergreen foliage, Hollies are attractive at all times, but additionally so during the autumn and winter when in fruit. The yellow-berried kind is so distinct that it should be more frequently seen than it is. The common Berberis vulgaris is second to none in the brightness and profusion of its fruits, besides which, from their sharp nature, they are not so much sought after by birds as are most of the autumnal fruits. Of recent years some very handsome forms have come to us from China. The Sea Buckthorn (Hippophæ rhamnoides) retains its silvery foliage well into the autumn, and at the same time the berries, which are produced in such numbers, assume a bright yellow colour. The Bladder Sennas (Coluteas) do well in hot and dry soils, and their large inflated seed-pods give them a distinct and curious appearance in early autumn. Cotoneasters of different sorts are very attractive autumn and winter shrubs, the principal being C. bacillaris, a large vigorous-growing kind, with small brown berries; C. frigida, a large spreading bush or small tree, with bright crimson fruits that remain on a long time; and the smaller-growing C. Simonsi, the berries of which somewhat late in the autumn assume their bright tints. The evergreen C. microphylla fruits freely, and though the berries are small and by no means brightly coloured, they at all events afford variety. The broad-leaved Spindle-tree (Euonymus latifolius) is more attractive than the commoner E. europæus, and altogether it is one of the showiest of autumn shrubs. It forms a large upright bush, a dozen fee more in height, thickly studded, if in a g open situation, with its brightly-colou fruits. They are composed of red pendul capsules, which when ripe open, and orange-coloured seeds hang therefrom slender filaments. The various single Ro are all very attractive by reason of t brightly-coloured fruits, and in the case of rugosa, the large rosy-crimson blooms generally produced till frosts set in, so t ripe fruits and blossoms are often seen on same plant. The berries of this Rose large and orange-scarlet in colour. R. lu (crimson), R. cinnamomea (crimson), spinosissima (dark), and R. villosa (bri red with long prominent bracts) are am the most showy. There are, in addition these, many sorts which have been introdu during past years. Skimmia japonica i pretty little red-berried shrub that does in shady spots. The European Box Th (Lycium europæum) is a slender scramb bush with crimson fruits borne for some tance along its slender shoots. Mau Cydonia that is so thickly laden with flow in the spring is in the autumn equally sho having bright golden fruits tinged with on the sunny side, that is, where it fr freely, but such does not always appear to the case. The Snowberry (Symphoricar racemosus), with white fruits, is dist among other berry-bearing shrubs. Guelder Rose (Viburnum Opulus) is a pr berry-bearing plant, and when growing the waterside is very effective. No collec of berry-bearing plants could be conside complete without some of the Pernet where suitable soil can be provided for th Some of the hybrid forms with which gardens have of late years been enriched charming, and fruit quite as freely as the type, the berries embracing every sh of colour from black to white and red yellow.



The Chinese Witch Hazel at Kew

Hamamelis mollis, now flowering in the Kew Arboretum, is the most decorative of all the Witch Hazels. However cold the weather may be, it never fails to bloom at this season. The illustration on the right gives a nearer view of the curious golden-yellow flowers, with twisted petals o leafless, dry-looking twigs. The flowers last for weeks and are delicious fragrant; the leaves that follow are soft and felt-like.

Garrya elliptica, that has outgrown its position, now flowering in a reader's garden at Rusthall, near Tunbridge Wells

Garrya elliptica

OR some years, when passing through the picturesque village of Rusthall, on the outskirts of Tunbridge Wells, the writer paused to admire a very handsome speci- n of Garrya elliptica growing against the se at Braeside. The above illustrations, pared from photographs taken a few days , give a fair idea of the great beauty of s Californian shrub at the present time, t all is not well with this Garrya, as may gathered from the following observations Mrs. Henry Taylor, who takes a great erest in the trees and shrubs at Braeside :—

"You would see that it has outgrown its sition, and it is a difficult problem to de- e what to do in the matter. Moreover, it s been failing the last two years and the kins are shorter than they used to be; also ge dead boughs have had to be taken out. e are contemplating a little 'lopping' en the catkins are off, perhaps taking out 2 feet from the top of the shrub, hoping strengthen it. It was planted by the late . Marnock, the landscape gardener who d out the Botanic Gardens, Regent's Park, , and when we bought this house about years ago the Garrya was about 5 feet gh."

It would doubtless strengthen the Garrya it were cut back slightly as suggested, but rd pruning is not recommended. If some the top soil were raked off and replaced th a good top dressing of loam and leaf- uld it would, perhaps, give a new lease of e to this interesting shrub. H. C.

Corokia Cotoneaster

This quaint and interesting shrub, a native of New Zealand, has been grown in this country for upwards of 50 years. In some parts it will need the protection of a wall, but in many gardens it will succeed in the open, where it may attain a height of 6 feet. So far as my observation goes it is slow-growing, but, nevertheless, it is worthy of a place in gardens, where it will always prove an attraction to visitors. It has a dense system of slender contorted branches and twigs more or less clothed with tiny spoon-shaped leaves, and the plant is evergreen. The yellow star-like flowers appear in May, and although small—about ½ inch in diameter—a well-flowered example is quite a pretty sight. Occasionally the blooms are followed by small red oblong fruits, but I have only seen them in meagre quantities. This curious subject can be increased by means of cuttings during the summer, these readily forming roots in a close frame. T. W. B.

The Purple Venetian Sumach

The typical Venetian Sumach—Rhus Cotinus—with its distinct mauve or pale purple flowers and growths is a valuable shrub for open situations in well-drained soil, but the purple form, R. C. atropurpurea, is not nearly so popular. It has the same habit of growth as the type and the same requirements in respect of soil and position, while the flowers do not differ in material degree. The foliage is, however, quite distinct, and it is herein that the principal value of the plant lies. The leaves are so far transparent that the veins are distinctly visible and the body colour of bright claret-purple differs from that of any other shrub that I can call to mind at the moment. Growths cut for indoors remain attractive for a long time. M.

The Golden Willow

This is too rarely seen even to-day, yet it is so charming that all who are able should grow it. During summer its singularly elegant shoots and leafage, the latter glossy green above, glaucous beneath, may be recognised on trees from 60 feet to 70 feet in height at quite a mile. In summer the effect is that of a soft, tender grey, and in winter, when the leaves are cast, the whole tree becomes bright yellow and greatly enhanced in effect during bursts of sunshine. It appears to have a limited life with me of from 30 years to 35 years, making a tree during that time with a trunk diameter of 18 inches to 2 feet, and from 60 feet to 70 feet in height. For cutting to the ground each year and providing gorgeous winter effects I cannot too strongly recommend the bright-red barked variety Britzensis. Near me as I write is a great mass of this beautiful subject. The sky in the rear is dull and threatening, and this appears to intensify the rich red and yellow of the Willows; indeed the effect rivals that produced during hours of sunshine, when it is truly handsome.

In some respects this charming Willow when grown in this way surpasses the red Dogwood, fine as the latter is in its warmer mixture of red and bright yellow. A few shoots pushed into moist soil strike root readily. E. M.

Perpetual Carnations in the Early Year

THE Carnation grower who propagates his own stock is busy with cuttings. More than once has the story of propagation been told in GARDENING ILLUSTRATED, but each year something fresh may appeal to the keen cultivator who is watching points for the best results. I recently saw a bad batch of cuttings in a friend's place which, instead of the usually good "take," was mostly dead. It appeared that he had taken his cuttings from plants growing in the open, but such are too soft. Proper cuttings are taken from plants under glass. There are many things about propagation which do not vary, and cleanliness is one of them. New clean sand is one of the items necessary for good results. It matters little whether this sand is placed in beds, boxes, or pots, so long as there are about 4 inches of it to retain moisture and form a rooting medium for the cuttings, which, after being dibbled into the sand about (but not more) than ¾ inch deep, are watered in to make them firm. If such cuttings are kept close either in a propagating frame or close house with a bottom temperature of not more than 60 degs. for a period of 10 days to 14 days they will require little further water at this time of year. Although this point must be watched for, maybe it will be found necessary to water once or twice in a house where things dry out. It is fatal for cuttings to become dry.

A word on the correct cutting should not omit a warning against "tops." Top cuttings in due course elongate to a flower-stem, which does not make such a good plant eventually. On the other hand, a "side cutting" (a shoot taken from the side of another growth) has the possibility of, and should in fact make, a good plant. These side cuttings are not always available at any moment that the propagator chooses to be putting in cuttings. They may be to hand on some plants, but not on others. It may often be heard as a complaint from propagators, both professional and amateur, that "cuttings are scarce." It is a proper complaint, which shows that correct discrimination is being exercised. Those people who put in anything and everything usually reap their reward in a second-rate lot of plants later on of very uneven growth and quality.

February finds Carnations that have been blooming since autumn at their lowest ebb. January this year, in spite of its cold, was better than some years for sunlight, but the short days have a strong tendency to cause either vegetation to go to rest or else make a soft growth. With the advent of February, however, the lengthening days often give us some useful spells of sunlight. It is such that put new life into our plants, and we see a movement in growth and renewed colour come to the foliage which spells health. At the end of February, if plants are healthy and doing well, a little slow-acting Carnation fertiliser will buck them up for the March days, which are sometimes a little trying

Those growers who have kept their plants in 5-inch pots would be well advised to get them shifted on now, unless it is intended to plant them outside in spring. The 5-inch pot may suffice for small plants the first season, but a larger one is required for the second year. February demonstrates the good or weak points of a variety to flower in midwinter. Many people select a variety for its special points which appeal to them, but certain flowers frequently show a weakness in colour during January and February. Generally speaking, most of the scarlets are prone to show white marks in the petals, while many of the cerises suffer from the same defect. Yellows move and open very slowly at this date, and even commercial growers have very few to offer.

There is an interesting contrast between what may be described as the prosaic method of watering now and next month, for while we have still winter with us and the plants are more or less dormant, care not to overwater is necessary. If we get an early burst of spring, however, a good grower will quickly rise to the occasion and respond by giving his plants according to their needs, for while it is fatal to over-water in dull weather, Carnations will soon suffer if they do not have ample during sharp spells of sunshine such as we are likely to get in early March. On such occasions, too, opportunity should be taken to give more air by opening the ve lators wider.

Those who send flowers packed in boxes rail or post should not omit the necess precautions in packing. A friend recei sent me some blooms for my opinion as their merits, but they arrived so withered to be useless. Had he taken the precaut to stand them in water a few hours bef packing it would have been quite otherw Flowers should be cut "young," that is, soon as open, placed in water for three ho to six hours in a cool, not draughty, pl When packed they should be laid on rolls pillars of paper, the box being also lined w paper. A slight space between the flow and the ends of the boxes will prevent th being bruised, and if a stick is wedged acr the box on the last row of stems it ke them from shifting. In addition to wedge a thick tight ball of paper pac tightly between the sides and the top bottom of the box to press the stems is extra precaution against the flowers shift and bruising.

A well-merited compliment came fr America recently on British methods of pa ing flowers, but while the large commer firms pack so well, amateurs and, indeed many professional gardeners do not.

Soon Carnation growers will be select fresh varieties to grow for the coming seas For a succession of flowers it is importan choose plenty of varieties. One may indu one's taste in the choice of colours, but w doing so two or three varieties of one col are a good method, as they vary more in ti period of flowering, and, consequently, giv better succession. LAURENCE J. COOP

Bush Hill Park.

Brunfelsia

IN many gardens these plants are met w under the name of Franciscea, and t need warm greenhouse treatment throu out the year. The best and largest flowe species in cultivation is B. calycina, a na of Brazil, from whence it was introduced 1850. When first expanded, the bloo which are about 3 inches across, are of intense purple colour, but with age this p is lost and the flowers become nearly wh At this stage it is advisable to remove th because others will appear and the plant be in bloom more or less for several week

There are several varieties of B. calyca the best being named grandiflora, the flow quite an advance on those of the type bot in size and richness of colour. A variety kno as floribunda is certainly free-flowering, it lacks the size and colour of B. grandifl A suitable companion to the above is confertiflora, which produces its soft flowers in the first half of the year, while calycina is often in bloom at no partic period. It makes quite a shapely bush 1 to 2 feet high. The two species mentio are those usually met with, but I have B. uniflora under the name of B. Hope The flowers are solitary and the colour a violet-purple with a whitish centre. also hails from Brazil.

All can be increased by means of cutti and these will form roots if placed in a c propagating-frame during the spring. light soil is best for these plants, and a m ture of loam, leaf-mould, and sharp san advised. Any repotting should be done the plants finish flowering, and then they placed in a warm moist greenhouse to c plete their growth. Syringe the plants fr with tepid water and keep the roots moist. When growth is finished a d atmosphere is needed, and the plants ma transferred to the coolest end of the ho Mealy bug is rather fond of them, so a sl look-out must be kept for this pest.

T. W.

Brunfelsia, a warm greenhouse plant from Jamaica

The flowers are of an intense purple colour, passing to white

EARLY FLOWERS AT VINCENT SQUARE

The three subjects illustrated on this page were shown at the meeting of the Royal Horticultural Society on January 26, reported in our last week's issue

1. Cyclamen Early White, the fine large flowers on stems about a foot length and held well above the marbled foliage. Shown by Messrs. Blackmore and Langdon in their display which was notable for good cultivation.

2. Lily of the Valley grown in a bowl, one of many shown by Messrs. Sutton and Sons in a beautifully arranged group of forced bulbs in bowls, which gained the Society's Gold Medal.

3. Narcissus Tazetta papyraceus lusitanicus. This is presumably a collected form from the hills of Portugal. It flowers with greater freedom than the well-known Paper White, which it resembles, and the perianth is slightly broader. A good head of bloom was shown on a long stem about 18 inches high by Mr. William van de Weyer, Cliffe House, Dorchester.

The Royal Horticultural Society's New Hall

IT has not been an easy matter to obtain particulars of the much-discussed new hall of the Royal Horticultural Society, but the following observations are based upon the report of the Council, which will come before the annual general meeting on Tuesday, February 9th.

That the Society should outgrow its home is a natural consequence of its continued prosperity. When the present Hall was opened in 1904 the total membership was 8,360 and the existing buildings were then ample for the Society's needs. The number of Fellows, Associates, and Affiliated Societies is now nearly 22,000, and for several years the need for a larger exhibition hall has been obvious.

At the annual general meeting in 1924 the Council sought and obtained the authority of the Fellows to acquire a site and erect a new hall. Since then the matter has received the constant attention of the Council and of the Housing Committee appointed to advise it, and it is now possible to report that the Society has obtained the lease of a site in Elverton Street, Westminster, almost adjoining Vincent Square, for a term of 999 years, at a ground rent of £1,300, on which it will be able to erect an exhibition hall nearly twice as large as the existing one. Plans submitted by several architects of repute have been carefully examined and a design prepared by Messrs. Easton and Robertson, of 36, Bedford Square, W.C., has been accepted subject to certain modifications. Special attention has been given to, and expert advice taken upon, the all-important matter of lighting. The requirements of exhibitors have been and are being kept constantly in mind, and in the interests of the Fellows and exhibitors it is proposed to provide a restaurant for use during the shows.

As soon as the details of the plans have been settled and approved, copies will be placed in the library, where they will be available for the inspection of Fellows. In order to give Fellows a further opportunity of making themselves familiar with the Council's proposals regarding the new hall, arrangements have been made for a lecture to be given by Mr. J. Murray Easton, A.R.I.B.A., of the firm of Easton and Robertson, the appointed architects, on Wednesday, April 7th, at which Mr. C. T. Musgrave, the Chairman of the Housing Committee, will preside.

The Council has proceeded slowly because it considers that no pains should be spared in an endeavour to make the building as suitable as possible for its purpose. So far there has been little to show for its efforts, but in order to give effect to the resolution passed at the annual general meeting in 1924 the Council will in the course of the present year enter into contracts for the excavation of the site and the erection of the buildings.

That the new buildings will entail a heavy expenditure must be clear to all Fellows, and until the quantities have been got out it is impossible to give even the roughest estimate of the cost.

Reliable Roses for Southern and Midland Gardens

ALL Rose growers should make a note of the varieties grown each year. It is useless condemning or praising any particular Rose on its first season of growth, or where there is only one plant. To prove a Rose at least half-a-dozen plants should be grown, and these carefully studied for at least two or three years. The varieties I am going to mention have come out top of the many I have had charge of the last few years, and all I can recommend for the small grower.

BETTY UPRICHARD.—I place this first. A bed of it is a picture not soon forgotten. It is a good grower, free from mildew, giving plenty of well-formed blooms which, on the outside of petals, are carmine and the inside a pale salmon-pink, which makes it very attractive, while it is also sweetly scented.

MRS. HENRY MORSE.—It is a poor Rose garden that does not contain this beautiful variety. The colour is silvery-rose on the reflexed petals, cerise-pink with orange base at the back of the petal. It is a Rose that will surely displace that old favourite Mme. Abel Chatenay.

OPHELIA.—This is a beautiful Rose and excellent for cutting, as the stems are strong and upright. The blooms are long and pointed, and in its half-opened state it is ideal for bowls and vases; colour, salmon-flesh, yellow at base of petal, fragrant, and a good grower.

LOS ANGELES.—This, of American origin, is one of the best for grouping; colour, coral-pink shaded gold. It is one of the most lasting Roses when full blown that we have. The flowers are of perfect shape and are best grown in sprays.

MME. BUTTERFLY.—This fairly new Rose very much resembles Ophelia, of which it is a seedling that was raised in America. Very possibly, when more known, it may replace its parent. It is deeper in colour, stronger in growth, and one of the best of the newer Roses.

LADY PIRRIE.—All Rose growers are well acquainted with this old favourite, which never fails under genial treatment. Coppery-pink in colour, sweetly scented, it is one of the best-shaped blooms.

THE QUEEN ALEXANDRA.—There was much comment when Juliet arrived, but, alas, owing to the black spot on the foliage, untidiness in growth, and undue fulness of bloom, this newer arrival has practically ousted it. It is a Rose that is very attractive and should be in every garden where novelties are required.

INDEPENDENCE DAY.—This Rose, orange overlaid with flame, is a splendid Rose, one of the very best for grouping. It is not too strong in growth, but very bushy.

GORGEOUS.—This, in colour orange-yellow with copper shading, is a splendid companion to the above. It is free-blooming and one of the best in this colour for grouping.

HENRIETTA. — This, in colour orange-crimson changing to salmon, is one that is ideal for the large or small Rose garden, and a bed of this in bloom, with its bronzy foliage, is all that can be desired.

GOLDEN EMBLEM.—This is my favourite of all the yellows, and in the bud state it is perfect. It is a good grower, but possibly does not give so many blooms as some varieties.

CHRISTINE. — Another beautiful golden-yellow, and being of a dwarfer habit than Golden Emblem is more suitable for small beds. The flowers, although on the small side, are of good shape and freely produced.

SOVEREIGN.—This excellent deep yellow should be included in all up-to-date collections. When grown well it is suitable for exhibition. Good grower with dark glossy foliage.

RED LETTER DAY AND K. OF K.—There is not much between these two dazzling red Roses. Red Letter Day is stronger in growth and blooms more freely than K. of K. Both are semi-double.

GENERAL MCARTHUR.—No Rose garden can be complete without this heavily-scented old favourite. The blooms, which are not of the best shape, are carried on stiff upright stems, while the foliage is of a beautiful glossy green. It is one of the best autumn Roses.

HADLEY.—To get this at its best it requires a heavy clay. On light and brashy soil the blooms are too much on the purple side.

COVENT GARDEN.—This is a good crimson that is splendid for buttonholes. If it were scented it would easily be one of the reds.

CLARICE GOODACRE.—This is a Rose of fect shape and one of the best of lig shades. The colour is chrome on iv white.

MRS. HERBERT STEVENS.—This beau Rose still holds its own as one of the whites. The blooms are of beautiful sl and are produced freely. Every one is able for a buttonhole.

MODESTY.—This is a fine pale-colo Rose which deserves a place in all Rose dens. The colour is pearly-cream sh pale rose. It is a free bloomer, and if gr well is suitable for exhibition.

FRAU KARL DRUSCHKI.—We have as ye produce a more perfect-shaped white than this old favourite. It is not suitabl small beds as it is a rampant grower. subject to mildew. If disbudded it mak good exhibition Rose. W. E. WRIGH

Stockton House Gardens, Near Rugby.

Weeping Standard Roses in June
Alberic Barbier and Tausendschön, creamy-white and rose-pink respectively

FRUIT GARDEN

Fruit tree spraying

THOSE who have few or many trees ei against walls or in the open should let the season slip by and not do all possibly can for the welfare of the trees as an aid to a clean crop of fruit this com summer. It will rid the said trees of m insect life if we cannot ensure a crop of fr for which the weather at the time of flo ing and setting must be held responsible. is to be hoped the few recent prosecution this country for selling fruit (Apples esp ally) contaminated with arsenic poisoning not deter growers from carrying out t necessary precautions for such an impor fruit.

There are several insecticides on the m ket minus arsenate of lead that can be after flowering. Up to then the usual poi ous washes may be used as advocated by vendors. If other countries do not a similar methods it is more than likely imported fruit will not be so eagerly bou up as heretofore, but as most of them pretty far-seeing other remedies will be t This spraying must be effectively done is labour in vain, and expensive at that. spray must be played on every angle of tree, from the uppermost branch to the of the trunk, choosing a dull mild day the least wind blowing. A misty rain not deter the operation so long as the oper is specially clothed for the purpose, w should include rubber gloves and keeping liquid from the face as much as possible.

An Abol syringe with a bend is a very s able implement for a few small trees, b machine on a bigger scale is absolutely ne sary for specimen trees or an orchard standards. There are several on the mar big and small, to suit all growers. It i be feared that many growers omit to s on account of its costliness where sev acres are concerned. It is especially bad weather occurs while fertilisation taking place, but it is worth the venture our Colonial friends would not be systematic over the procedure. As a lifel gardener and fruit grower on a private s it appears to me to be the one and best co to adopt if we are going to keep our f trees clean and healthy along with cle sound fruit. J. MAYN

Eltham.

—— All progressive people who grow f trees nowadays realise the necessity of sp ing in winter as well as summer to co insect pests and diseases.

Until three or four years ago the m winter washes were caustic soda,

ulphur, and paraffin emulsion, but now we e a new type of wash, the tar oil emulsion shes. My object in writing this note is to cate the use of these extremely useful ids.

ly personal observations lead me to the clusion that these washes are not so effec- in cleaning Moss from trees as is caustic da, but as insecticides they are miles ahead the latter. I do not say that one spraying one of these emulsions will render all sequent spraying unnecessary, but I am vinced that eggs of many pests are killed hem.

his spring (1925) I carefully watched eggs Apple sucker, winter moth, and aphis on is which had been sprayed with the best- wn brand of carbolineum, and none of hn hatched. The only spraying which I nd necessary on these trees was to use otine once for aphis (presumably they had rated from a wood near by).

have been told that these washes will ctrol capsid bug, but, personally, I have not nd this the case, and I still maintain that otine is the most effective control we have this pest.

word about using carbolineum. Spray soon as possible, especially Plums, as I e found that late spraying causes the fruit s to fall. Use a machine giving a good ing spray to force the emulsion well into crevices, and do not neglect the young od, as it is at the base of the buds that ny eggs are laid.

ll these washes are proprietary articles, one is quite safe in dealing with firms of d repute. Personally, I have obtained the t results with "Mortegg." Follow the ker's instructions regarding mixing care- y and spray thoroughly.

lthough these washes do not burn the skin caustic soda, care should be taken as y stain clothing slightly and cause the face smart. N. D. H.

The renovation of old fruit trees

his is a somewhat thankless task and not ays successful, but it has to be undertaken asionally when trees have been consider- y neglected and there is not the means or ination to root out the old and replace h new. If there is plenty of wood in a n, healthy condition one may assume all well with the roots, but if, on the other d, the growth is weak and spindly, atten- n must be paid to improve root action in way of clearing out old soil to a consider- e depth and encouraging healthy fibrous ts by adding a better compost, as often ommended in GARDENING ILLUSTRATED. his operation should be performed in two cessive years. In the case of old hori- ntal and fan-trained trees long neglected re will often be found huge spurs with a lot shoots at the extremities, standing away hes from the wall, which not only produce y third-rate fruit but are very difficult to otect alike from frost in spring and birds autumn. The first consideration is to lay foundation of some clean, healthy wood t one can get fairly well into the wall, ther a quick nor an easy task, but one that be accomplished in time. If these old rs are plentiful it is best to cut half of m away, or to within a very short tance of the main branches, and of the ots that come away from the base the ongest can be selected, tied in, and treated erwards in the way of pruning and pinch- g for the ultimate production of fruit rs. The remaining spurs can be treated following seasons in a similar manner. It of course, only thoroughly good sorts that need trouble about in this way. Third- e varieties must gradually be replaced by nething better. I think the practice of obtaining better varieties by grafting on to those of poor quality, common among former generations of gardeners, is gradually dying out. The above remarks apply to Pears, Plums, and occasionally Apricots, but renovation is also applicable to other things, as for instance Vines and cordon Gooseberries and Currants; only in the one case new rods have to be worked up from as near the base as possible, and in the other new spurs built up on the site of the old. E. BURRELL.

Hardwick.

VEGETABLES

Vegetables for Scottish gardens

Some reliable varieties

YEAR by year I am the more convinced that success in vegetable culture in a great measure depends on the varieties of the different kinds we grow. There is no use in putting a lot of labour into the process unless we are certain that the varieties are suited to our special soil, climate, and so forth. I have proved this over and over again, and now fight shy of new varieties until I have tested them for a year or two. My method is to test a few new things every year, but that in only small quantities, and note carefully the conduct of each for future use. Those showing a fair return are tested a second year, and if they come successfully through the second trial they are fit to take their place with the standard sorts hitherto relied on. In this way one can soon discover just what to depend on for an unbroken succession of good vegetables. It must not, of course, be supposed that suitable varieties alone will ensure good supplies, for unless these are given skilful attention the results cannot be of the best.

CULINARY PEAS.—These are, probably, the most popular of all our vegetables, and much is forgiven the gardener who keeps up a constant and abundant supply of these, and that over as long a period as possible. For earliest supplies there is quite a number of good dwarf varieties that may be grown in pots or in frames, but these I do not propose to include in these notes, but will stick to such as will afford a long and unbroken succession out of doors. The Pilot, although not, perhaps, the very earliest, is so hardy and reliable that it has displaced most of the others here in the north. Gradus, where it succeeds, is splendid to follow Pilot, but with me it simply refuses to grow. I therefore, as a second sowing, rely on The Pilot again, and at the same time put in a row of World's Record, which does quite well, although here not an exceptionally heavy cropper. Then follows Senator, the heaviest cropping of all Peas and one that can always be depended on to succeed. Then come Boston Unrivalled, Glory of Devon, Superlative, Royal Salute, Dreadnought, The Gladstone, and Rearguard. Should only half-a-dozen varieties be wanted, The Pilot, Senator, Glory of Devon, Superlative, Royal Salute, and Rearguard would be my choice.

BROAD BEANS.—Broad Beans are not greatly favoured in some kitchens, while in others they come only second to the Peas. They are, when properly cooked, both delicious and wholesome. Seville Longpod, Hawlmark Exhibition, and Carter's Leviathan are all of good quality, Hawlmark being the best here. Of

KIDNEY BEANS, Earliest of All, Sutton's Masterpiece, and Canadian Wonder will give a fine succession. A good strain of the last-named is difficult to beat, and if only one variety be favoured this is the one to grow. Of climbing or Runner Beans a good selection of the old Scarlet Runner is excellent.

CAULIFLOWER AND BROCCOLI.—These are not greatly in request during the height of summer, but in early spring and late autumn their value is considerable. A good selection of Dean's Snowball is as good as any for the earliest sowing under glass but of finer quality, but, some days later, is Sutton's Magnum Bonum. Then follow Sutton's Favourite, Dwarf Erfurt, Walcheren, and Veitch's Autumn Giant. Of Broccolis Walcheren may be grown for autumn use, but there is little use in attempting winter varieties. For spring Leamington, Evesham Giant, and Methven's June are good, the last-named the hardiest and latest variety to date.

CABBAGES.—Flower of Spring sown in July will produce fine heads from April till July, and can be followed by Dickson's First and Best, Sutton's Favourite, and Winningstadt, which will carry on supplies until November or later, when the Savoy will take its place. Of the latter, Dwarf Ulm, Dwarf Green Curled, Ormskirk, and Omega will see the supply through until April again.

BRUSSELS SPROUTS.—As the Pea is the favourite for summer, the Sprout can claim the same place among winter vegetables. There are numerous good strains, the best here being Newtownards Gem, with Solidity a good second. Both are very hardy, of medium height, and give excellent crops of firm, medium-sized sprouts of first-class flavour.

ROOT CROPS.—Carrots are, usually, a very precarious crop, but where they do succeed Early Scarlet Nantes, St. Valery, and Improved Altringham are most reliable. Of Beetroot, Dobbie's Purple, Pragnell Exhibition, Nutting's, and Galloway Purple are excellent. The last-named is unique in that it is non-bleeding, it being possible to cut it up into any shape desired before cooking. Parsnips are not much in favour, but have their uses. A good type of the old Student is as good as any. Onions are now mainly raised in heat and planted out in spring. Personally, I prefer Cranston's Excelsior, but Ailsa Craig does well in many gardens. For autumn sowing I find Trebons and Danver's Yellow much better than the Tripoli sorts. For general purposes no Leek can compare with the true Scotch Musselburgh. Among numerous varieties of Celery I prefer Grove Pink and Sulham Prize. The former is as early and is hardier than the white varieties. Turnips are in demand most of the year. For earliest crop the Purple Milan is really reliable, with Dobbie's Model White, Sutton's Snowball, Dobbie's Golden Ball, and Chirk Castle for succession; while for winter use Bangholm Field Swede is far superior to the so-called "garden" Swedes.

OTHER VEGETABLES.—Of Borecoles, Dwarf Green Curled and Russian Kale are to be commended as being of splendid quality and very hardy. Lettuces are, of course, more of a salad than an ordinary vegetable, but are in constant demand in most establishments. I confine my selection of these to the three grand Cabbage varieties, Holborn Standard, New York Giant, and Webb's Wonderful. The white-skinned Jerusalem Artichoke is superior to the purple and is quite as hardy. Barr's Mammoth Asparagus has no rival. Dickson's Triple Curled, Glasgow Prize, and Myatt's Garnishing Parsleys are all of excellent quality. Moore's Cream and Pen-y-byd Vegetable Marrows usually supply all wants. Cucumber Lockie's Perfection is very reliable for general use. Of Tomatoes, Hawlmark, Sutton's Best of All, Laird's Supreme, and Ailsa Craig will meet most requirements.

POTATOES.—Duke of York, Edzell Blue, British Queen, Arran Comrade, Windsor Castle, Langworthy, and Golden Wonder, as

a rule, under decent cultivation, will give an excellent succession during the whole year, but all are not immune to wart disease.

C. BLAIR.

Preston House, Linlithgow.

Vegetable Marrows on heaps

In days when stable manure was plentiful and much cheaper than it is to-day it was no uncommon thing to see surplus heaps after the garden had been planted. On these heaps, rather than let them be idle during the summer, many people planted a few Marrows, and it would appear from this practice an idea got about that a stack of manure was essential to the growth of Vegetable Marrows. As a matter of fact they neither need it nor are they so productive grown in so rich a medium. None of us, I think, is likely to err in this direction to-day, having regard to the cost and increasing difficulty of ob ing manure. Plants grown on gr which has been well dug and vegetable r incorporated will give good results. In circumstances an abnormal amount of an manure is of no advantage. In a dry se plants on ground level mulched with le spent Hops, or anything that will con moisture, will yield better than those per on a heap.

TOWNSM

REMINDERS FOR THE WEEK

Southern and Midland

Broad Beans

Where an early row or two of these Beans has not already been planted the first opportunity should now be taken where the site has been previously prepared. It should be in good condition for working after the frosts. The seeds may be dibbled in 3 inches deep, placing the eye downwards. The lines may be 18 inches apart and the seeds 6 inches. If the soil is on the wet and heavy side it is advisable to cover the seeds with old potting soil. The Longpod varieties are the most suitable to plant now.

Mushrooms

Where these are in demand all fresh horse-droppings should be collected daily and stored in an open shed, keeping them turned until sufficient has been obtained for forming the bed. After turning several times until the fermentation is on the decline they will be ready for making up the bed. There are several ways of making up the bed, but which ever is chosen it is essential to make the manure firm with a spade or mallet. When the temperature stands at 75 degs. the beds may be safely spawned. Pieces of spawn the size of a hen's egg are suitable to insert, and these should be pressed into the manure to the depth of 2 inches, finally covering with 1½ inches of good fine loam. The air of the house or shed should be kept moist and at an average temperature of 60 degs. Where the Mushrooms are grown in cellars it is advisable to cover over the bed with 4 inches to 6 inches of clean straw.

Lobelia cardinalis

This useful plant may now be brought out of the stores and the boxes placed in a cool house where growth will soon commence, when the plants may be divided and each portion placed in a 4-inch pot or separately in boxes of light soil. When the roots have taken hold of the new soil they should be placed in cold frames and grown on as hardy as possible until the end of March or early April, when they may be planted out.

Border Chrysanthemums

Plants that have been wintered in frames should now be pushing up young shoots that are suitable for cuttings when they reach 3 inches in height. These should be taken off and inserted either in pots or boxes of sandy soil and kept close until rooted. Backward plants may be brought into the greenhouse and the warmth will soon cause growth to commence. They must not be subjected to strong heat. Plants that were left in the beds and covered with ashes should be watched and guarded against slugs. When these make several inches of growth they may be increased by division.

Ferns

Adiantums and others that have had water withheld and placed in cooler quarters for a few weeks for a rest may now be started into growth again in preparation for repotting towards the end of the month. Some growers cut their Ferns down, but I prefer removing the old fronds as they change colour, leaving the ones that remain green to give shelter to the young and tender fronds. Any large Asparagus plumosus may be planted in a prepared bed or tub at the base of the back wall where there is an open space and trained to string. They will provide valuable shoots for decoration.

Strawberries in pots

The earliest batch should now be blooming freely, and a fairly dry atmosphere should be maintained until the fruit has set, at the same time taking care the roots do not suffer from want of water. When six to eight fruits on each plant are commencing to swell the remainder should be removed and the plants given stimulants twice a week. The main batch should now be brought in and given a light airy position near the glass in a cool house for the first few weeks, taking care the drainage has not been fouled by worms.

W. E. WRIGHT.

Stockton House Gardens,
Near Rugby, Warwickshire.

Scotland

Planting

Those who may be contemplating additions in the way of ornamental trees ought now to have the sites prepared in readiness for planting next month, or as soon as the weather is open. While evergreens may be planted later, in the case of summer-leafing subjects the sap begins to rise early, and planting should, if possible, be undertaken early in March. Some of the Maples are, I think, being overdone—Acer Negundo variegatum, for example—but there are many fine sorts which give a vivid effect in autumn. The Weeping Silver Birch (Young's) is worth planting; so, too, are the Scarlet Oaks, the Copper Beech, the White Poplar, and the Purple Sycamore. I am no admirer of the Golden Elm, nor have I ever seen a good piece of the Golden Oak (Quercus Concordia). Merely passing mention is made of the Prunus family, the Cherries, and the shrubby Spiræas. After planting is completed careful staking is recommended, and, if needed, a good soaking of water.

Early vinery

Assuming that the heat has now been applied to the early vinery, care must be taken that too warm a temperature is not given at once. A night heat of 50 degs. is ample meantime; if it reads a degree or two less in the morning no harm will result. If the sun, as sometimes happens at this season, is a trifle warm in the forenoon, I prefer to damp down the fire for a time and to give a chink of top ventilation. Syringe the rods morning and afternoon in order to soften the buds, and damp down the pathways freely. Much the same routine is followed in the early Peach-house, but the heat is kept 5 degs. under that in the vinery.

Late Peach house

If the cleaning, pruning, and retraining of Peaches and Nectarines in the late house have not been completed, the work should no longer be delayed. Old trees which freely must have support in some form, this can be given in the form of a mul good manure or by reinforcing the bo with an addition of fresh loam to whic been added some good chemical ferti Care should be taken that there are n spots in the borders, more especially these are inside. For late houses, a events, it is always preferable if the bo are partly inside and partly outside.

Begonias, Gesneras, etc.

A batch of Begonias for early flow should now go in, and those who ma feature of the pendulous forms for han baskets ought to get the tubers into box once. These Begonias are of conside value in corridors or in lofty conservat even although admittedly rather a nui in the way of watering. Gesneras, too be potted up—three corms in a 5-inc ultimately make specimen pieces when growth is advanced, they are moved on 8-inch pots. The old G. cinnabarina i as good as any of the Gesneras, and if be any shortage of stock leaf cuttings grow into useful plants. Water spar until growth is visible.

Herbaceous borders

It is usually the case that the bulk of plants is cut over in early winter, but the wiser practice of leaving the stems they are thoroughly ripe yet prevails may now be cut over. Such stems at season readily burn, and it is better to di of them by burning on a vegetable break to wheel them out to the rubbish-heap. wards a scattering of manure, or eve half-decayed leaves in the absence of any better, may be given, and as soon as bu plants are visible the top-dressing ca forked or lightly dug in. Overgrown p can be reduced in size as the work proc and gross-feeding subjects, such as Phl may with advantage be lifted and repl after the stations have been, in some ma enriched. Many of the older Asters are obsolete and ought to be scrapped wi hesitation, and every seedling should b stroyed as these are, in almost every worthless. The planting of new additio the herbaceous borders can now safe undertaken.

Vegetable garden

A recurrence of frost, accompanie snow, has for the moment made diggin advisable. It is always unwise to dig even a sprinkling of snow is on the gr and there is certain to be, in most p plenty of manure-wheeling to be done the ground is hard. The leaf-mould hea be turned, Pea stakes can be cut, trim and graded, Birch-brooms can be made similar things, if done now, will eas strain when better weather arrives. F Beans sown in 7-inch pots in a brisk will give better returns than sowings previously. Supplies of Rhubarb and kale for successional crops will, of cours attended to.

W. McGUFF

Mabie Gardens, Kirkcudbrightshire.

Rearing Young Chrysanthemums

HOSE whose object is the production of exhibition blooms are usually pretty early in starting the cuttings. By the end of uary these will have rooted and may be ted into small pots. The advantage of g well ahead, however, applies more to e of the large Japanese kinds, which are urally late in providing flower-buds, such Majestic, Queen Mary, and the like. ther plan in the case of such sorts is root- the cuttings in February onwards, then big specimen blooms taking the earliest er-buds that show themselves. This last- ned method should commend itself to a at number of cultivators, anyway. It is y the few who can command appliances ing the necessary warmth and at the same e ample air. Generally, too, one would fer that the majority of the sorts have the tings put in during the above months, be- se it is at such period the better class of ting is obtainable. Certainly no time is in the case of culture of the plant for er purposes than show. As to the time door varieties may be propagated, rarely satisfactory material be obtained before ruary is well advanced.

here are several excellent ways of treat- the cuttings, which, by the way, may not too large and sappy, nor have a tiny er-bud at the point. The quickest, pro- ly, is the plan of specialists who deal in e numbers. Shallow boxes not more than nches in depth are employed, a little fire- t being given to the glasshouse. At the e of the year named rooting takes place in nonth or less, and such little plants grow ay freely from the start. When small col- tions are being dealt with a little green- se within one, so to speak, is a capital y of procedure. A frame may be made by ling four boards together and placing ets of glass on the top. Here the cuttings all but closed when air is given to the in structure. A thing to avoid is too much isture. It is well, then, to remove the ss for an hour or so each morning, and, of rse, shade from sunshine. The frame y be filled to within 3 inches of the top h soil and the cuttings dibbled in, or these be put into small pots (three or four in h), or, indeed, in the shallow boxes ned. The item that counts is care that y shall not rot through too much moisture, l, of course, suitable soil. Chrysanthe- m cuttings are worth sweet, fresh soil, ted turf, sifted leaves, and grit. They will well in this in equal portions except the t, which may be less. In the country one obtain grit that is washed by water in es. Failing this, use silver sand. I netimes use old soil which has done duty other plants with fair success, but for ting plants quickly fresh soil is much the ter. Failure in rooting an easy subject y readily occur if the grower be too free th water. A good soaking when the cut- gs are first placed into the soil is usually ficient till these have rooted, particularly the closed frame be employed. The ment roots have formed—a good indica- n of this being the formation of new leaves he plants should have small pots to them- ves, or rather be treated more individu- y. A favourite plan is to place two in one and grow these on as one. This practice nmends itself to the producer of big blooms o concentrates in number of flowers a nt shall develop. Thus it will be found ter to have a pair of plants in one pot each furnish a single blossom, the former to be 9-inch diameter and over, than one plant a smaller pot, for if by any means a wer-bud be lost all the season's work is t so readily lost.

Somehow the plants do well in pairs. One seems to help the other in not growing too robust. This method of two plants in a pot is carried on also in the case of other styles of growth, bush plants, singles, and so on. From my point of view this does away with the necessity of topping the points of the growth to get sufficient side branches from the first natural branching, an item of importance in obtaining the number of first-rate blooms we desire from each pot, in giving material for early or crown-bud selection. Be it noted, however, potting two or more small plants in a large pot later on is a different matter from starting the same together while yet young. In the compost when away from the cutting stage may be less grit and leaf-mould and more loam. In place of grit one would prefer old mortar-rubble.

As the little plants become established in their rooted condition they require the air given to an ordinary greenhouse where frost is kept out, and if placed on shelves near the glass all the better for sturdy progress. Under such conditions, too, water becomes a necessity, more especially in spells of sunshine.

It is a peculiarity of crimson varieties that we must get the cuttings to start with when we can. These rarely give early ones. So, again, in the case of the outdoor kinds, as has been noted. These latter resent warmth more than the rest of sorts, and this should be borne in mind as the spring advances. More, perhaps, can be done with this popular class in cool frames in March and after, when growth is most rapid. Indeed, this is a capital period for an amateur to begin business—a grower, say, who does not want Chrysanthemum blooms for show, but merely to provide a wealth of flowers for home use. Propagating may well go on till the end of April and thus give us plants comparatively small in the end, but useful, inasmuch as the pots they require will be small, too. H. S.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FRUIT

Fruit trees growing too strong

Amongst my Apple-trees (half-standards, mostly) planted 1922 there are some eight or ten which for the last two years have thrown out very strong shoots like Willow canes. Take Bramley's Seedling as an example, on which they are stout and strong, and about 3 feet long. In the last pruning of 1925 they were cut back to about 5 inches or 6 inches only. The "canes" this last season appeared as strong as ever, with little signs of fruit buds or spurs. Am I correct in my belief that when there is such strong growth as I explain the pruning should be lightly done, leaving most of, in fact, at least half of, the shoot or cane to make it more likely, that the sap thereby being, as it were, less concentrated at the bases of the old two-year wood would not repeat the energy by sending forth a barrowload of canes again as a product of 1926? HOOD-A-WINK.

[You are quite correct in your assumption that the pruning of fruit-trees which are prone to make strong growth should be lightly done, because the more severe the pruning the stronger the resulting growth. Generally speaking, fruit-trees, particularly such as Blenheim Orange and Bramley's Seedling, for instance, both of which come under this category, are what is termed strong growers and require time to become fully established before coming into bearing. Hard pruning in such cases renders the trees unfruitful, as it only induces the production of strong growth. By the adoption of the more rational method of leaving the wood produced or that which is required for extending existing branches as well as that needed to furnish subsidiary branches at least about half its length instead of cutting it back hard each year, the heads of the trees not only become the more quickly formed, but the fact of there being so much more wood present serves to take up the superfluous sap, and naturally tends in due course to the production of wood of a much less vigorous character. Fruit-buds then begin to develop and the trees come into bearing.

Root-pruning or root-lifting is another way of dealing with varieties of Apples, etc., inclined to make gross growths, but after a long experience we think that where the heads of trees can be allowed to develop unrestricted the above-named method produces the best results. After matters begin to right themselves, *i.e.*, when the trees begin to bear, pruning in regard to standards resolves itself into the ordinary procedure of keeping the wood in the heads properly thinned out and so on each year.]

Pear failing

(W. R. I.).—The variety of Pear mentioned is apt to make a quantity of fruiting spurs, and it is necessary to subject them in such case to severe thinning, getting rid of the weakest of them and preserving none but the strongest or such as have bold-looking, well-developed blossom buds on them. Judging by the sample of wood sent, the trees do not make very vigorous growth, and we are inclined to think that they are in need of hard pruning which would encourage the production of wood of a more robust nature. If you lack experience in these matters we strongly advise you to get a practical man in your locality to do what is necessary in the way of pruning for you. The imperfectly-formed fruit is not an uncommon occurrence in regard to the variety in question.

Walnuts not bearing

(M. S.).—In all probability your Walnut-trees are growing in a good, deep soil. If so, it is only age that will make them fruit-

ful. As soon as the ground becomes exhausted by the action of the roots the growth will get smaller and firmer, as well as shorter jointed. They will then bear fruit. As you say, the boles are not more than 12 inches in circumference, it is probable you will have to wait several years before you get a full crop of fruit from them. Walnut-trees, as a rule, do not bear good crops until they get to a considerable size.

Bone meal for Strawberries

(C. J. Ufford).—Bone-meal is an excellent manure for Strawberries either used as a top-dressing for the plants in the open air or mixed with the soil when the Strawberries are grown in pots. In the latter case add half a peck to 3 bushels of soil. For top-dressing in the open air about 10 lbs. or 12 lbs. per square rod may be applied early in the spring, sprinkled on the surface and lightly forked in.

Disbudding Vines

(Anxious).—This consists in removing the young shoots which are not required, and the sooner this is done after the bunches of Grapes can be seen the better. All healthy, vigorous Vines will throw out more shoots than there is room to lay in. As a rule, one shoot to each spur is quite enough to leave. We generally go over the Vines as soon as they break and take off all weakly buds; but, in doubtful cases, where one cannot identify the shoot which is destined to carry the best bunch, two of the most likely ones are left, and a final selection made later on when the bunches are more developed; but it is generally easy enough for a practised eye to select the best bunches early in the growth of the shoot.

GREENHOUSE

Single Dahlias from seed

(Dahlia).—These are useful in a cut state, but they must be sown early, so as to get the plants strong by May, for our summers are too short to allow any lengthened flowering season before frost cuts them down. With strong roots, however, to begin with, and planted out very early and protected from spring frosts by some slight covering, they attain large proportions by the middle of July, and from that date until the middle of October yield a continuous supply of brilliant flowers.

Cultivation of Ageratum

(X. Y.).—This is propagated and increased by seeds and cuttings. If required true the former is the only sure way. Sow the seeds in heat in shallow boxes of rich sandy soil, prick the plants out into thumb pots as soon as they are large enough to handle, and keep them in heat till well rooted and growing freely. Then place them in a cooler house or frame, and transfer into larger pots when the thumb pots get full of roots. Keep them steadily growing until time to plant out—the end of May or later, according to season and locality. To propagate by cuttings, have some pans or boxes filled with rich sandy loam ready in the early part of September. Fill these with cuttings and place the boxes in a close warm frame, sprinkling the cuttings with tepid water daily. When rooted, give air and gradually harden off. Some growers top these cuttings in spring and strike the tops on a hotbed, or in a propagating house, and grow them on for bedding out.

Seeds of Fuchsia

(Fuchsia).—Fuchsia seeds should be got out of the pulp by washing them out in clean water; then spread them out on a sheet of paper to dry, placing the paper in a secure position in a warm room. If you can command a temperature of 60 degs. in a hot-house or Cucumber-bed you may sow the seed early in February. If you have no heated structure, defer sowing the seed until the early part of April. Drain with crocks two 6-inch pots, and fill about three parts with any ordinary potting soil. The remaining space must be filled with a fine sandy compost. On this sow the seed, and cover lightly with the same kind of material. Place the pots in a warm corner of the greenhouse, and as the plants come up let them have a little shade. Pot off the plants into single pots as they get large enough.

TREES AND SHRUBS

Treatment of Ericas

(Erica).—The proper way of treating such soft-wooded Ericas as bloom in winter is to cut them down to just below the blooms as soon as the latter fade. They are watered carefully until they begin to make growth, and are then shifted into pots one size larger. The best peat must be used, with plenty of white sand and good drainage, ramming in the compost well round the ball. The plants are kept in a cool-house until the middle of July, and are then put in the open-air till the middle of September. Careful watering is all important; the soil must never become dust-dry.

Insects on Myrtle leaves and green-fly

(A. B. P.).—The Myrtle leaves are infested with "brown scale." The plant should be thoroughly and frequently washed with soapy-water and Tobacco-juice, applied by a syringe. If the scale is dislodged from its holding by a piece of pointed stick it will the more readily be washed off. The plant should be laid on its side when washing it, to prevent the mixture reaching the roots. Green-fly is best destroyed by frequent gentle fumigations with XL All. In doing this be careful not to allow the material to flame or the plant leaves will be burnt.

MISCELLANEOUS

Gooseberry caterpillar

(E. Munro).—As the chrysalides of this hibernate in the soil during the winter some 3 inches or 4 inches deep, the best course, where it is practicable, is to remove and wheel away, burying it in trenches, the top soil about the bushes down to the roots, replacing it with fresh soil from the vegetable quarters. Then you may spread gas lime about under the bushes at the rate of about one peck to each bush, breaking it up as fine as possible. Later, some four weeks or so after, smother the bushes with soot, then fork that and the lime in a few inches deep. A good remedy is Hellebore powder, but as this is poisonous we do not recommend it.

Books on Gladioli and bulbs

(B. H.).—Our correspondent would find the recent work, entitled "Gladioli," by A. J. MacSelf, of service. It is published by Messrs. Thornton, Butterworth, Ltd., 15, Bedford Street, Strand, W.C. 2. Another book, entitled "Bulb Gardening," by the same author and publishers, would prove useful. Both books are published at 6s. net.

Effects of variable weather

The weather, one may say up to Christmas morning, when the ground was covered with snow, was all in favour of retarding premature growth on outside plants generally, but the two or three weeks from that date up to January 12th were more like early April. Since then there have been severe frost and more snow, with a biting east or north-east wind, which it is to be feared will cripple many young shoots that started into growth during that short spell of very mild weather.

On the south front of my dwelling Rambler Roses and Clematis of the Jackmani t along with C. Flammula, have shoots 2 inches to 3 inches long, especially the named; this in spite of the main shoots yet pruned back to the desired point. T having such plants should defer the pruning and the re-adjustment of branches until this cold snap has given to more spring-like weather. We read ir columns of the daily Press of Violets, P roses, Wallflowers, &c., being in flower we must not be led to think spring has to stay. The excessive rains in most must have saturated the ground so th spell of hard frost would be welcome that point alone. In its absence, or th a drying wind, it will be some time cr soil can be got into a fine tilth for sowin even planting. Wall flowers transplante October have fared badly already, n killed outright. This was expected du such hard frost, as they are far from one would class as hardy. Early-flowe Chrysanthemums, lifted and their packed tightly on a raised narrow bo with a background of boards facing appear to have suffered but little up to but as aforesaid they too may have a tr time yet. At the date of writing (Jan 14th) snow is falling fast, and should it p of any depth it would protect many a pla we are in for a long frost. J. MAYN

Report on condition of Horticult Crops on the 28th January, 1

Beet.—Crop above average and roots k ing well.

Broccoli (Spring Hearting).—Has wint well in the south, but much damage frosts in midlands and north, where cr likely to be poor.

Broccoli (Sprouting).—Promises gene an average crop.

Cabbage (autumn-planted for green Crops have suffered more or less from severe weather in all districts and will be generally.

Kale (Green).—Crop looks promisin Kent and is yielding satisfactorily in Mi sex.

Leeks.—Promise an average crop in E and Middlesex.

Parsnips.—Crop reported below ave except in Yorkshire; much damage by and canker in Essex.

Rhubarb (forced).—A satisfactory cro good quality, particularly as regards batches in the north.

Seakale (forced).—Large quantities of quality available in Middlesex and crop a age in Essex.

Anemones.—Not flowering so freely usual.

Daffodils and Narcissi (indoor).—Cro least average in Cornwall and Scilly.

Daffodils and Narcissi (outdoor).—Co crop shows excellent promise. In S Polyanthus varieties are flowering fr though somewhat late; other varieties a age.

Hyacinths (forced) and Tulips (force Average crops in Cornwall.

Violets.—The Devonshire crop is rep a failure. In Cornwall stems are sh and fewer than usual; elsewhere prosp fair.

Wallflowers.—Plants have wintered we Middlesex and Sussex, and are budding s factorily. In Cornwall plants are on small side. Much damage by frost northern counties.

SEEDSMEN BY APPOINTMENT

Antirrhinums Carters Re-selected Nelrose

CARTERS for ANTIRRHINUMS

Carters Strains of these popular and brilliant flowers are unsurpassed for continuous Summer display in beds and Borders. The seed should be sown in February to ensure an early show for the garden.

CARTERS TALL LARGE-FLOWERED

No. 3014. CARTERS CORAL RED. Deep rosy colour with faint pale primrose shading on lip.

No. 3042. VENUS. Noble flower of a delicate rose colour on white ground.

No. 3038. CARTERS TALL MAMMOTH-FLOWERED MIXED. The mixture contains a wide range of beautiful and unusual shades.

CARTERS INTERMEDIATE LARGE-FLOWERED

No. 3058. NELROSE. CARTERS RE-SELECTED. The wonderful glowing pink variety (see Illust.)

No. 3060. CARTERS GOLD CREST. Soft rose-pink, tinged salmon, with golden orange lip.

No. 3061. CARTERS SCARLET FLAME. A self brilliant fiery scarlet. In the sunshine the spikes look flame-like.

No. 3063. CARTERS FIERY BELT. A most striking colour, fiery brilliant orange-scarlet, with white throat.

No. 3070. CARTERS YELLOW. Clear pure golden blooms. Even habit.

No. 3075. VICTORY. Rich terra-cotta on buff ground.

The above per packet, 1/- and 1/6

ILLUSTRATED **CATALOGUE** POST FREE

A complete List of Carters Large-flowered Antirrhinums together with full description will be found in "Garden and Lawn," post free.

Carters TESTED SEEDS

SEEDSMEN TO H.M. THE KING

RAYNES PARK, LONDON, S.W.20

BOLTONS' The Leading House for SWEET PEAS

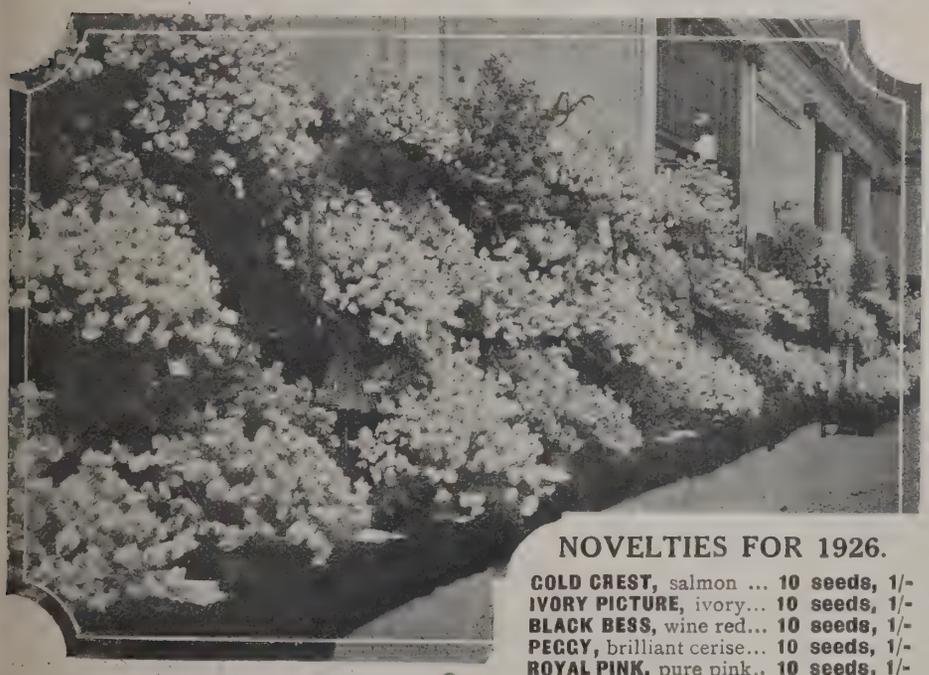
Please Note.—Last Season we sold over 35,000 collections and everyone was satisfied.
Cultural Notes, How to grow the finest Sweet Peas, sent with every order. All orders by return of post.

ENGLISH SEED GROWN ON OUR FARMS AT BIRDBROOK, ESSEX. AWARDED 175 GOLD MEDALS

Winners of Bath Challenge Cup, 1925. **Winners of Eastbourne Challenge Cup, 1925.**

BOLTON'S POPULAR COLLECTIONS

SPECIAL COLLECTIONS INCLUDING THE CREAM OF SWEET PEA NOVELTIES FOR EXHIBITION OR GARDEN DECORATION.



GOLD MEDAL GROUP.
June 24th, 1924, at Royal Horticultural Hall.

COLLECTION No. 1.

Gold Crest, salmon (Novelty, 1926)
Ivory Picture, ivory (Novelty, 1926)
Black Bess, dark maroon (Novelty, 1926)
Pink Perfection, pink
Royal Sovereign, orange
Wembley, lavender
Supreme, shell-pink
Mammoth, orange scarlet
Angele, mauve
Bluebird, blue
Hebe, pink
Matchless, cream
Youth, white, pink edge
Powerscourt, lilac
Constance Hinton, white
Purple Perfection, purple
Picture, pink
Bonfire, cream and pink
Comrade, apricot
Sunset, rose
Faerie Queen Improved cream pink
Lady Eveline, mauve
Grenadier, scarlet
Commander Godsal, blue
Mrs. Tom Jones, blue
Elegance, blush

The above choice up-to-date varieties.

15 SEEDS OF EACH 10/6 Post Free

Bolton's Unequalled Mixture
SPENCER-FLOWERED SWEET PEAS
Containing all the elegant flowered vars, mentioned in this list, also many choice novelties. Pkt, 1/-; oz, 1/6.

NOVELTIES FOR 1926.

GOLD CREST, salmon ... **10 seeds, 1/-**
IVORY PICTURE, ivory... **10 seeds, 1/-**
BLACK BESS, wine red... **10 seeds, 1/-**
PEGGY, brilliant cerise... **10 seeds, 1/-**
ROYAL PINK, pure pink.. **10 seeds, 1/-**

COLLECTION No. 2.

Ivory Picture, ivory (Novelty, 1926)
Picture, pink
R. F. Felton, lavender
Hebe, pink
Charming, cerise
Mrs. Arnold Hitchcock, light cream-pink
Mammoth, orange-scarlet
Black Bess, dark maroon (Novelty, 1926)
Constance Hinton, white
Conquest, pink
Elegance, blush
Youth, white, pink edge
Royal Scot, scarlet
Sunset, rose

The above choice varieties.

15 SEEDS OF EACH 5/- Post Free

Catalogue of all the Latest Novelties and best of the Older Varieties, post free.

ROBERT BOLTON & SON, THE SWEET PEA SPECIALISTS, BIRDBROOK, HALSTEAD, ESSEX

LATE REPLIES

Eucalyptus failing

(B. Kenion).—The fungus present on your Eucalyptus leaves turns out to be Cladosporium, but the particular species present is not a plant parasite and can only live on dead tissue, so that we think you must look for some other cause of your Eucalyptus failing. There are signs that scale insects are present, and we think that probably the original damage was caused by the scale, some portions of the leaves being killed, and then the fungus came along and was living on the dead tissue. We should advise you to sponge the leaves with a good insecticide. A recipe for the purpose is appended:—Take 2 ozs. Gishurst Compound and dissolve in a little hot water. When dissolved make up to 1 gallon with warm soft water.

Walnut seedlings

I have a bed of Walnut seedlings (J. nigra and J. cinerea). The late frost has cut nigra. The seedlings are thick in a sheltered position. The nuts were sown last April and the seedlings are 12 inches to 18 inches in height. Would it be wise to transplant them this season or let them remain till next autumn?

G. P.

[A good method of propagating the Walnut is to sow the nuts in February or early March in nursery rows 18 inches apart; the drills should be 30 inches apart. The seedlings should be left alone the first year, but in the autumn following every other plant should be carefully transplanted at a yard apart each way. When this transplanting is done the tap root should be tipped with a good sharp knife. This will encourage the production of fibrous roots. The following autumn the remaining plants should be lifted from their original nursery rows and treated as above. The trees should be removed and transplanted every second year until they are placed in their permanent places. As your seedlings are planted thickly we should advise you to try and thin out the plants to about 18 inches apart. The seedlings removed should be replanted at 18 inches apart. The best time for this work would be autumn, but as that period has gone we should advise you to delay the work another four or five weeks. When carrying out this thinning do not disturb those that are to remain any more than you can help.]

"Damping off" of Tomatoes

(G. P.).—The correct proportions of blue vitriol and ammonium carbonate to use in making "Cheshunt Compound" for use against the above disease is as follows:—Take 2 ozs. of powdered copper sulphate (blue vitriol) and 11 ozs. powdered ammonium carbonate. Mix these two ingredients together very thoroughly. Take care to get the materials in powdered form and crush any lumps that may be present, the idea being to get the ingredients in a fine state of division so that they can be perfectly mixed together. The mixture may be stored in an airtight bottle or jar, but it very soon loses its strength if stored under any other conditions. Before using, the mixture should be stored for at least 24 hours. Cheshunt Compound Solution is made by taking 1 oz. of the above mixture and dissolving it in a little hot water and then making it up to 2 gallons with cold soft water. The above quantities would therefore make 26 gallons of solution. If larger quantities are required the dry materials may be mixed together in larger quantities as long as they are mixed in the same proportions. Certain damping-off diseases are controlled by the use of this solution, but it should be remembered that plants already attacked do not benefit. Attacked plants generally die unless the healthy part is cut off and put in as a cutting. Watering the soil in which an infected plant has been growing kills the organism causing the disease, and a new plant can at once be planted in the same position. If this disease is troublesome, soil and seed boxes in which it is proposed to raise young plants should be treated with the solution before the seed is sown. If a box of seedlings begins to damp off they may be treated with the solution *in situ*, but it would be wise to get them pricked off as soon as possible.

Grease banding for winter moth

(F. E. F.).—Your query on page 76 makes me wonder if winter moth is really the cause of your trouble. If grease bands are put on properly and a good brand of "grease" is used a marked improvement ought to be seen the first year. I found with my own trees that, after I had banded the first two years, the numbers of female moths caught on the bands decreased very much. My best band the first year on a tree 14 inches in circumference had 187 females on. The second year I did not get half this number, while during the third year round about a dozen only were found on each band. This was as it should be, but I would like to point out that I had always taken care to carry out two things very carefully. One was to remove the grease bands early in April and burn. Secondly, I have always made a practice of whitewashing the trunks of the banded trees so that any eggs laid on the trunks of the trees below the band would be sealed in. If you are again troubled with caterpillar this year you should send in some specimens and let GARDENING ILLUSTRATED tell you if it is really winter moth that is causing the trouble. My worst pest this last year was the caterpillar of a tortrix moth, against which grease-banding is of no avail.

J.

SHORT REPLIES

C. J. Ufford.—(1) You cannot do better than mulch with rotten manure. This, in addition to benefiting the plants, also retains the moisture, which, if the soil is dry, ought to be given frequently. (2) Merely cut off any shoots that spoil the symmetry of the hedge, using a knife for the purpose. This is best done in the spring.

NAMES OF PLANTS

W. H. Shufflebotham.—1, Thuja dolabrata; 2, Sequoia sempervirens; 3, Cryptomeria japonica; 4, Sciadopitys verticillata.

A. B. C.—The specimens sent were insufficient to properly identify the plant. It is probably one of the Cupressus. C. funebris is often grown as a pot plant.

E. A. H.—Probably a Tillandsia. Must have flowers.

Obituary

MR. JAMES WHYTOCK, V.M.H.

We regret to announce the death, at the age of 80, of Mr. James Whytock on Sunday, January 31st, at 15, West Savile Road, Edinburgh. Mr. Whytock was formerly head gardener to the Duke of Buccleuch at Dalkeith Palace gardens, Dalkeith, and retired in 1921 after 21 years' service. He filled a prominent place in the gardening world, and for a number of years was President of the Scottish Horticultural Society. He was presented in 1914 by the Royal Horticultural Society with the Victoria Medal of Honour. He was also awarded the Neill Prize by the Royal Caledonian Horticultural Society. Mr. Whytock was President for four years of the Botanical Society of Edinburgh. The funeral took place on Wednesday, February 3rd, the place of interment being Eskbank Cemetery. He is survived by his widow and four sons.

Benn Brothers' Other Journ

The Cabinet Maker.—Special Pram ber; Completion of Review of the L Exhibition, with Special Attention to Models; Notes from the Home Jou Dimensions of the Modern Home.

The Chemical Age.—"The Chemist Works," by Dr. Charles F. Roy; The bustion of Solid Fuel; New President Chemical Society (Photograph); M Metallurgical Supplement; An Exc Analysis of the World's Iron and Statistics for 1924; "Manganese: Its and Its Uses," by Dr. G. Malcolm Dy

Discovery.—"Private Sea-water Aqu by T. A. Stephenson, D.Sc., and W. Evans, B.Sc.; "Should Scientific Re be Rewarded?" by J. B. S. Haldane.

The Electrician. — "Electric Tr Equipment," by E. H. Croft; "All-E Houses," by A. J. Milne; "The Econ of Electric Transmission," by J. Rob

The Fruit Grower.—Apples, Pape Paraffin, Cold Storage and Transp Fruit; Leaders of our Industry (Illust

The Gas World.—Monthly By-P Coking Section; Coke for Blast Fur The Storing of Coal; Piping of New H for Gas.

The Hardware Trade Journal.—Br Oldest Ironmongery Business; The R of Stock to Profit; Enamelled H ware Inquiry; Opponents' Case O Perambulators for 1926.

TRADE NOTE

The 90-year-old firm of Thomas Gre Son, Ltd., of Leeds, inaugurate the by announcing several interesting ne tures. Among their hand machine Model De Luxe "Silens Messor" deserves mention. Its cutting cylind nine blades instead of eight, incorpora easy free-wheel action, and is easily ad being fitted with self-aligning ball be The aluminium chain-gear case forms bath. An increase in the diameter of th rollers from 8 inches to 9½ inches res easier travel, and the front rollers are light steel instead of wood. The gra capacity has been increased. The ne Luxe "Silens Messor" weighs only more than the ordinary model. Super and green enamels give a pleasing an ing finish. Made in three sizes, 12 14 inches, and 16 inches. A complet trated catalogue can be had from T Green and Son, Ltd., Smithfield Iron Leeds, and New Surrey Works, Sou Street, London, S.E. 1.

The nervous reflex in plants

Sir Jagadis Chunder Bose, whose botanical discoveries have evoked wor interest, has written an account o which Messrs. Longmans, Green, a Ltd., will shortly publish. The comp count will be in two volumes, but th which is nearly ready, will deal w nervous reflex in plants.

CATALOGUES RECEIVE

Kelway and Son, Langport.—Man 1926.

Clarence Elliott, Six Hills N Stevenage, Herts.—Seeds of choice and herbaceous plants, 1926.

Barr and Sons, Covent Garden. and tubers for winter and spring plan

John Golding, Fordham, Ely, Ca Flower and fruit-tree list, 1926.

H. Correvon, Floraire Nursery, Bourg, near Geneva, Switzerland.—S alpine and perennial plants.

Bostal Nurseries, Ltd., Bexley H Everything for the garden.

Godfrey and Son, Exmouth, D Short concise list of Chrysanthemum

GARDENING ILLUSTRATED

2449—Vol. XLVIII. FEBRUARY 13, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

TABLE ...GNS 106
in the green-hardy 103
a selection 96
THE WISE ...RT PENDU 95
Welling- 96
phylos Uva- 96
BEGONIAS FOR A COLD GREEN-HOUSE 101
Blue Gum trees (Eucalyptus) 98
Cabbage white butterfly 108
Celery, late 106
CLEMATIS JOUINIANA 98
Corokea virgata 96
Currants, Red and White 104
Delphinium Nora Ferguson 97
Fibrex pots 108
FLOWERS AT KEW, FEBRUARY 101
Freesia Wistaria ... 96
FRUIT CULTURE; WALKER'S SYSTEM OF 104
Fruit trees clean, keeping 95
Fruit trees, spraying, bees and 96
Heliotrope, winter (Petasites fragrans) 96
HOLLIES, THE BEST TIME FOR PLANTING 97
Hotbeds, forming 105
JASMINUM PRIMULINUM 101
Onions for autumn storing 105
PÆONIES, HARDY HERBACEOUS ... 99
Palms, potting 101
Peristrophe speciosa 101
Plant destruction, mice and 108
Potato growing: Is there a decline? ... 106
Propagator, a home-made 97
Rose Etoile d'Hollande 97
Saxifraga Burseriana rosea 106
Snapdragon, the evolution of the 102
SNOWDROP AND SNOWFLAKE 103
Stachys lanata 99
Sweet Pea, the evolution of the 106
Vines, mealy bug on ... 96
WILDINGS, CANADIAN, FOR ENGLISH GARDENS ... 102

Keeping Fruit Trees Clean

With special reference to February spraying and lime washing

HICH is the best method of keeping the fruit-trees clean? What is a good winter wash, and when is the best use it? These are the questions so sked by amateurs, anxious to do the ing and who find themselves more or wildered with the multitude of remevised and the expressions of conflictinions on the subject. Many official tions and text books, although quite and clear, and helpful to the proal, are sometimes rather alarming to ateur, and give him the impression is half-dozen fruit-trees are highly ible to numerous different pests and s, all of which call for their own l or preventive measures, and he ften wonder whether the fruit he is to get will be worth the necessary

us assure the beginner at once that look is not nearly so serious as might sight be imagined, and that with tlay and a little careful forethought den trees can be kept clean and free rouble, excepting possible epidemics, nay demand heroic measures.

desirable that we should concentrate orts on a single g operation will deal with a umber of pests at nd this can only effectively during mant season.

a common oce at this time of r to see the ent busy limewashboles of his fruitvith a brush as s he can reach. an excellent and al operation, but wash only the This is only half t! Lime has excleansing and cidal properties, ees are always or it. It also has rther quality of ing numbers of eggs and pretheir hatching. it be remembered e eggs of various and other ininsects are denot on the trunk of trees, but on the extremities of the twigs. Nature has endowed all insects with an unerring instinct to make provision for the feeding of their young; therefore they do not lay their eggs in barren places.

Let us consider the winter moth as an example. In the autumn the female, which cannot fly, crawls up the tree and along the twigs until she finds the buds which will open in the spring. There she lays an egg or two, glueing them to the base of a bud, and so proceeds until her work is done. Then she dies, but her offspring are provided for, and when, in the spring, the young buds burst open, the baby caterpillars also appear, and find their food at hand.

So if we decide to adopt the beneficial, though rather untidy, method of limewashing our garden trees, let us do it thoroughly and cover the trees from top to bottom. The best way to do this is to take 2 lbs. of good quicklime and slake it gradually to the consistency of milk, then add a handful of common salt for adhesive purposes, and make it up with water to 10 gallons. Apply it forcibly with a syringe or knapsack sprayer, but strain it first or it will clog the nozzle. The most effective time for this operation is towards the end of February or early March, as late as possible before the buds begin to open.

Where trees have been long neglected—are covered with Moss and Lichen, and generally dirty—a caustic wash is the remedy. One lb. of caustic soda and 1 lb. of soft-soap to 12 gallons of water applied forcibly with a sprayer in January. But caustic soda must always be regarded as an extreme measure, not by any means an annual operation. It is an unpleasant material to use, burning clothes and proving extremely painful if splashed on the face of the operator. It should be handled with great care and used only when the condition of the trees demands strong measures.

Undoubtedly, by far the most effective and the safest of winter washes is the recently-introduced tar-oil wash, or carbolineum preparation. This was originally introduced by a firm of Dutch manufacturers in Holland, and, its effectiveness once demonstrated and proved, it soon caught on, and is now used extensively, in one form or another, and with great success in all the commercial fruit-growing districts. A similar wash is now made by several of the British manufacturing firms and is proving satisfactory.

The great value of this preparation lies in its egg-killing properties, as it actually destroys, or renders infertile, the eggs of insects by simple contact.

C. H. Middleton.

Apple Court Pendu Plat, the Wise Apple
So named because in standard form it is the last to open its flowers

The Wise Apple (Court Pendu Plat)

THIS dessert Apple, which is now in season, is a great favourite on account of its keeping qualities. It is a distinct-looking Apple, having a flattened appearance and a firm flesh. The tree does not make a strong growth. It makes a compact bush on the Paradise, but we prefer it as a standard for late supplies. In standard form it is the last to open its flowers, hence the name of "Wise Apple." The

fruits are very firm and sweet, of a bright red colour, with russet markings. It will do well in most districts. We have bush trees which fruit freely, but the fruit does not keep so well as that from standards.

Arctostaphylos Uva-ursi

This forms a spreading mass of bright evergreen pendulous branches. The berries, which appear in autumn and last through the winter, are bright red, being preceded by loose clusters of pinky-white flowers. In the rock garden, rambling over a big stone, the spreading branches are seen to advantage. It thrives well in sandy peat in any position.

H. STEVENS.

Winter Heliotrope (Petasites fragrans)

If of a rather dingy lilac colour a bowl filled with the sweet-scented flowers mixed with Ivy leaves is welcome in the home during January and early February. The spikes are each about 1 foot in length and therefore serviceable for the purpose. If grown in odd corners and about the base of thinly-planted shrubs of the commoner kinds this old plant blooms profusely, the air around being laden with its fragrance. It is not, however, a plant to introduce inside the garden proper, as it becomes a weed, spreading with amazing rapidity. Grown in such places as here recommended it is not to be despised.

M. E. G.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Freesia Wistaria

I VERY much appreciate Mr. Chapman's kind remarks about this Freesia, and coming from him, a Freesia grower, makes his opinion of the plant a valuable one.

In my humble opinion it is the high-water mark in Freesias. So far as I know, at the moment, and in this colour will be difficult to beat. To improve on it I can only suggest a very strong scent and a richer colour, with less white in the throat; and if one gets these one may lose some of its other good points. So one must be content with what one has.

G. H. DALRYMPLE.

A selection of Apples

In your interesting paper several notes on Apples recently have attracted my notice. As manager of a very large fruit farm my interest in Apple culture naturally is keen, and perhaps a few short notes my experience of many years has made may be worth while.

Recently a correspondent of yours wrote on Allington Pippin, advising people to plant this variety and stating how good it was and how highly acceptable to the public as a favourite Apple. My experience of this variety—and we grow, perhaps, 1,000 to 1,500 bushels in good seasons of first-class fruit—is that, of all Apples, this is most difficult to sell, and we are informed by market salesmen that this Apple is not cared for by the public generally.

I have boxed this variety and then had to accept very low prices for the fruit afterwards. It is difficult to understand why this is so, for Allingtons are good cookers and good croppers every other season when large enough (this point I have not seen mentioned), and also quite a good flavour as dessert to some palates. It is rather sharp and acid if eaten too soon. If kept very long it also proves rather apt to shrivel.

Another note that interested me was the long-keeping of Apples. I had Apples last September that had been kept from 1924 of an old variety called, locally, Gooseberry Pippin. These were perfectly sound at that date, and I fear many of our newer varieties lack the firmness and soundness of keeping qualities that characterised the old-fashioned varieties, such as, to name a few at random, Northern Greening, French Crab, Graham, Hanwell, Souring, and Golden Nobs, so beloved of the bygone generation.

Our best keepers of modern Apples to-day are Newton Wonder, Annie Elizabeth, and King Edward VII. This last-named is a great keeper and the finest late Apple I know to-day. I have it in splendid order at this date and expect to keep it for some time yet to come.

Just one more note on your article of cooking Apples for beginners (issue January 30th, page 63). I quite disagree over the inclusion of Bismarck. This is another Apple quite out of favour for market work, and very difficult to give away with us, and we grow many.

The Apples for succession are, in my opinion:—

(1) Early Victoria.—The best of the Codlins.

(2) Grenadier.—A very fine Apple left out by your correspondent.

(3) Stirling Castle.—Very inclined to canker.

(4) Lane's Prince Albert.—A good reliable cropper with us always.

(5) Bramley's Seedling and (6) King Edward VII.—Newton Wonder is not reliable enough, though we got the Gold Medal with it this year at the Imperial Fruit Show.

Too many varieties are grown altogether, and a man who pinned his faith to the above six for cooking purposes would have the pick of the basket.

B. J. MERCER.

Amberfield Farm, Chart Sutton, Near Maidstone, Kent.

Wellington Apple

I have read what Mr. W. E. Wright says on this subject in your last issue, and I think his being further north and his soil may account for his views. Certainly here Wellington is our best cooker, and of all the kinds of Apples we grow, the best cropper. Our trees are not pyramids, but standards. Mr. Wright quotes what I say about its being the latest eating Apple, but only remarks on this, that it is a good cooking Apple. I consider it our best cooking Apple, but I hope your readers will try it as a dessert Apple in July. Can Mr. Wright tell me of a better dessert Apple for July?

THACKERAY TURNER.

Godalming.

Corokea virgata

So vast is the profusion of exotics hardy in the climate of Britain and so greatly has the number of desirable species been increased during the present century that it would best serve the interest of amateurs if their attention were drawn specially to the most ornamental species in each genus. Wherefore when I read "T. W. B.'s" commendation of Corokea Cotoneaster (page 85) it occurred to me that the superiority of C. virgata should be more generally recognised. Its yellow flowers are very similar to those of C. Cotoneaster and are as freely produced, but the habit of the shrub is quite different from the tortuous tangle of the other, the growth being straight and free, an oblong-spatulate leaves from 1 inch inches long. The young growth is c with dense white tomentum which falls autumn, leaving the twigs smooth and ashen-brown. C. virgata is figured in Mag., t. 8466, and is tentatively ide with a species collected by Cheeseman, which he had seen neither flower nor (Manual of New Zealand Flora, page It is noted in the Bot. Mag. that the had not been seen, the plant in the Tem House at Kew not having borne any, Monreith it has grown 7 feet high in th and has ripened yellow drupes in th three years. The three species describ Cheeseman—C. buddleioides, macro and Cotoneaster—all bear red drupes.

Corokea virgata is evergreen, bu foliage is of a sombre tint in winter, bri ing up attractively with the young gro spring.

HERBERT MAXW

Monreith.

Bees and spraying fruit trees

Last year beekeepers in several pa England suffered severe losses throug spraying of fruit-trees during the bloss period with arsenical washes. It is that fruit growers will remember th honey bee is one of his greatest frien materially helps his fruit crop. The ing of fruit trees with arsenical should be done *immediately after the soms have fallen* and not when the tr actually in bloom.

L. BIGG-WI

Wells, Somerset.

Mealy bug on Vines

The use of tar and clay I strongly obj I have had charge of vineries where bu very prevalent and never yet used the ture of tar and clay. I have seen it perhaps not altogether without result have had the misfortune of having to the rods the following season. Furthe I have seen the rods laid low by t judicious use of a tar mixture.

If Vines are raised from eyes for vinery on the establishment, and this i a common method nowadays, there sho no mealy-bug on them if careful wa kept. For Vines of a considerable age is perhaps more excuse, but bug is an faulter, and the war years offer but lit cuse for its increase.

I do not go so far as to misdoubt the of the various writers' experiments wi etc., but I am confident bug can be e ted without them.

Where bug is observed in a vinery there are no other occupants the work termination is simplified, but where th other subjects in pots there is bound bug amongst them, too, and these ns thoroughly overhauled before being re elsewhere or the offending bug will to colonise new surroundings. Ass then that the other occupants of the have been thoroughly cleared of the p best time to launch an attack is wh Vine foliage begins to fall. As soon foliage is down the Vines may be pruned and all leaves, stalks, and pru and all old ties, should be carefully pic and consigned to the fire. With the a rake scrape off all surface soil th come and consign this also to a fire.

It is a well-known fact that mea hibernates in cracks and crevices in th and this of necessity must be remove the Vine rods. Lay down mats on t der and with an old, blunt knife or remove all old bark from the rods. handy a jar of methylated spirit and a and wherever a suspicion of bug is see this is easily noticeable by the woolly

Hollies planted in January

A gateway in the 80 yards Holly hedge. The top of the arch is about 9 feet high

The 80-yards Holly hedge. The result of planting small seedlings in January, 1911

ı dab with the spirit. The scraping gather up carefully all rubbish and Next make up a strong soft-soap solu- ıirly hot, and to every 30 gallons add a ›ful of paraffin. Thoroughly saturate odwork and glass and wash down with :s and cloths, afterwards swilling down lean hot water. Rub all wires and sup- with a saturated paraffin cloth and use ethylated spirit freely where the wires hrough the supports.

v we come to the washing of the rods, ıis calls for the most careful attention, ›eing exercised that the buds are not ;ed. Take ½ lb. of Gishurst Compound 'ork it into 1 gallon of hot water till it lissolved. With an ordinary sized paint thoroughly saturate every portion of ine rods from the border to the top, buds, and main stem. The mixture be as hot as the hands of the operator bear it comfortably and should be ghly brushed into the bark. When the re dry go over them again and fill up ›les with Gishurst Compound and paint with styptic or painter's knotting. wash the back wall with hot lime to add a good cupful of paraffin to ›ns of limewash. Scrape off 1 inch of ırface soil and burn if possible, and all ventilation open until the house is for starting, or as the weather con- ; permit.

:ided no plants are put back into the all will be well till the house is closed rting, but no matter how thorough the ıg is done there is always the likeli- of bug reappearing. A close watch therefore be kept for this, and a look ıe rods during the brightest periods of y will locate any bug that may be on ›ve. A dab with the methylated spirit, should be kept close at hand, is all that led. R. ASTLEY.

nikier.

A home-made propagator

ı reference to the lucid description of a ;ator by "East Anglian" (January ›. 43), I find it an inexpensive plan to ›ose sheets of glass placed over the box ‹-like enclosure, instead of a hinged The advantage is that when the inner surface of the glass is bedewed with moisture it is only necessary to reverse the glasses, placing the dry side downwards. There will then be no need to wipe the glass, as the moist side, being now exposed to the atmosphere of the house, will naturally dry by the time it is again necessary to reverse them.

WILLIAM F. ROWLES.

The Gardens, Hardwick House, Bury St. Edmunds.

The best time for planting Hollies

GARDENING books with practically one voice say that the best time for planting Hollies is either early autumn or early May, although they add that such planting may be done almost at any time, providing the Hollies have "balls" of earth on their roots. One standard work which I often consult and read with much profit states that the "most dangerous" time to move evergreens, including Hollies, is from Christmas to April, and that the work "can only be done safely" in early autumn or May. But however much one may value books, one's own experience must be the chief guide, and my own experience tells me that January is a very good month indeed for planting Hollies, whether they have earth on their roots or not. My conversion to this view came about in this way. In 1911 I moved house and took with me enough Hollies to make a hedge about 80 yards long in my new garden. The inhabitants, when they saw the 1 foot hollies being planted, said that "none of us would live to see them make a hedge." Knowing how well the ground had been prepared I smiled, but I expected a good number to die as the planting was done in January, and all the books said this was a dangerous time. But only one Holly died, and in 1918, when my gardener came back from the war, he found a hedge that badly needed cutting with the shears, but a very well-grown hedge of 7 feet. Similar plantings have produced similar results. Only last year I planted about 25 yards of Holly hedge in January, the plants being 2 feet to 3 feet high. None died, and one grew 10 inches. This January I planted about 70 yards of Holly hedge, the plants being mostly 1 foot high, but a few were larger, and one was 5 feet. We kept as much earth on their roots, of course, as possible, but the earth dropped off most of them. Immediately afterwards came severe frost. My thermometer on a south wall registered 22 degs. But not one of the Hollies has "turned a hair." And they will need no watering nor syringing of leaves, nor do I expect any to shed their leaves, much less to die. I feel sure that the safest time to plant Hollies is when there is most certainty of a moist atmosphere and a moist soil. It does not seem to matter whether the roots are active or not. I enclose a photograph of the 80 yards long Holly hedge taken the other day. The only person whose advice to plant in January which I have seen was a writer in your paper some little time ago. R. M.

Watton, Herts.

Rose Etoile d'Hollande

I am sorry to have to disagree with two such eminent gardeners as Mr. Markham and Mr. Wright. My notes on this Rose were written from actual experience. It was under my personal observation, day in, day out, all the season. My plants are on the seedling Briar and were not favoured with special treatment. In this district we had a prolonged drought, the severest test a dark red Rose can have. I can assure Mr. Wright the colour was there; grand colour, too; and the scent equal to Arthur Cook or Hadley. Now Mr. Wright has become almost a neighbour of mine I shall be pleased if he will come and see my Roses at Victoria Nursery, Burbage. I feel convinced he will then, like myself, consider Etoile d'Hollande a grand Rose. VICTORIA.

Delphinium Nora Ferguson

With the near approach of the spring planting season I would strongly advise all lovers of this grand flower to plant Delphinium Nora Ferguson. This grand Delphinium received the Award of Merit R.H.S. in 1924, and is a lovely pale blue flushed pink. It is a good grower and the large semi-double flowers are carried on a fine spike. Of all the Delphiniums I grow, not one has given me greater pleasure than this, and it has been the admiration of scores of visitors. It's too good to be missed. VICTORIA.

Blue Gum Trees (Eucalyptus)

THE Eucalyptus belongs to the Natural Order Myrtaceæ, and includes a very wide range of trees and shrubs. All are beautiful and many are extremely quick growers. Generally speaking, they are not fastidious as to soil, but some attention must be paid to position, as there are varieties which will flourish in swampy places, and, on the other hand, there are mountain or alpine forms needing dry quarters.

Considering the vast number of species there are comparatively few which can be grown in the open air in the British Isles. There are, however, many beautiful varieties which can be grown in cold conservatories or even on walls outside. These varieties only reach a few feet in height and must not be confused with the giant-like trees of the Australian forests. All are beautiful in foliage alone, while many of the varieties bear tremendous crops of flowers. The timber is used for practically all purposes in Australia and also in many other countries, it being of a tough and very enduring nature. Of some varieties the bark is used for roofing. The size of the pieces of bark which may be obtained may easily be imagined when I state that one piece with a little manipulation can be made to serve as a canoe.

Of recorded giants I think E. amygdalina heads the list with a height of 470 feet. Another giant of the same species, known as Big Ben, reached 400 feet in height, with a circumference of 56 feet. There is, or was, a photograph of the base of this tree in No. 1 Museum at Kew. These heights easily top the vegetable kingdom, being many feet higher than Sequoia gigantea.

E. globulus is the species commonly met with in this country, and there are some very large trees in existence, that is, for the British Isles. It is the Blue Gum, and is frequently used for sub-tropical work as its juvenile foliage is of a beautiful glaucous blue. E. Gunni, a native of Tasmania, is, however, a hardier species and soon makes a large tree. There are good specimens of this species in several parts of the country. There is a splendid tree in the heart of Sussex from the seed of which I have raised many hundreds of seedlings. At Dartmouth and other places in the West self-sown seedlings appear as weeds. Another species close to E. Gunni and hardy is E. urnigera, also a native of Tasmania. E. coccifera, another hardy species, has delightful glaucous foliage and bears purple flowers. All the foregoing varieties like plenty of moisture and are gross feeders. E. cornuta, a slow-growing shrub, is quite hardy in sheltered positions where the ground is not too wet in winter. It has smaller foliage than many others, rarely exceeding 4 inches in length and bearing red and yellow flowers; native of Australia.

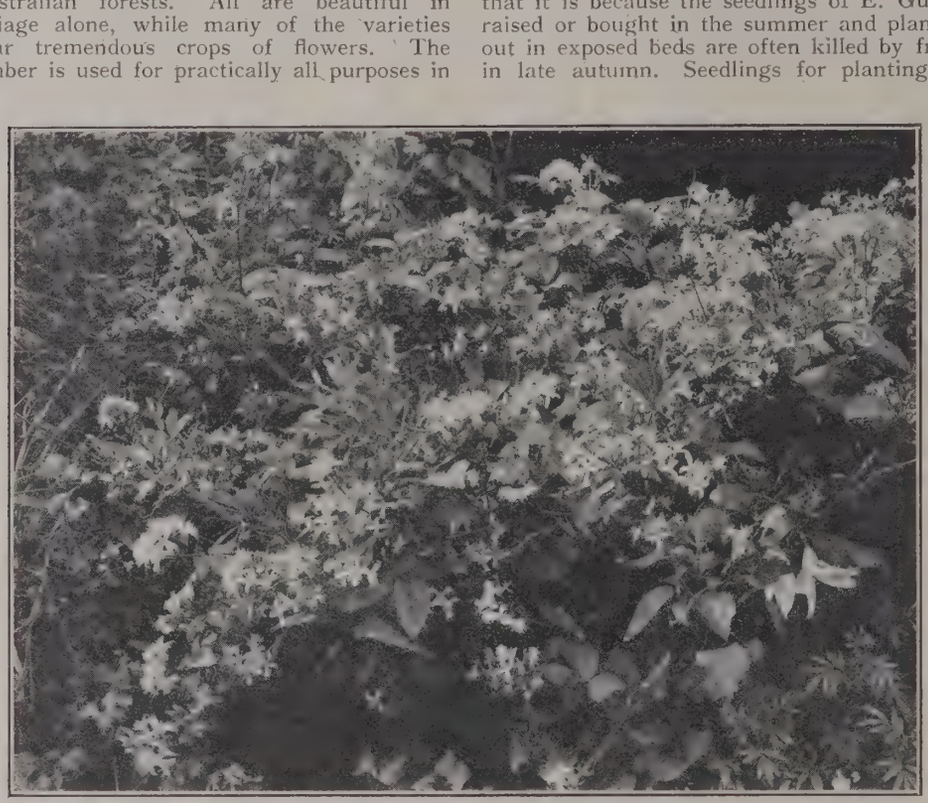
There are many places where the Eucalyptus will grow, but very few people think of planting it. One can only surmise that it is because the seedlings of E. Gunni raised or bought in the summer and planted out in exposed beds are often killed by frost in late autumn. Seedlings for planting in permanent positions should be grown in pots for at least two seasons, requiring sufficient shelter the first winter to exclude frost, finally planting out in the month of May. They must be well staked, allowing the stake to be several feet taller than the plant. Keep well supplied with water and after a time feed with weak manure-water, and by autumn the plant will easily overtop the stake, excepting E. cornuta, which may be easily grown in a pot for four or five years before planting out. A few of the best positions for Eucalypti are by the sides of streams, on the southern fringes of woodland, in open woodland where sheltered glades occur, on the southern sides of hills, or in ravines, valleys, and for some varieties at the edges of still lakes or swamps. (E. Gunni is known in Australia as one of the Swamp Gums.)

A few of the less hardy varieties, such as E. MacArthuri, E. Maddeni, E. resinifera, and, under dry conditions, a comparatively new variety, E. rubida, will flourish. Some of the smaller-growing varieties, and which, when better known, cannot fail to find many admirers, are well worth a place wherever suitable conditions prevail. Many kind live in a large pot or small tub for year owing to restricted root-room never produce masses of flowers of varying s while the fragrance given off by the foli an additional attraction. All shou grown in a mixture of fairly strong lo little sand and some thoroughly decaye soil, or very old manure. Firm pott also necessary. During the summer th should be stood in receptacles cont water, while many may be used for te and in vestibules. A few good varieti such treatment are E. cæsia, with deli foliage and pink flowers. This in W Australia reaches about 12 feet. macrocarpa the foliage is about 6 inc length, flowers very large, brilliant re does not exceed 15 feet, but more ofte 8 feet or 9 feet. One of the choicest va is the lovely E. miniata, which bears flowers of a brilliant vermilion and al beautiful foliage. Seeds of this varie sold at about one penny each. E. tetr is noted for its square fruits and red fl It rarely reaches 12 feet and is good fo culture. E. crucis (the Eucalyptus Southern Cross) has small silvery foliag bears golden-yellow flowers, and in its soil reaches 20 feet or so. E. Foresti another lovely variety bearing bright g yellow flowers. Even when quite sm grows up to 15 feet. E. priessiana lovely yellow flowers and beautiful and grows only about 12 feet, being a variety for a wall. E. tetragona bears flowers of a good red and pleasing foliage. It is not so large as some ties, the largest leaves being about 4 in length. This variety makes a good tree and reaches sometimes to 15 feet.

In addition to the varieties mentioned are many beautiful sorts which have found homes in the British Isles, but in days of high-priced fuel and other charges on the upkeep of heated house deners are turning to the large and lists of half-hardy shrubs to fill their and at the same time cut down to a min the fuel bills. I have now on trial new varieties of Eucalyptus and shall to broadcast their merits when the arrives. I have, for many years, great variation in the foliage of batc seedlings, but this disappears as the mature, and there is no variation flowers, these being always true to ty

I think one of the chief reason Eucalypti are not often seen in the glasshouses up and down the country fact that they are so seldom offer nurserymen, even the seeds are omitte most lists, excepting, perhaps, E. gl However, I am glad to note that a f Paris house offers no less than 71 vari seeds of Eucalyptus, mostly of the h varieties. These are, I think, suffici any beginner to make a good selection for indoor or outdoor culture. JOHN I

Paignton.



Clematis Jouiniana, a garden hybrid

Clematis Jouiniana

THIS useful and free-growing Clem a natural hybrid of the native C. and C. Davidiana. The specific n from that of Monsieur Jouin, the man a large nursery at Metz, where it app have been first observed. But it oc other gardens, for in that of the writer note two examples came in one year eight years ago. A number of Vitalb lings always appear in different parts garden, but the leaves of these tw noticeable from their larger size, stif ture, and darker colour. It has the of Davidiana in that it is herbaceo takes after Vitalba in its rampant

Imperial Pæony Princess Duleep Singh

e flowers show the features of both parents combination. The colour may be all a iet white, or white tinged with blue-rple. The yearly growth may be anything to 18 feet; it is longest when it is clamber-r up some tree such as a Holly. It is use-in the back of the flower border for train-ing forward over plants that have gone out of bloom. In the example shown some early summer flowers had a white Everlasting Pea, which blooms in July, trained over them. At the back of this again is the Clematis, trained over the Pea and in flower in the end of August. G. J.

Hardy Herbaceous Pæonies

Their large flowers rival the finest Tea Roses in delicacy of tints. They should be grown in all gardens—a light, rich soil suits them best

DURING the months of June and July these constitute one of the chief features of the hardy flower garden, and too ich cannot be said in their praise. They ssess an exquisite perfume similar to that Tea Roses, and their large, handsomely-med flowers possess a striking variation colour, varying from the deepest crimson the purest white.

HARDINESS.—The first point in favour of onies is their perfect hardiness. It may truly said of them that they are "hardy as Oak." In the severest climates the plants uire no other protection than that which y afford themselves. Then their vigorous oit and healthy growth, freedom from all eases and insects, are important arguments favour of their cultivation. Growers of ses know well that their flowers are ob-ned by great vigilance and care. Not so h Pæonies, with which when once planted is done. Each succeeding year adds to ir size and beauty. The foliage is rich l glossy and of a beautiful deep green our, thus rendering the plants very orna-ntal even when out of flower.

POSITION.—The herbaceous Pæonies rank ong the best of hardy border or shrubbery nts. There are generally to be found, n in gardens of limited size, spots so much ded that scarcely any flower will thrive in m. In such places Pæonies would grow luxuriantly; the colour of their blooms would, in many cases, be even more intense, and they would last much longer than flowers fully exposed to the sun. They may there-fore be made useful as well as ornamental even in small pleasure grounds, although the proper place for them is undoubtedly the fronts of large shrubberies, plantations, or by the sides of carriage drives. Where dis-tant effect is required no plants so admirably answer the end, as their size and brilliancy render them strikingly visible, even at long distances off. Planted on either side of a Grass walk, the effect which they produce is admirable, especially in the morning and at or near sunset, and when planted in masses, as, for instance, in beds in pleasure grounds, they are invaluable for lighting up sombre nooks.

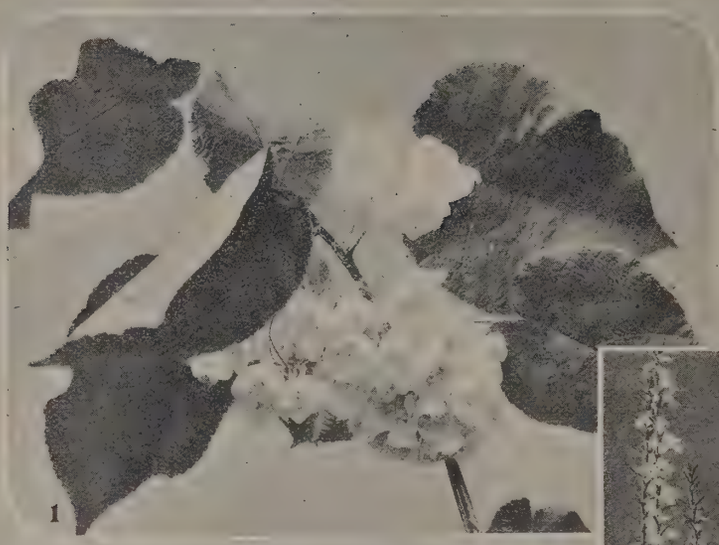
SOIL AND PLANTING.—Herbaceous Pæonies succeed in any soil and in any position, but a good moist loam, particularly when enriched by the addition of cow manure, is the soil best suited to them. They can be planted at any time of the year, but from October to April is the best. Take care to have the ground well prepared for their reception by manuring and trenching it to the depth of about 3 feet, and on no account should they be planted nearer than 4 feet apart in each direction. They must not be expected to flower well before the second or third year after planting. Open-air culture renders the plants robust, and they do not require to be shaded from the sun until they flower, when some slight shade prolongs and preserves their delicate tints, and also enables the flowers to become more thoroughly developed than they otherwise would be; watering the plants judiciously now and then, as soon as the buds are well formed, with liquid-manure also greatly benefits them. It is likewise, of course, necessary when the tufts have be-come very strong, and have impoverished the soil, to separate and transplant them on fresh ground.

It is well to plant in some position where they may not be disturbed from year to year. Being of a vigorous and enduring nature they will succeed where many other flowering plants fail, growing vigorously and flowering freely even in the poorest soils. They are capital subjects for the foreground of a shrub-bery. They will be grateful for a coat of rotten manure applied in winter.

We are indebted to Messrs. Kelway and Son, Langport, for the beautiful picture of Imperial Pæony Princess Duleep Singh, which accompanies these notes. The variety is extremely lovely, with very large pink flowers and a mass of golden anthers. The raisers write: "We would not have parted with the original plant for £100." It is now, we ob-serve, listed at 21s. each, and it has gained an Award of Merit at York. C.

Stachys lanata

This is not frequently met with. Its unique appearance is due to the thick, woolly foliage and stems, which are of a silvery-white hue and provide a welcome change during the summer from the glaring colours of other plants. It will thrive with very little soil, and even that may be only of the poorest character. For this reason it is admirably adapted for planting on arid parts of the rock garden, where plant life is difficult to estab-lish. H. STEVENS.



FEBRUARY GREENHOUSE FLOWERS AT KEW

1. Dombeya, a valuable winter flower in the Mexican House. The flowers are pearl white and fragrant, and the soft velvety leaves are heart shaped.

2. Jasminum primulinum from China, with bright yellow semi-double flowers. Hardy only in the mildest counties, now flowering in the Temperate House.

3. Daphne odora rubra (syn. D. indica rubra), a deliciously fragra evergreen shrub. It is slow growing, and requires greenhouse treatmen

4 and 5. Epacris, pot grown in the Temperate House. Free-flowerin Australian shrubs of Heath-like habit.

6. Abutilon, a greenhouse climber of the Mallow family, wi pendulous bell-shaped flowers on slender stems. Trained to ro rafters and pillars in No. 4 House at Kew.

February flowers at Kew

ISITORS to Kew this month will have an opportunity of seeing a great many plants in flower, more especially under ;. That indispensable Chinese shrub ıamelis mollis is still the chief object of est out of doors, but the greenhouses, in- ıng the Alpine House, Temperate House, No. 4, are more or less full of interesting ts in flower, and are likely to remain so ome weeks to come.

ALPINE HOUSE

though later than usual, the alpine house ɔw gay with bulbous and alpine plants, f which have been grown in pans.

ıere is the bright golden-yellow Adonis rensis and the large Helleborus niger has been in flower for weeks.

ıanthus Elwesii, one of the sturdiest of ıowdrops, is making a good show in the ıe House and a still braver show in the . Anemone Hepatica and its variety ılosa closely resemble one another as seen ering in the Alpine House.

f Saxifrages there are a great many, two he most interesting in pans being S. ıæ Theresiæ, quite crimson in bud, and Petraschi, likewise in bud and full of nise.

is Vartanii, native of Palestine, of more ss Cambridge blue, is flowering well.

he hardy Cyclamens, which appear to be ering exceptionally well this year, include pure white C. Coum album, the deep red 'oum, and the deeper red C. ibericum.

alax aphylla, with green leaves edged ıson, is a noteworthy pot plant for its ıge alone. It is a North American sub- and is grown in pans of peat.

IPERATE HOUSE AND No. 4

he flowers of the Temperate House include cias in great variety, the lovely A. leyana and others hanging in huge oons from the rafters. We note the semi- ıber Canarina campanulata, native of the ıary Islands, with drooping flowers of ıge hue netted with red veins, and many r plants including Dombeyas, Daphnes, Epacris, illustrated on the page opposite. he near future Rhododendrons are to have ouse to themselves, though we were not ɔurably impressed with the house in con- ıction, neither is it in keeping with the d architecture of the Temperate House to ch it is attached.

he deep pink Epacris hyacinthiflora and bright yellow Jasminum primulinum and ɔhne odora are very attractive.

he show house of Kew, popularly known No. 4, is bright with many winter flowers. were interested to see a large and well- wn batch of the pale lilac Strobilanthes ɔhyllus. Other plants in No. 4 worthy of cial mention are Abutilons, bearing a cession of flowers on slender stems with -veined petals and golden anthers, trained roof rafters and pillars, the Heath-like ıcris, illustrated on the page opposite, the ow Linum-like flowers of Reinwardtia ;yna, and forced Forsythias with masses golden bell-shaped flowers.

'he African Hemp (Sparmania africana) is) flowering. It is a favourite and easily- wn subject for greenhouse and conserva- y, with white petals and golden stamens ich, curiously enough, are sensitive to ch. The leaves are like those of the com- n Lime, to which family it belongs.

H. C.

Potting Palms

At this season of the year I like to go ough the Palms and give them a thorough ɔnging and repot any that require it. It is well to state, for those of little experience, that Palms will thrive for a long time in comparatively small pots if the soil is in good condition. It is important that the compost used for potting should be moderately dry, the plants potted firmly, and the stems kept well above the surface of the soil. The compost should consist of good fibrous yellow loam, and if this is really good a sprinkling of sharp sand is all that is required for potting the small plants. For the larger plants I give a liberal addition of well-rotted stable manure, and when the loam is close and heavy some peat is also used. F. H.

Begonias for a cold greenhouse

BEGONIAS have always been my favourite flowers, and after many experiments I have found the following method to suit them. Living, as I do, high upon the North-East Coast, we have very cold, bitter winds, consequently cannot start the tubers in the greenhouse. I get over this difficulty by utilising a spare bedroom window with a table in front. I start my tubers the last week in February or first week in March (according to the weather) in shallow boxes filled with leaf-mould and sand. The tubers are lightly pressed in the compost, and care is taken in watering that none is allowed to settle in the centre of the tuber, or disaster will follow. When the tubers have sprouted 2 inches or 3 inches I pot each one singly in 3½-inch or 4-inch pots in a compost of riddled turf, leaf-mould, and sand. When they are nicely rooted in this size I move to the greenhouse, which is about the second or third week in April. They will then be ready for a shift into 6-inch and 8-inch pots. The compost I use for this potting is turfy loam, leaf-mould, pulverised sheep manure, sand, and a sprinkling of raw Peruvian guano. By the end of May they are growing strongly and can then be assisted with very weak doses of liquid-manure made from sheep droppings and soot. One important point I have learned about Begonias is this, in the final potting the top soil must be made fairly firm, whilst that underneath must be as loose as possible. They delight in a "spongy" soil, so that the roots can ramble at will. During the summer I give them one or two doses of liquid-manure composed of ¼ oz. nitrate of potash and ¼ oz. phosphate of potash to 1 gallon of water. This, I find, keeps the foliage a beautiful colour and also improves the quality of the blooms. I am adding to my small stock this year some hanging-basket Begonias, among them being a beautiful white variety named Lady Blanche, raised by my friend at "Rosecroft Begonia Gardens," Point Loma, California. AMATEUR.

The lovely white Tuberous Begonia Lady Blanche in a hanging basket

The result of one tuber in the second year from the taking of the cutting

Jasminum primulinum

THIS plant was introduced from Yunnan by Messrs. J. Veitch and Sons, and it first flowered at their Coombe Wood Nursery in October, 1901. In January, 1906, Mr. Leopold de Rothschild exhibited a batch of plants at the fortnightly meeting of the Royal Horticultural Society. They were exceptionally well-flowered examples, and were stated to have been treated as a cold greenhouse subject. In most instances, however, it is treated as a wall plant outside, but so far as I can gather with little success. It grows freely, but flowers very sparsely. In general appearance it somewhat resembles J. nudiflorum, but both flowers and leaves are larger, and, moreover, it is practically evergreen. The yellow flowers are often semi-double, and so far I have never seen any seed-pods on the plants. Undoubtedly, great things regarding the usefulness of J. primulinum as an outside subject were anticipated, but, unfortunately, they have not been fully realised. If grown in pots as a cool greenhouse plant better results will be obtained, and it can be had in flower in January without heat, unless cold, frosty weather is prevalent.

Large specimens in pots 10 inches to 12 inches in diameter are very effective when in bloom, while it can also be grown in 6-inch receptacles. They are best when the main shoots are securely tied to upright stakes and the smaller growths or branchlets allowed to develop in their own way without any restriction, then the plants lose any stiffness or artificial appearance.

After flowering, the growths are cut back, and any exhausted old shoots removed. If needed, the plants can be repotted, otherwise the roots must be fed with liquid-manure during their period of activity. When all danger of frosts is passed they should be afforded a sunny position outside, plunging the pots in ashes to keep the roots cool and prevent labour in watering. The growths must be well ripened by exposure to air and sunshine, especially during the early autumn, then a crop of blooms may be expected. It will be advisable, however, to place them in the cold greenhouse before the advent of frosts. J. primulinum is readily increased by layers from a specimen planted outside; in fact, young plants are often found already rooted and only waiting to be severed and potted up. T. W. B.

Peristrophe speciosa

This is a desirable plant, and, flowering as it does throughout the dull winter months, is sure to be found useful. The flowers are purple, a colour which is not always obtainable for the greenhouse. During the summer the plants should be grown in a frame exposed to all weathers until there is danger of frost, when they may be removed to a slightly warmer place, and finally to the greenhouse, where they continue to bloom all the winter.

Canadian Wildings for English Gardens

By Lady Byng of Vimy, Government House, Ottawa

In Gardening Illustrated of January 9th several Canadian plants are mentioned, among them the Sisyrinchiums, which grow in abundance all over the Dominion, both in meadows and alongside railway banks, starring the ground with their attractive blooms. Sisyrinchium atlanticum, angustifolium, and gramineum are wildings of this country, whose varied flora has been a source of joy in my five years' residence in a land that has a knack of winning one's heart by its beauty and the wealth of its flowers.

Another Canadian plant named in that same number of Gardening Illustrated is Potentilla fruticosa, which thrives everywhere; indeed, as one book on wild flowers says, "It is a troublesome weed in New York State and parts of the West." Personally, it is a form of "weed" that most of us welcome for its lovely yellow blooms and attractive foliage.

I fully share in A. T. Johnson's panegyric on the "Madrona," or Arbutus Menziesii, of the Pacific Coast, when seen in native surroundings, for it has every artistic merit, whether for its red-brown trunk that, having shed the bark, shows in ghostly nakedness of greyish-green—an indescribable colour, really—or for the glossy splendour of its foliage, set against the sombre background of Western Cedars, and the lush growth of the Pacific Coast. But as a horticultural specimen it is a perfect devil!! I speak with heat and feeling, for last autumn, when on a big tour in which my gardener from England shared, we lifted some three dozen tiny plants, packed and expressed them with infinite care to Essex, where most rare and tender things thrive. Not a single one of the little wretches survived. Next time I shall content myself with seeds, for there certainly shall be a "next time," because Arbutus Menziesii is worth any number of attempts to grow it, and any amount of failures on the off-chance of a few successes.

You also illustrate on page 24 the Rocky Mountain Bramble, well worthy of the praise bestowed on it, though I should not have thought it needed the shelter of a wall in cultivation. The various types of Rubus throughout Canada are great, charming shrubs they make in any woodland glade. In Western Canada the berries are beloved of the black bear, who fills himself with them in late summer, being a glutton for berries of all kinds, but to the human palate this fruit is rather tasteless.

I could ramble on endlessly about Canadian wildings that I long to see in English gardens, but which can only succeed if some semblance of their native habitat can be reproduced, and that is only in favoured gardens where a damp woodland can accommodate the majority of the Orchid tribe, and where blazing sun can shine on the Pentstemons and other sun lovers. The most difficult problem of all, when dealing with Canadian plants, is that of the snow, which, out here, is the blanket and fertiliser on which they thrive. In normal seasons England can supply no snow, and therein lies, I believe, the failure of many of the Northern plants that could otherwise be, indeed, a joy to the keen horticulturist.

Potentilla fruticosa, a Canadian Wilding that is welcome for its lovely yellow blooms and attractive foliage

The evolution of the Snapdragon

Less than a century ago the Snapdragon was an obscure, hardy perennial, limited in variety and colour, and grown by comparatively few. Its most enthusiastic admirers could scarcely have conceived that a time would come when, known as the Antirrhinum, and grown by countless thousands, it would be raised as an annual from seed and bloomed a few months afterwards, rewarding the cultivator with a range of plants of varying height bearing a prodigality of flowering spikes of delightful colours, due to the untiring and painstaking work of the hybridiser along the years.

This, in brief, is the story of the progr of a very beautiful and universally-gro annual. It would not be an easy matter point to one more popular in the garden day for bedding or one which has made s rapid strides in public favour than that r generally known as the Antirrhinum. the time when it was grown by a limited and called by the old and familiar name Snapdragon is a far cry, and in the in vening years much work has been undertal by hybridisers in the perfecting of the flow Theirs was a task which entailed the exer of much patience and not a little scien knowledge, and meant, time and again, carding plants which produced indiffer blossoms for those which were more cl and defined until at last their ideal reached. You may characterise this wo if you will, as the result of the law of survival of the fittest. To my mind it be summed up in one word—evolution. the outcome of all this work is, that fro present-day collection of seeds of An rhinums it is possible to obtain a heritag lovely blossoms in the garden for m months diversified in height and colour charming to a degree.

More than once it has been remarked t they are most accommodating plants, though, strictly speaking, they belong to order of hardy perennials, and can be pro gated from cuttings, it is really as annu that they are mostly recognised. As known, they are now divided into th distinct classes, tall or branching, mediu and dwarf. Seed can be sown for the earl batch in the warmth of a greenhouse February, in a cold frame towards the end March, and in the open ground a month or later. They are not at all fastidious as soil at any stage, but in sowing the earl the compost should be made light.

In planting them out of doors in May position they are to occupy is most impo ant. This should be a sunny one. Soil c sandy nature seems to suit them best, often splendid results are achieved in qu poor soils. Cow dung worked in bef planting will help to retain moisture keep the roots cool during long spells of weather. To ensure a continuance of spl it is important that spent flowers should cut off and not allowed to go to seed. In more effective way can Antirrhinums be e ployed in a garden than grown in bold mas in beds of one colour, or fringing a l border. To this end it is advisable to s seeds of each section if one is desirous obtaining the best display. A number firms, recognising their worth, specialise Antirrhinums, and seed purchased from s sources may be depended upon, as, inv ably, varieties come true to name. One m therefore, for quite a modest sum—a f shillings at the most—secure a collection seeds of the several sections, which will p vide plants to fill any colour scheme desir

A superintendent of a public park in Midlands has paid special attention to th annuals, using them for large beds, wh previously, plants of a sub-tropical and m expensive character were employed, the ef being considerably enhanced by velvety-gr lawns. Whilst in other years only a negat interest was shown by visitors, the lib planting of this old-fashioned subject in modern dress has called forth nothing praise. So, too, in private gardens where Antirrhinums are grown the results equally satisfactory; indeed, I know of annual so eminently suited for bedding, wh gives greater "colour joy" for so long time, or is calculated to transform a gar into a veritable place of delight through the summer, and often far on into autun as this one does.

W. F

Snowdrop and Snowflake

HE extreme variation in the time of flowering of the earliest hardy flowers lends some interest to the sequence of ir first appearance. This year, as frently happens, the palm must be given to ucojum vernum, the Spring Snowflake, ich usually begins to show above ground the New Year, although it does not asne its full stature until some weeks later. nted in some quantity, it likes its sunny ith border under Beech and Birch trees, ere it benefits to the full by the winter and rejoices in the general shade of the nmer leafage.

n order to benefit to the utmost by our rse winter sunshine I find it an advantage, a day of melting snow, to carefully note spots where the brown earth first appears, d mark them down for the firstlings of the r.

The native Snowdrop frankly does not like or my garden, although I offer it every lucement. The conditions under which nearest approach to success has been atned have been where growing in short turf a cool, moist, but well-drained loam with ne shade, the bulbs being planted almost ching one another in little groups, as the owdrop loves company. Some degree of tience is also necessary till they become nfortably established.

Some of the Eastern species succeed quite ll, as they appear to like drier and warmer nditions, and I have Galanthus byzantinus d G. Elwesii under a tall conifer in very , light soil, conducive to a thorough rest. ir English wilding is, on the contrary, a stic beauty that loves to hang out its ndent bells of ivory and green in meadow d woodland glade, and pining for its tural environment appears ill at ease under trim conditions of the ordered garden. d then, further to humble my pride, I ake an annual pilgrimage to a small oded dell adjoining the Serpentine in Hyde rk, where within sound of the full tide of London traffic the lightly-clustered tufts stling in the short turf seem to mock at efforts and point the way to success.

E. R. Ashton.

Hardy annuals in the greenhouse

I HAVE often thought that instead of the scraggy Geraniums and things of that sort one sees in a greenhouse in early spring and winter, the stages full of hardy annuals would be much prettier. How would the following do if sown in the summer and potted on for winter and spring flowering in a house that can be got up to 70 degs.? Godetia, Clarkia, Canterbury Bells, Schizanthus, Bartonia, Zinnia, Phlox Drummondi, Petunias, Mimulus, Nemesia, Nemophila, Salpiglossis, Diascea, Balsam, Antirrhinum, Portulaca, Larkspurs, Annual Chrysanthemums. Perhaps you could suggest a few more?

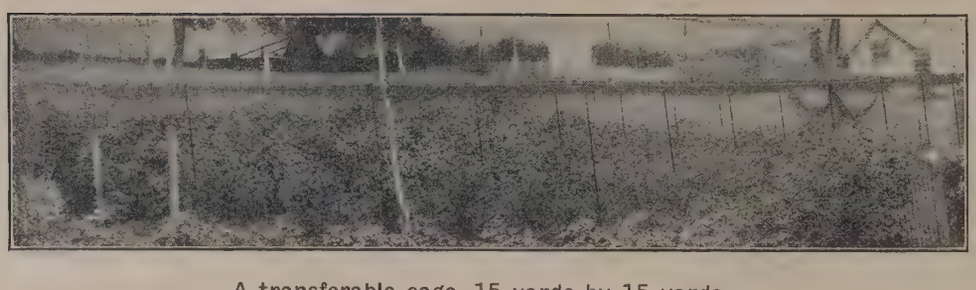
Amateur.

[Many of the best hardy annuals will bloom freely under glass in winter and early spring, and the flowers come bright and clean. A cool, light house is the most suitable place for them. Too much heat will draw the plants up weakly. The house should only have an ordinary cool greenhouse temperature, say 40 degs. to 45 degs., at night, and be very freely ventilated during the day. For winter flowering sow the seeds in June, and to bloom in spring sow in August or September. We have added somewhat to your list, and have included a few biennials. In making out the list we have made a kind of running commentary upon each. Rhodanthe Manglesi is a very pretty pink-flowered Everlasting. Seed should be sown in September, and the plants grown cool. Mignonette is indispensable. Sow in July, either in small pots, and afterwards shift into 5-inch pots, or direct into 5-inch pots. Pot firmly in good soil, and grow cool. Nemesia strumosa may be sown in June for winter flowering. Nemophilas in variety may be sown in June for winter, and in September for spring. Godetias are very useful showy annuals. Sow in boxes, and prick off early for flowering in pots. Bartonia aurea is rather a pretty yellow-flowered annual. It is somewhat straggling in growth, but it is of a colour we want. Coreopsis in variety should be sown in August for spring blooming. By judicious pinching when young the plants may be kept dwarf. They flower very freely, and the blooms are useful for cutting. Love-in-a-Mist (Nigella) is a very pretty annual, and makes a nice pot plant. Marguerite Carnations are easily raised from seeds, and soon begin to flower. Sow in spring. Clarkias may be grown in pots for the cool greenhouse. Sow in August for spring blooming. Mimulus, including the spotted varieties, and Musk are charming in a cool greenhouse, and are nice for filling window-boxes on the north side of the house. Cornflowers sown in September, and grown in 5-inch or 6-inch pots, are very useful for cutting in early spring. Sweet Peas are also charming. They must be grown well and not crowded. Sow in September, and grow cool. Annual Chrysanthemums are very useful. Sow in June, and again in September. Do not crowd, and ventilate freely. Sow the improved dwarf varieties of Antirrhinums in April for winter flowering, and in August for flowering in spring.

Among the biennials we must have Canterbury Bells and other Bell-flowers. These should be sown early in spring, outside, pricked off, and grown outside during summer, potted up in autumn, and kept in cold frame till the days begin to lengthen in January, then taken to cool greenhouse. Some of the most beautiful plants for the cool greenhouse are the Forget-me-nots. Sow early, and prick off to get strong, and then place in 5-inch or 6-inch pots to flower. These are beautiful for cutting. We have sometimes grown in pots some of the ornamental Grasses, such as Agrostis nebulosa, Eragrostis elegans, Agrostis pulchella. Isolepis gracilis is a charming little Grass for small pots. Sow in spring. The Hybrid Columbines (Aquilegias) are fine pot plants, but will not flower the first year. The Schizanthuses are a charming family. When well grown they make large specimens. Sow in spring, and again in August, and grow on under glass, cool.

A good selection of annuals and biennials will be lovely in the conservatory in early spring, but they must be well grown, not crowded, nor yet rushed up in heat. Some of the new Wallflowers, including the double flowering varieties, are lovely for cutting, and the flowers grown under glass are fresh and sweet.]

Snowdrops in Mr. Ashton's garden at Broadlands, Tunbridge Wells, in which Galanthus byzantinus appears to do best in very light soil under conifers



A transferable cage, 15 yards by 15 yards

Walker's System of Fruit Culture

The illustrations show how different kinds of fruit trees and garden crops can be adequately protected

JUST a year ago we gave an outline of this system culled from his booklet, and as it is causing increased interest as it becomes known we propose giving a few fresh details from the booklet he has brought out for the coming season.

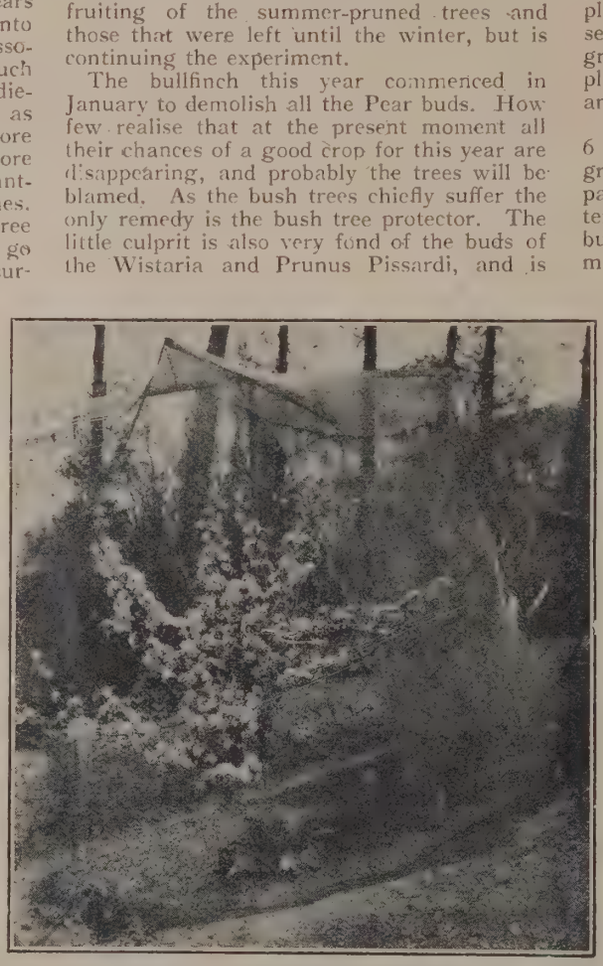
He discovered last season on a few of his Lord Grosvenor, Peasgood Nonsuch, and Newton Wonder Apples a new disease which has been diagnosed by the Ministry of Agriculture as Phytyphthora cactorum. It is believed to be the first case in Wales, and has been reported from two places in England and once in Dublin. It is new to America, where it attacks Strawberries, Apples, Pears, and Rhubarb. A pale brown patch appears on the Apple which spreads and extends into the fruit. Rainfall and temperature are associated with it. Many kindred diseases, such as blossom wilt, silver leaf, mildew, and die-back, are more prevalent in a wet season, as the spores of these fungi germinate more readily in moist weather. He therefore advises care when selecting the site for planting and the interspacing of the branches. Not only must air be admitted into the tree but above all sun. We are asked to go into the fruit garden in September and to survey all the trees. We shall be interested to discover that the trees which have their branches well interspaced bear more fruit than those with branches close together. The cause of the heavier crops is the ripening of the wood and buds by the sun. If a healthy tree protected from frost and cold winds whose blossom is fertilised does not bear fruit we can generally decide that the wood and buds were not sufficiently ripened in the previous year. If a tree shows no blossom it is either due to too much growth or over-cropping the previous year.

He brought out at the Chelsea Show last year a new transferable fruit cage, which could also be utilised as a portable poultry run. The following are the advantages claimed for it over any other form:—Two different crops are saved in one season by one cage by erecting it firstly over the Strawberry bed, and as soon as the fruit is over transferring it to cover the Raspberries and Gooseberries or the culinary Peas just at the time the tit brings her brood to rip up every pod in a row. The tit feeds her offspring on insects until they leave the nest, and therefore they never attack the earlier crops when the Strawberries are ripe and are being protected. It is far cheaper than one of wire netting with door, yet just as durable; so simple to erect; can be entered at any point; everything can be picked in comfort; it is not unsightly all the year round like wire netting, as after the fruit is over the whole apparatus is stored and therefore cannot be wrecked by a snowstorm; it can be reduced or increased in size; not being a fixture can be packed up when moving house; it can be transferred to new ground by one man in three hours and will last a lifetime. It is, in fact, a long-felt want.

He seems to have eradicated the sawfly caterpillar for some years by top-dressing the Gooseberries with horse manure, and maintains that the ammonia destroys the fly as it emerges from the cocoon in the soil. The same remedy applies to the winter and March moths and Pear midge, which all hibernate in the soil under the tree.

So far he has found no difference in the fruiting of the summer-pruned trees and those that were left until the winter, but is continuing the experiment.

The bullfinch this year commenced in January to demolish all the Pear buds. How few realise that at the present moment all their chances of a good crop for this year are disappearing, and probably the trees will be blamed. As the bush trees chiefly suffer the only remedy is the bush tree protector. The little culprit is also very fond of the buds of the Wistaria and Prunus Pissardi, and is often the undetected cause of the paucity o blossom on these trees.



Protection from the bullfinch, frost, and cold winds. Note wind screen

This appliance protected the Pear and then Apple blossom. Later on it saved a Cherry tree, early dessert Apples, Plums, and, lastly, Pears. Five different fruit crops saved by one protector in one season

Trees, such as Cherries, 10 feet high, can be completely closed in by four standards and cross-bars on the same principle as the fruit cage

The winter so far does not seem to hav reduced our small birds, but if we have a col February or March their numbers will be re duced. The fat with which Nature clothe them in the autumn is in the late winter mo or less absorbed into the system, and they ar then not so well equipped.

A last word of caution. The present un precedentedly mild weather has caused th sap to rise so early that unless ample pro tection is provided the fruit crop will suff severely in spite of the fact that it should b a good fruit year.

It is difficult to find a single point essenti to fruit culture which is not dealt with in th booklet, which can be obtained from Walker Fruit Tree Protectors, Ltd., Brecon.

Red and White Currants

RED and White Currants are grown in variety of forms, such as bushes open i the centre and as standards with sten 2 feet to 3 feet high or more with good head of shoots. For such modes of cultivatio provision must be made when the wood put in to root, keeping the stems the desire height, the bottom buds picked out of th straightest and strongest of the young shoots three left at top to make young growths, an all other buds picked out to prevent sucke growth. The cuttings being ready for in sertion select a cool place with soil free o excessive wet. The first year after they ar planted roots and shoots are formed, and th plants ready for shifting at the end of th season. I prefer to give them two seasons growth. When preparing the ground fo plantations the land should be well trenche and manured.

Currants may be planted from 4 feet t 6 feet apart; the former distance is for dry gravelly soils, where growth is weak com pared with that on land that is strong tenacious, and in good heart. Place th bushes equi-distant in rows and give a goo mulching before all the soil is replaced, s that the mulch may retain its virtu longer than when exposed. If th plants are standards place a stake t each at the time of planting. In som establishments Red and White Cur rants are grown for late supplies an are planted on north walls and othe buildings where it is easy to net then Good supplies may be had very late i autumn, when they are of considerabl value. Insert a good well-rooted cu ting and take a shoot right and left. plant with four, five, or six shoot taken upright at 1 foot apart will soo cover a good wall space. Anothe simple method of obtaining the sam results is to put in cuttings against th wall in the usual way, taking thre shoots from each trained upright 1 foo apart.

Bushes that have for years been sub jected to close pruning, that is, spur ring in to one or two eyes every season and so accumulate a lot of old har wood which produces small frui should be rejuvenated by cutting ther down half-way, lifting entirely, and re planting in fresh soil in new position New wood will soon spring up and th old bushes will be in good conditio again. This is only advisable wher supplies of fruit cannot be dispense with till young bushes have grown u to furnish the supplies.

A few years ago I transplanted large number of worn-out bushes an have had good value for the labou but now that a good plantation o young plants has come into bearin the old bushes will be grubbed up.

Pruning is generally practised upon the ɔur system, that is, cutting close to a bud r two. In addition to this I prefer to cut ut some of the older shoots, annually supanting with a few strong growths of the urrent year. If managed in this way the ushes will give good crops of fruit of the best uality. F. H.

VEGETABLES

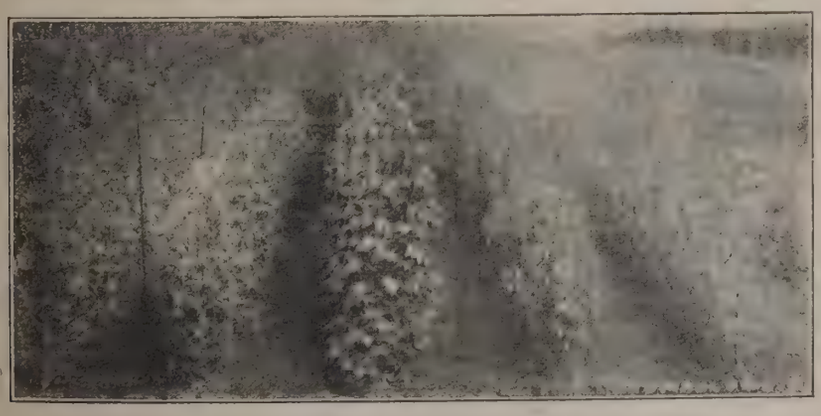
Forming hotbeds

THE old-time method of providing freshfallen leaves with a less percentage of strawy litter from the stable still remains ıe only possible way with the majority of mateur gardeners wherewith to ensure an ırly dish of Carrots, Potatoes, Radishes, ettuce, or Mustard and Cress. Not only this, is a system largely practised to-day in the igger gardening establishments, since the aves can be collected on the estate, and when ıoroughly mixed with stable litter at the eginning form excellent manure for the garen later on after the season's crops have nished and the bed turned back a time or vo. Oak and Spanish Chestnut leaves are referable, but those of Beech, Plane, Lime, nd Elm frequently predominate in some ɔcalities and have to be gathered. These hould be mixed with about one-fourth of the tter and thrown into a large conical heap ɔr a fortnight, again turning over and aving another week, when all will be ready ɔ make up the bed. The position chosen hould command every gleam of sunshine uring the winter, and should face due south possible. If sheltered at the back with igh buildings or evergreen trees so much ɔ the good. Another little advantage is if ıe bed can be located on a gentle slope to ıe south any drainage likely to occur will ass away and not tend to keep the base wet nd cold as if such were left to congregate.

As the work proceeds see that the whole is horoughly trodden, placing plenty of the trawy material along the sides of the bed as aves alone are sure to tumble away, while ıe bed itself must be some 18 inches wider ll round than the frames to be placed thereon nd several feet longer if several frames have ɔ be accommodated, so that new linings ıay be introduced in very cold weather. The ed at the back may be from 4 feet to 5 feet igh and a foot less at the front. Previous ɔ placing the frames in position get some lm boards 6 inches wide and ½ inch thick ɔr the same to rest on, so that as the bed ubsides all will go down evenly together. t depends upon the depth of frame as to lling in, but a foot of soil is necessary for ıost things, and nearly that amount of space etween the surface and the lights for the evelopment of the plants to be grown ıerein. The soil, which should be of a ght nature, may be put in as soon as the frames are in place. Here it keeps dry with the sashes on, also gets warmed for the reception of the seeds, which may be sown from early December onwards, making it just moderately firm for Carrots or Turnips. The former enjoy soil of a sandy nature, and should be sown in quite shallow drills very thinly about 4 inches apart. A few seeds of an early-maturing Radish may go in between the rows. These will mature ere they injure the young Carrots. Asparagus and Seakale can also be brought to perfection in such frames, endeavouring to maintain a bottom temperature between 60 degs. and 70 degs., keeping Asparagus dark to ensure a blanched head, while a little fresh air towards mid-day whenever mild enough to give the heads of Asparagus that green tint so beneficial to that vegetable must not be overlooked. Allow the crowns to show a little above the soil and some 3 inches or 4 inches apart. The former may have the roots overlapping one another and should be covered with 4 inches of fine soil. The frames should be securely matted up every night. A test stick should be kept in each frame. Excessive heat at the bottom quickly burns these two crops. On the other hand, if the roots are not responding and the weather cold and frosty renew the lining all round the frame. When watering is considered necessary as the days lengthen in the New Year let it be through a fine rose can and at a temperature of 75 degs., doing this in the early morning. Potatoes nicely sprouted will yield a nice few dishes towards early spring if planted about 9 inches apart each way, adding 3 inches of dry soil as soon as the shoots are 6 inches high, ventilating freely in mild weather. Towards the middle of January will be a suitable date to get these into the frame. Later, Turnips may be given a trial, but they require abundance of fresh air, and Marrows respond likewise, but from early in the year Mint, Mustard and Cress, Lettuce, and even a crop of Spinach may be taken from these ever-useful frames, while from April, with a little renovating and renewed linings, Cucumbers and Melons give a good account of themselves if properly managed, although much depends upon the weather as regards the success of the latter. With the leaves come in heaps of slugs generally, so an eye must be kept on Carrots, Lettuce, and one or two others, or they quickly lessen the crop. The glass must be kept clean so as not to obstruct light or sun, so beneficial to most of the crops dealt with. Varieties have not been given, but select early dwarf-growing Potatoes, such as Sharpe's Victor, Shorthorn Carrot, Cabbage Lettuce, and Little Marvel or Early Milan Turnips.

J. MAYNE.

By this method two or more wall protectors can be used in conjunction with one another



Beans and Peas protected from frost and birds respectively

Onions for autumn storing

Few vegetables are more in daily demand than the one under notice, and it behoves those that are responsible for the supply to see that every encouragement is given to the plant from the date of sowing up to the time the bulbs are ready for harvesting. Most cultivators know that the ground to supply their requirements must be in good heart, open to the full sun, and made very firm, the seed sown very thinly and lightly covered.

The rows should not be less than 1 foot apart so that the flat hoe can be freely used to keep down weeds and loosen the surface soil so that the rain can enter freely as well as prevent the same from caking over during hot, dry weather. The frequent stirring of the surface soil also promotes the growth of the plant, which should commence as soon as the rows can be seen, and be continued right up to the time the tops begin to fall over, remembering that unless the bulbs are thoroughly ripened towards the middle of September at the latest their keeping qualities will be of the poorest. One cannot well give them too much attention while in active growth and getting them thoroughly dry before storing. About the middle of February, with the soil in a suitable condition for seed-sowing, the earliest opportunity should be taken to get the crop in. Sow in quite shallow drills, cover with the back of a wooden rake, and eventually tread in with the feet and rake the plot evenly over. When large enough to thin allow from 4 inches to 6 inches between the plants. This distance applies to those transplanted from boxes.

J. M.

supply of winter greens, such as Savoys, Brussels Sprouts, Kale, etc. The general opinion in many districts is that one may use ground much more profitably on the lines indicated than devote it to one crop which monopolises it for most of the year. W. F.

Late Celery

When keeping qualities are combined with good flavour and hardiness a word of recommendation is, surely, permissible. I yet pin my faith to Leicester Red, Standard Bearer, and Major Clarke's Red for furnishing the latest supplies. Some varieties of recent introduction are very fine, yet they, or, at least, some of them, appear to lack the robustness of the trio above named. Naturally, for late crops sowing is deferred until spring is well advanced and the seedlings are treated quite coolly throughout. Too many Celery growers err in earthing-up late varieties too early. I have found it best to allow the plants to be at their full stature before earthing, and this is done at one operation instead, as is the case with many, of being done a little at a time as growth proceeds. Early

An Alpine table garden

Potato growing: Is there a decline?

Statistics published during the last few months reveal the fact that the acreage devoted to Potato growing during 1925 was less than in several years previously. It was an open secret that in many quarters last spring dealers in seed Potatoes found themselves with stocks left on their hands, particularly of late varieties. There are several reasons which may, I think, be advanced for this decline. One is that the house shortage throughout the country has led local authorities to take away from allotment holders ground which they acquired in the war years. In quite a number of instances it has not been possible to find other convenient land for those who have been dispossessed, and consequently gardeners are fewer in number than they were a few years ago. Another cause why smaller quantities of late Potatoes are grown is that one may now purchase in the autumn on terms equal to pre-war prices, and this being so very many gardeners, particularly those who have to cultivate ground unaided, are not purchasing seed of late varieties to the same extent as formerly. Except for planting sufficient early and second early sorts, there is a disposition to leave alone the growing of late Potatoes and use the ground for summer vegetables, Peas and Beans, for example, and ensure a plentiful

blanching in the case of Celery intended for late spring consumption means that it is made tender and unfit to withstand the effects of rain and frosts as otherwise it would. Hardily-grown and earthed-up late, the plants never require to be protected by straw or litter.

A Scottish Gardener.

ALPINES

Alpine table gardens

I AM anxious to make an indoor miniature rock garden, not Japanese. Could you give me any helping hints in your paper? The whole thing would only be on a table 30 inches by 20 inches. It would stand in a S.E. window and I should only have the tiniest plants, and should be very glad of the names of some.

M. T.

[We reproduce herewith one of the alpine table gardens which Mr. F. G. Wood, of Ashtead, Surrey, has exhibited at some of the fortnightly shows of the Royal Horticultural Society recently.

Each model is built up carefully by hand, and no two are therefore alike, but are as varied as rockwork is in Nature. Filling with the tiny alpine plants needs a large amount of time and skill. Built in varying sizes from a few inches to over a foot length and proportionate in width, ea forms in itself a complete garden. In it represented the pond with its mossy ban and, where size permits, its little bridge.

The alpine gardens are made of artific stone, and the plants really are growing a all have roots. "They are not stuck in the occasion." As to how long they will la that depends upon how well they are look after. With careful watering and a fai even temperature they should keep quite w for some months, at any rate. Should any the plants show a tendency to grow too lo they can be snipped back with the scisso and any which become sickly can easily replaced.

Veronicas, Saxifrages, Sedums, tiny Pi trees, and Thuyas are amenable to this tre ment, and the surface is covered with Mos

The alpine rock gardens should prove useful as well as a fascinating form of ta decoration or indoor garden. To reside in flats and others who are not fortun enough to possess an outside garden th should be specially attractive.]

Saxifraga Burseriana rosea

This differs from the type in habit a colour of its flowers. In full sunshine, wh it has some little depth of sandy soil, it velops into neat little cushions 2 inches acro It has pretty rosy-coloured flowers on slen stems 1 inch high. A succession of flow is kept up for several weeks. H. Stevens

BOOKS

The evolution of the Sweet Pe

Although there is an increasing literat on Sweet Peas they are, perhaps, the o topic of the garden upon which books still in numerical disproportion to the u versal affection in which these comparativ modern flowers are held; modern, that is, the forms generally cultivated since He Eckford, late in the nineteenth century, tra formed a despised flower into the glori annual that we know to-day, and see evolvi into higher standards of perfection. There no fever of excitement about Sweet Peas s as existed some years ago. This has giv place, however, to a much more serious int est in their cultivation, and they are bei grown to a greater extent than ever, and the most part grown with understandi This is largely due to the efforts of National Sweet Pea Society, as well as to devotees of the flower among writers and trade. Among these latter the name Unwin, of Histon, has long been associa with the raising of choice modern varieti and now we have before us an important bo from this pioneer's son, Mr. Chas. W. Unwin, entitled "Sweet Peas: Their H tory, Development, and Culture."*

The author's love of his subject has abled him very agreeably to impart his thusiasm to the reader in a most interest and practical text book that may well pr to be the best of its kind for some time come. It traces the origin, history, and velopment of Sweet Peas, describes how n varieties are raised, and the difficulties of hybridist, and also deals liberally with cu vation out of doors on the cordon or exhi tion system. A list of the better mod varieties for exhibition and advice on hibiting is included. General and cold gre house cultivation are explained, and enemies and diseases of Sweet Peas are a dealt with fully. It is made clear that th are not unduly subject to these latter, but a

* "Sweet Peas: Their History, Development, and C ture," by Chas. W. J. Unwin. Published by W. Heffer Sons, Ltd., Cambridge; illustrated, 5s. net.

t, most accommodating plants which e successfully grown by anyone follow- few simple rules. Varieties for indoor ation, seed growing and saving, advice on selection, tabulated lists of new and standard kinds, and too much alike varieties, are all comprised in this valuable work, which concludes with an interesting outlook on future developments of the flower. We can recommend it to every enthusiast as the up-to-date guide to Sweet Pea lore and cultivation. G.

REMINDERS FOR THE WEEK

outhern and Midland

ns

ere seeds were sown some weeks back edlings should now be large enough for ng off, if necessary. It is not too late in boxes and germinate in a heated ouse. When the soil is in a suitable ion winter Onions may be planted out ply-dug and well-manured ground.

r

inch of an early variety may now be in a warm greenhouse, and the re- t plants will be suitable for exhibition ly use. The pans must be kept moist aded until the seeds have germinated, ng off when large enough to handle. sandy soil with decayed manure at the of the receptacle is the best for Celery.

els sprouts

obtain the best results from these it is ant to sow the seed early. Plant on y-manured ground and allow ample between the plants. A box of plants now in a warm house and pricked out gentle hotbed and gradually hardened ll be in a fit condition for their per- t quarters during May.

Carrots

se are always appreciated, and where a hotbed can be made up there will be ficulty in raising them. Nine inches of garden soil should be placed on top of otbed, allowing 6 inches from the glass. of the Shorthorn varieties should be d for the purpose.

he early houses, where growth has been l, it is important that a uniform tem- re be maintained. It is not wise to he house too moist other than on hot, days. Ventilation must have special on, allowing no cold draughts to pene- he house, or irreparable damage will e.

es

trees where started early should now ning into bloom, and it is important e blooms are artificially pollinated to a good set. A rabbit's tail fixed on the a Bamboo cane is excellent for the e, and if this is done on sunny days noon so much the better. The house be kept fairly dry until the fruit is set. ards syringing may be again continued.

t seeds to sow

rrhinums, Petunias, Celosias, Ver- Heliotrope, Salvia patens, S. splendens, ntermediate Stocks require a green- that is heated or other warm structure e them successfully, and where this can en and the seed sown now in pans or light sandy soil plants that will bloom the coming season can be had.

as

s may be sown during the next week and germinated in heat, afterwards g the plants on in a cooler tempera- near the glass as possible. Seeds of s of Coltness Gem can be obtained and ry interesting. Old tubers in store brought out and potted, and if placed t will soon throw shoots that, if taken off at a joint when 3 inches in length and inserted in small pots of sandy compost, will root readily in a propagating-case. The tubers may also be divided.

Lawns

Every chance should be taken to keep these swept and rolled during open weather, and if the Grass is getting straggly, the machine, which has been re-sharpened, should be run over, just cutting the tops off. Daisies and other coarse weeds should be grubbed up and the holes filled with old potting soil or other that has been passed through a sieve. Any alteration or re-turfing should be completed as soon as possible.

Box edgings

Where box edgings are overgrown and become unsightly now is a good time to take up and replant. The soil should be dug and enriched with leaf-mould and rotted manure, removing the roots of any weeds that may be found before replanting. The plants may be broken up to any size required, and if the roots are over-long these may be shortened. Box will not live where there is lime in the soil.

Rock garden

At this season this part of the garden is beginning to look gay with various plants, so to get the utmost beauty the plants that are blooming and in bud should be protected against birds, slugs, and other despoilers. Plants raised from cuttings taken during autumn may be planted out, and those that require top-dressing should receive attention now. Any renovations or extensions should be taken in hand and completed without delay. W. E. Wright.

Stockton House Gardens, Near Rugby.

Scotland

Under glass

The forcing house is at this season one of the best auxiliaries of the gardener, and a continual stream of things will be passing through it. It is sound policy not to attempt too much, and over-crowding ought to be guarded against. Nor is it wise to allow too great an amount of fire heat. A temperature of round about 65 degs. will suit most things in a mixed forcing house. Flowering plants which have opened their blooms in such a temperature will last longer, and be quite safe if removed to a house the heat of which is normally 10 degs. less. It is advisable in greenhouse or conservatory to rearrange the occupants at fairly close intervals. A change of position appears to be beneficial to all plants, especially when they are somewhat cramped for space. Continue the syringing and damping in early Peach houses and vineries, and if the cleansing of other houses has not been completed the work can be attended to during severe or wet weather, of both types of which there has been a superabundance during the past three months.

Cold frames

There has been more covering up needed, on account of frosts than usual, but whenever it is possible to do so the mats, or what not, should be removed, even if it be only for an hour or two, in the middle of the day. When conditions permit, also, ventilation ought to be freely given. Those who have boxes of autumn-sown Antirrhinums, Larkspurs, or similar plants in boxes in cold frames will find that unless careful attention in respect of ventilation be given there will be much damping off. Damp in cold frames is always more to be dreaded than frost.

Stove

There is always some potting or repotting to be done in the stove at this season, so it is well to get a supply of the necessary composts under cover in order that they may be fairly warm and dry when they are needed. When circumstances permit of it a portable potting bench should be taken into the house and the work carried out there. I have known cases of stove plants receiving a severe check through being taken into an unheated potting shed to be operated upon.

Chrysanthemums

When Chrysanthemums last in good order until the end of the third week in January no one need grudge to dispense with them after that time. Cuttings from these late sorts may yet be taken. Observation must be kept upon the cuttings, now rooted, which were put in previously. Such as are obviously making growth should be examined, and if the state of the roots warrants it they ought to be given a move into larger pots. Many promising young plants receive a check from which they never really recover by being left alone until the whole batch can be handled at once. Plants of the border varieties intended for the production of cuttings should be warmed up a little. The soft young growths root more readily than older shoots.

Gladioli

Another batch of the early-flowering Gladioli may be boxed or potted up for cutting. G. Colvillei albus, G. Ackermanni, and G. Blushing Bride are a good trio. A box or two of the summer-flowering varieties may also be put to work in quite a cool house for early transplanting. The comparatively new race of hybrids is, of course, more useful for cutting than the older forms, yet the stately spikes of the latter are, in their season, indispensable.

Irises as pot plants

While I am no great admirer of Irises as pot plants, yet they come in very useful at times for vase work in rooms. The ordinary Spanish Iris, good examples of which are Belle Chinoise and Thunderbolt, bloom early. So, too, do the Dutch Irises. Iris Susiana makes a good pot plant, four pieces in a pot. None of them, however, will endure anything at all resembling forcing in the strict meaning of the word. A very gentle heat at most suits them best.

Vegetable garden

Seed Potatoes of the early varieties may now be overhauled and set on end in boxes, fully exposed to the light but safe from frost. Most of them are now moving, and it ought to be the aim of the grower to keep the shoots as dwarf and robust as possible. Leeks can now be lifted and laid in thickly in any odd corner in order that the ground may be manured and dug. Digging, unfortunately, is in arrears owing to the continuous snowfalls, and every opportunity ought to be taken in order that this important work may be pushed forward. If necessary Celery may be lifted and stored in a cool shed. Packed with dry sand, the heads remain in excellent condition over a long period. W. McGuffog.

Mabie Gardens, Kirkcudbrightshire.

Cabbage White Butterfly

CABBAGE caterpillars were very common last season, and have been responsible for a good deal of damage to all members of the Cabbage family. We have been repeatedly asked for the best means of control, but unfortunately we know of no royal road to success.

The numbers of Cabbage caterpillars present in our gardens vary considerably from year to year. In some years there are very few, in other years they roll up in their thousands. The reason for this variation in numbers is difficult to explain, but in all probability favourable weather conditions at certain periods in the life history of the butterflies play the greatest part.

I have noticed that the caterpillars are particularly susceptible to wet weather, especially if they are born in a dry period. The death rate among Cabbage caterpillars is very great when a spell of wet weather sets in when the caterpillars are about half grown. The epidemic of caterpillars last season was due to the fact that the first batch of caterpillars had not a wet day throughout the whole of the period when they were feeding.

Gardeners do not as a rule worry very much over the names and kinds of the various insects which cause them trouble, but in the case of Cabbage butterflies it would seem worth while to take a little trouble to separate at least two kinds from each other. It seems to me that one kind is fairly easy to control, while the other kind is very difficult. There are really three kinds of Cabbage white butterflies, the caterpillars of which are present in most gardens—one large kind and two small kinds. The life history of the small kinds is so much alike that for all practical purposes we may group them as one. For our purpose we shall only talk of large whites and small whites.

Both large and small white Cabbage butterflies have two generations a year. The first batch of butterflies appears fairly early in spring, eggs are laid, and the caterpillars appear during June, these eventually becoming fully fed and then changing into the chrysalis state. The second batch of butterflies emerges from these chrysalis during August, and the life history is again repeated, except that the chrysalis state in this second generation lasts throughout the winter. As a matter of fact there is considerable overlapping between the two generations, so that it works out in practice that there are Cabbage caterpillars eating our Cabbages throughout the months of June, July, August, September, and part of October. The female large Cabbage white butterfly lays her eggs in batches of 20 or so, either on the upper or lower side of the Cabbage leaf. The eggs are bright yellow in colour. When the tiny caterpillars hatch out they feed upon either the upper or lower surface of the leaf, according to the position of where the eggs were laid. They do not at first eat right through the leaf, but always leave the skin opposite to that on which their mother laid the eggs. Later, when they get older and stronger, they eat right through the leaf. I have noticed that large Cabbage white caterpillars always feed in batches, and that they generally start at the apex of the leaf and work down to the base, leaving nothing but the main veins of the leaf. When fully fed the caterpillars wander off more or less singly to a suitable sheltered spot and there pupate.

The female small Cabbage white lays her eggs singly, never in batches; the eggs are pale yellow in colour. When the caterpillars hatch out they feed in the same manner as the eggs are laid—singly. The caterpillars of the small Cabbage butterfly always feed on the young leaves towards the centre of the Cabbage. Seldom do they feed on the outer leaves. They are not nearly such heavy feeders as the caterpillar of the large white; but this is not an advantage, because the little they do eat is always in the heart of the Cabbage, and they spoil more than they eat with their droppings.

In the matter of control the only practical recommendation that can be made is hand-picking. This is a slow process, but with the large Cabbage white is very effective. The batches of caterpillars feed together, and always in the outer leaves. Generally, too, the damage of the large white can easily be seen even from the outside of a batch of Cabbage, because of their habit of feeding from the apex of the leaf and leaving the ribs. When such signs are noticed search should at once be made for the batch of caterpillars responsible. The control of the small white caterpillar is a much more difficult affair, and I am inclined to think that hand-picking is only practical with the first generation. At that period the various members of the Cabbage family are only small, and it is fairly easy to look right into the centre of the plants without doing any harm to the growing plant. Every caterpillar of the first generation that is killed means far fewer caterpillars in the second generation. Searchers will notice that the small white Cabbage caterpillar is not easy to detect on the Cabbage leaf because they mimic the colour of the leaf on which they are feeding.

Every effort should be made by gardeners to destroy all chrysalids of both large and small Cabbage white butterflies during winter. A search made on any walls of buildings near the Cabbage patch will generally be very productive. J.

Fibrex pots

Many of the visitors to the Chelsea and other shows of the Royal Horticultural Society may have been momentarily interested by the exhibits of Fibrex pots put by Mr. J. N. Harvey, of Evesham, but the use of these aids to successful gardening is not by any means widespread yet. After two years' experience of them for the purpose of raising Sweet Peas I have come to the conclusion that I should be very reluctant to do without them. Some of their advantages are—the small space they occupy owing to their shape (square), the absence of spaces between them when placed together in a block, the small quantity of compost required, and the splendid start which they give to plants.

I use No. 2 size for Sweet Peas. I have found that No. 1 size is too small. It is very important that they should not be in a bone-dry condition when the seeds are sown, so I have a pail of water at hand, and each pot is held in the water for four seconds. Having thus soaked, say, two or three dozen, enough compost to half-fill the pots is trowelled in, the seed sown (one seed in each pot), compost placed on the top and lightly pressed down, and finally the block of pots is fairly well watered from a can with a fine rose.

The pots are apt to dry out somewhat rapidly when under cover, so it is necessary to examine them each day and give water if and when necessary. The seeds will germinate quickly if the pots are placed in a cool house, and soon after germination the pots should be transferred to a cold frame. When the plants are 2 inches or 3 inches high harden your heart and nip out the top of the shoot; the resultant growths, which should be restricted to two or three, will be much stronger than the original stem. Harden off the plants in the usual way and plant out the pots, just as they are, at an appropriate time. There should be about ½ inch to 1 inch over the top of the pot. The fer material of which the pot is compose gradually become disintegrated durin season.

Of course, the use of these pots adds cost of the gardening operation, but additional outlay can be afforded, every Pea enthusiast will be well advised t advantage of this modern development.

The makers not only supply Fibre for seed-sowing, but also send out many of seedlings in the pots, and amateur cannot for any reason rely on seed-sowi all or some of their stocks will be able their Antirrhinums, Primulas, Chrys mums, Begonias, etc., in this handy fo

The makers have now extended the system to such larger subjects as Ros fruit-trees, the effect being obtained by ing the Fibrex material round the r the trees. As the root-system is embe a material which will not come off and gives complete protection it is poss plant at any time of the year Roses an trees thus treated. WINN HELL

Mice and plant destructio

During the winter and early spring that does a vast amount of damage, ally in frosty or snowy periods, is There are two kinds in the garden than the common house mouse, these the brown-backed field mouse, with bead-like eyes, and the vole, a shor mouse with a round head. In frosty w their chief hunting ground is the r bulb beds, or any shrubby surrou They even venture into cold frames the houses if hard pressed for food, an a vast amount of destruction if not c Wherever there is any growth at al miscreants nip it off, and one can eas their haunts by the amount of stal foliage carried to the holes. During cent snow and frost I had occasion the frames matted, and on inspecti bright day I discovered some doz Pentstemons, Antirrhinums, and Stoc been bitten off and carried to a hole corner of the frame. At other periods lost a whole batch of Trollius just were unfolding their leaves, a whole of St. Brigid Anemones as they we ginning to open their blooms, and occasion I lost in one night practic whole of four beds of Carnations th been newly planted. At first I was to think, being early spring, that thi was the work of a young rabbit, bu waiting some two hours with a gun served in the dusk that it was non than field mice and voles that we depredators. I found next morning cally the whole of the Carnations border of Rock Roses.

Where these rodents are suspected t should be commenced at once. Poison about their haunts will account for but where pets or children are runnin this is often strongly objected to.

I have tried various kinds of mous and pin my faith on the Little Nipp ally the Veto. I have baited the tra bread, cheese, Potato, Carrot, Peas, oatmeal, and Maize. Peas and Ma latter for preference, are the only t will entice with any measure of These I have used with gratifying re

Place the traps under pieces of tile or under the edge of stones on the and reset occasionally, especially weather is wet. A good plan is to traps at intervals for a day or two a renew the attack.

In wooded localities owls, hawk weasels do much in checking mice, ar

-ncouraged rather than persecuted as is ally the case. Spraying the growths of with quassia and other bitter specifics erves to ward them off for a time, but rest and best method of extermination is by trapping, and this is most successful during lean periods, when they will invariably nip at the proffered bait and end their career of destruction. R. ASTLEY.

Dunnikier.

Answers to Queries

stions—Queries and answers are inserted in ING ILLUSTRATED free of charge if corre- nts follow these rules: All communications be clearly written on one side of the paper and addressed to the EDITOR of GARDENING ATED, 8, Bouverie Street, London, E.C. 4. s on business should be sent to the PUB- The name and address of the sender are ed in addition to any designation he may to be used in the paper. When more than ery is sent each should be on a separate f paper, the name and address being added h. As GARDENING ILLUSTRATED has to be sent ss some days in advance of date, queries always be replied to in the issue immedi- following their receipt. We do not reply to s by post.

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

GREENHOUSE

as (Reply to W. R. J.)

ough the species of this genus number d hundreds, those of a sufficiently orna- d character to merit a place in the gar- re but few. As seen growing under al conditions many of the Cassias are gly attractive, especially those of an scent character, the general appear- of which is said to closely resemble that own Laburnum. The difficulty, how- of reproducing those conditions which ssential to many of these and other iful tropical trees makes it almost im- ble to cultivate them with anything like ss in this country. We have, however, half-a-dozen useful Cassias, speaking ulturally, and in addition to these there veral species to be met with in botanical tions. Of the ornamental kinds one of est is

FLORIBUNDA.—This is a handsome -flowered species, and one which s in a warm greenhouse or stove, where lds an abundance of flowers almost all ear round. It forms a compact shrub, s very freely, and is easy to manage, at home in any open soil, and likewise ing very little from the attacks of s.

CORYMBOSA is a handsome greenhouse s. It may be used for sub-tropical ng in the warmer parts of the country, f planted in good soil in spring it forms od-sized shrub in a short time, and rs very freely. I have used this largely flower garden during the summer, lift- he plants in the autumn and storing away, cutting them back in the spring lacing them in gentle heat to make new th previous to planting them out after have been well hardened off. The treat- meted out to the plants was that given uchsias. It is always well to put in a of cuttings in the autumn, these taking t little room and are useful for keeping stock of moderately-sized plants.

ALATA may be treated in the same way, is quite as handsome as the last-men- d. C. Sophora is a good plant for train- along rafters or pillars, as it is very mmodating, growing freely and flower- iberally during the summer. C. florida other shrubby species which bears large les of deep yellow flowers.

MARYLANDICA is, perhaps, the best known e Cassias, being often used in the her- ous border. It is a very pretty perennial, ing to a height of from 3 feet to 4 feet, thriving well in any garden soil. This es is largely cultivated in North America s leaves, which form one of the Sennas of commerce; it is sometimes called Wild Senna. C. Fistula, the Pudding-pipe tree, C. angustifolia, C. angustiloba, and C. Alexandrina are the most important of the species, possessing valuable medicinal properties.

Pelargonium: Damping-off diseases

Will you be kind enough to inform me what is the matter with the enclosed Geranium cuttings. For several years now I have lost a considerable number of my cuttings. After putting the cuttings in they appear to do well for a short time, but before they root they begin to damp off; one cutting in the pot usually goes first and the others soon follow. I have tried taking away the affected cutting as soon as I see it, but this practice does not seem to stop the disease.

T. E. D.

[We have examined your Pelargonium (Geranium) cuttings and find that there are two parasitic fungus diseases present, either one of which would be sufficient to cause your cuttings to damp off instead of rooting. As the control for each disease is similar there is no need to worry about which of the two diseases is causing the most damage. We should advise you remove and burn all the affected cuttings and then water the rest *in situ* with Cheshunt Compound. Watch your pots of cuttings carefully for a time, because the above fungicide will have no effect upon any of the cuttings that are infected, but are not yet showing the disease. It will, however, kill the spores present in and around your pots of cuttings, and will therefore prevent clean cuttings from becoming infected. The correct method of making and applying Cheshunt Compound was given in a reply to "G. P." on page 94 in our issue of February 6th.* We should also advise you to thoroughly clean out your greenhouse when occasion offers, because we think that probably the diseases are present in your house, and that they remain there from year to year. When the house is empty thoroughly scrub the woodwork and glass with carbolic soap and water, limewash the walls, and give the floor a good soaking with Cheshunt Compound; and if you have an inside water tank clean that out too. The soil used for propagation purposes should be sterilised.]

FLOWER GARDEN

Waterside planting

(A. L. M.).—The improvement of the sides of the lake may be most readily effected by using vigorous hardy flowers, many of the finest plants, such as Irises and Globe Flowers, thriving in moist soil. You cannot do better than plant some of the Day Lilies, Meadow Sweets, tall Irises, Gunneras, American Swamp Lilies in peaty soil, Loosestrife, Golden Rood, Starworts, Knotworts, Moon Daisies, Cardinal Flower, and the common Lupine. To these you could add some of the nobler hardy Ferns, as Royal and Feather Ferns.

Iris reticulata

(E. A. S.).—The leaves and flowers are attacked by slugs—probably small black slugs, yellow underneath—which are very partial to this and other Irises.

FRUIT

Injury to Peach and Nectarine shoots

(W. F. Riddle).—The trouble may be due to the roots of the trees having pushed beyond the border or stations prepared for them into the surrounding soil, which may perhaps be soil that has in past years been heavily manured for vegetables. The effect of this would be that wood of a gross nature would be produced. This in turn would fail to mature or ripen properly, and be liable to injury from frost, even if it was not killed outright. The remedy in such case is to lift and shorten the strongest of the roots somewhat, and lay out the roots afresh in a nearly horizontal manner in good loamy compost containing a liberal admixture of old mortar rubble. We suspect that the death of the wood has been brought about from another cause. You state that the trees were attacked last spring, and that the disease disappeared later. Now you would help us considerably in arriving at a conclusion if you would please say if at the time you first noticed the attack whether the foliage flagged, then turned black, and dropped from affected branches. Was this followed by a shrivelling of the young wood or did it remain firm and put forth a further crop of leaves? If you will be good enough to enlighten us on these points we will reply further to your query.

Pruning newly-planted Peach-tree

(K. G.).—Certainly it will be necessary to shorten the growths back, if you wish to fill the space and obtain well-developed trees. It would seem that your soil is over-rich for newly-planted trees to become so vigorous. We should be inclined to lift them, and if at the time of planting you supplied manure, remove some of the staple and replace with plain garden soil, mixing lime with it at the same time. If your trees continue to grow thus strongly the prospects of fruit bearing are poor. Even if you do not change your soil it would be advantageous to lift the trees carefully and shorten the strongest roots, and, in any case, apply lime to the border. Prune back the shoots to near the points where you need the formation of branches to fill the wall or trellis, and if they again grow strongly in summer, pinch the points out to encourage more equal distribution of sap.

Pruning Black Currants

(A. J. J.).—Black Currants bear their fruits on the wood made the preceding year. The proper course in pruning, therefore, is to cut out some of the older growths each year, preserving the strongest of the younger growths, but shortening them back a little when they are unduly long or project much beyond the other shoots. It is the suckers from the bottom of the bushes that one wants to encourage, and if they are too crowded it is an easy matter to thin them.

Pruning Red Currants

(A. J. J.).—Red Currants grown as bushes on a short, clean stem should have the centre kept quite open, the main branches being about 1 foot apart. To have the branches well furnished with fruiting spurs, the leading shoot on each should be shortened to about

* The diseases present are: (1) Pythium sp., (2) Phytophthora cryptogea. Both these diseases cause damping-off and foot rot trouble.

one-third its length, and if there is room for another branch reserve a well-placed shoot, which shorten to about one-third its length, so as to gradually build up a strong bush. All the side shoots should be spurred back to about ½ inch of the old wood, the fruit being generally borne in clusters round these spurs.

VEGETABLES

Asparagus bed

(P. B. J.).—For making a new bed three-year-old plants give the best return. No heads should be cut the first year, and but few the second if the beds are to prove a permanent success; indeed, it is better to refrain from cutting any heads the second year and to cut but sparingly the third year. (*b*) Connover's Colossal is the best variety. (*c*) No, there are no so-called early and late varieties. The difference in kinds is very often mere difference in cultivation. (*d*) Of course, the position of the bed has something to do with the earliness.

NAMES OF PLANTS

E. A. S.—Skimmia Fortunei.

Journeyman.—1, Selaginella Krausiana; 2, Panicum variegatum (the correct name for this plant is Oplismenus Burmannii variegatus); 3, Tradescantia Zebrina (syn. Zebrina pendula); 4, next week.

S. G., Bournemouth.—The shrub is a Ceanothus, probably C. azureus. Please send in flower.

Royal Horticultural Society

A record show

IT is probably safe to say that never in the whole history of the Society has there been such a wonderful display at such an early date in the year as that put up at the Royal Horticultural Society's Hall, Vincent Square, on Tuesday, February 9th, 1926. What a gorgeous feast of colour! Superbly grown, magnificently displayed, and with what exquisite taste! The whole Hall was radiating spring in full festive gala, while the world outside was in the depth of winter gloom, black and forbidding. Mr. J. C. Allgrove, the fruit wizard, carried off the premier honour, the only gold medal awarded for an exhibit of Apples, over 100 varieties which, verily, must have been enchanted. In the words of the President, Lord Lambourne, "Wonderful." For this period of the year more than wonderful in colour, weight, form, condition, and perfection evident in every fruit. Imagine Cox's Orange in February; yet that variety had all the characteristic qualities in every point, including even juiciness and flavour at its best. The same applied to all the varieties shown. Messrs. Sutton and Sons' exhibit of Primulas in mossy dells and on ridge banks created an impression of great charm and exquisite grace.

Messrs. James Carter's forced Tulips, which we hope to illustrate next week, were magnificently grown. Mr. Cecil Hanbury's Citrus fruit display was of great botanical interest, but garden owners are not yet fully alive to the magnificent quality of Oranges grown in pots as was exhibited by Rivers and Sons. Their St. Michael's Orange, tasted annually now for some years past, puts all imported Oranges in the shade. Bunyard's fortnightly Apple exhibit was very good, with Claygate Pearmain and Sir John Thorneycroft, excellent-flavoured dessert fruits for present use. The trade display of Orchids was grand with Mr. McBean and his fairyland; yes, a real fairyland show of Orchids of every hue and superbly arranged. Mr. J. E. Shill, for Baron Schroder, obtained an Award of Merit for Cattleya Minnehaha. Perhaps this Orchid was the outstanding flower of the show. A huge pure white flower, except for a broad yellow band across the labellum. The perianth of great width and substance, the lip is a true trumpet fluted at the rim. The presentation of the outline, form, and pose of the whole flower is imposingly graceful, majestic, yet sweet. Truly one of the most wonderful flowers in the white Cattleya class. Sir George Holford's Cymbidium Flamingo var. White Wings is a beauty, but nobody has Cymbidiums to compare with those from Westonbirt. Mr. Collier, for Sir Jeremiah Colman, obtained a "cultural commendation" for Brasso-Cattleya Gatton Lily magnifica, a glorious plant with grand flowers superbly grown.

The private Orchid growers held their own against gorgeous trade displays staged by master leading firms like Sander, Charlesworth, Cowan, and others. Mr. Pitt had some seedlings of note. Now that smoking in the Hall is strictly forbidden and enforced the delicious wafts of Orchid scents sends one's thoughts far away into those tropical regions where the scent alone indicated the presence of an Orchid and a long hunt ensued before the treasure was secured. This is a delicious experience. Russell's Wistarias in full truss and bloom, (Paul's) Chaplin Bros.' Camellias, Barr's miniature Daffodil species, Waterer's Iris unguicularis, the many miniature rock gardens replete with gay subjects, botanical flowering plants in pots from Cambridge, and a host of other unmentioned subjects lent a charm rarely so well exhibited at this time of year.

Mr. E. J. Hicks' forced Roses made every rosarian's senses tingle. Even the Hon. Secretary of the National Rose Society had to linger long over them. The artists put up wonderful creations in pictures; among them Miss Bunyard's Apples, Pears, and Plums were of exceptional merit. Where does this good lady get her colours? What colours! All her fruits are alive and have a soul. They were so realistic that one was tempted to pick them off the pictures in an attempt to eat them. It is not every artist that can depict such skill and technique.

Where in the whole world can one see the equal of this show? Although the lecture hall was packed to overflowing on account of the annual general meeting, the flower hall was packed from the moment of opening to closing time. If this is a foretaste of what the other shows to be held are, then the floral exhibitions of 1926 must become a landmark in horticultural history.

Benn Brothers' Other Journals

The Cabinet Maker.—Soft Furnishings; Cinema Furnishings.

The Chemical Age.—The British Industries Fair: Survey of Chemical Exhibits; Dyestuffs Monthly Supplement; "The Dyestuffs Situation from the Maker's Point of View," by L. B. Holliday.

The Electrician.—"Some Studies in Radio Broadcast," by R. Bown, D. K. Martin, and E. J. Potter; "Notes on Wireless Matters," by L. B. Turner; Power Factor Problems; "I.E.E. Papers," by E. V. Clark and E. W. Dorey; Full Report of the Dinner of the Electrical Wholesalers' Federation.

The Fruit Grower.—Black Currant Growing Problems; British Empire Marketing; Short Weight and Measure.

The Gas World.—Gas and Electricity Supply in Greater London; Gas in Furnace Work; Gas Showrooms.

The Hardware Trade Journal.—(Gardening Requisites Annual); Satisfying the Needs of the Gardener; Lawn Mowers for 1926; New Models Described; Gardening Requisites; Seasonal Window Trims: How to Secure Effective Layout; The Welding of Aluminium.

Obituary

REV. JOSEPH JACOB.

It is with deep sorrow that we recor passing of our genial friend and contrib the Rev. Joseph Jacob, Rector of White Whitchurch, Salop, who died on the nig February 5th at the age of 67. It wa nounced in our pages a fortnight ago Mr. Jacob was down with pneumonia, from this attack he did not recover. We sadly miss him at the spring shows, an shall miss his ever-ready pen, for he v voluminous writer and was a regular tributor to horticultural publications ir country and in America.

He was the author of "Tulips," the volume on Tulips in the English languag the "Present Day Garden" series), as as "Daffodils" in the same series, and later, in 1924, he wrote another char and informative little work entitled "I Bulbs for Amateurs." His book on T was translated into several languages, n Dutch. As a judge he had visited all pa the British Isles and abroad, and was, ir on the "Grand Jury" of Holland—a rar tinction for an Englishman. In earlier he was an extensive grower of I Spanish, and English Iris, and he highly successful in hybridising and vating new varieties of Freesias and I nalias. The Polyanthus Primrose, the the Chionodoxa, and the latest variet the Michaelmas Daisy have also been a his special studies.

He was for many years an authority Daffodil, but, owing to the disease whi veloped on his land, he relinquishe growing and hybridising of this flower took up Tulips, on which, in course of he became an equally great authority.

The funeral took place at Whitew Wednesday, February 10th.

PROFESSOR WILLIAM BATESO F.R.S., V.M.H.

By the death of Prof. Bateson, at th of 64, the world of horticulture loses its most valued scientific workers. It w work in connection with "Mendel's and Genetics" as applied to plant br that brought him into prominence in cultural circles. He was a biologist of national reputation, and author of s standard works in the field of genet search. After a very distinguished car Cambridge he became Director in 1910 John Innes Horticultural Institution a ton Park, Surrey, and retained this imp office till his death. In 1914 he succeed Oliver Lodge as President of the B Association, and presided over its annu ference held in Australia.

His writings were more profound numerous, but they included many imp papers in various fields of biology, as v four standard volumes, "Materials f Study of Variation," "A Study of M Principles of Heredity," "Problem Genetics," and "Mendel's Laws of I ance and Wheat Breeding." His prefe for Mendel rather than Darwin led teresting and lively controversies scientific circles, which drew scant attention at a time when we were en the world war; but his experiments an clusions have had a marked influen modern interpretations of sex-limited i ance, and have undoubtedly populari department of science.

Professor Bateson was a familiar fig the fortnightly meetings of the Royal cultural Society, and was Vice-Chairm the Scientific Committee. In 1901 h awarded the Victoria Medal of Hon his services to horticulture.

GARDENING ILLUSTRATED

. 2450—Vol. XLVIII. FEBRUARY 20, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

ca cannabina ... 112
als, accommo-ing 114
, Wellington ... 112
feeding, with dy 123
ble the Rocky ntain, and other ubs 112
protection 112
anulas, hybrid, sers of 124
pillars, hand-ting 113
Carrots forked 124
Ceanothus not doing well 124
Cornus Mas 112
Davallias 119
Dogwood, the Red (Cornus alba), in winter 118
Eucalyptus trees ... 113
Flowers, hardy herbaceous, the showing of 124
Flowers, raising summer 123
Fruit-buds, birds and 123
Fruit trees clean, keeping 120
FRUIT TREES, TRAINING ESPALIER 120
Gardener, working hours of a single-handed 124
GARDEN, IN A WEST SURREY ... 116
Garden, liverwort in damp 124
Grafting wax, a good 124
Hippeastrum, a winter-flowering 119
Hot-bed, making a ... 124
Ideal Home Exhibition, forthcoming ... 111
Lapagerias—a plea for an old climber... 113
Lettuces under glass and in the open ... 122
Mahonia, the Japanese (Berberis japonica) 112
ONCIDIUMS 119
Pears, some good late 113
Planting... 117
Potatoes in clamps ... 112
Potato sets, the treatment of 121
PRIMULAS, GREENHOUSE 111
Raspberries and basic slag 123
Raspberry Lloyd George 112
Restis verticillata ... 112
Rose Etoile d'Hollande 112
Rose Gloire de Dijon, pruning 123
Roses in the forcing-house 116
Shrubs, evergreen flowering 117
Sweet Peas for exhibition 114
Vegetables, fertilisers for 121
WILLOW, THE CRICKET BAT ... 113

Greenhouse Primulas

S a very old subscriber to Gardening Illustrated I am taking the liberty to ask if one of your correspondents would us an article on greenhouse Primulas, ding sinensis, stellata, obconica, mala-s, Forbesii, and Kewensis, stating the time to sow the seeds, the best soils, and h kinds are best treated as annuals, and h (if any) should be treated as nnials. J. A. Tattershall.

ayes, Exbourne, Devon.

During the last 20 years considerable im-ement has been made in nhouse Primulas, and rever it is necessary to a greenhouse more or gay through the winter ths they can hardly be ensed with. There is a derful variety of colour, foliage is pleasing, and plants as a whole are to grow, providing a cultural details are ob-d and green-fly is kept eck. Our correspondent tions P. sinensis, P. ta, P. obconica, P. coides, P. Forbesii, and Kewensis. With, per-, the exception of P. esii, all are treated as als, and even this es can be raised from annually, but I find it not germinate so freely ss from home-saved s, which must be sown tly they are ripe. P. esii can be increased by ion after flowering. time to sow seeds of ulas depends on when are needed in bloom, rom seeds sown the end of May a good ay could reasonably be expected in ary and February. This applies to P. sis, P. stellata, and P. Forbesii. P. ica and P. Kewensis may be sown a h earlier, as they require a slightly r growing season. P. malacoides can ad in bloom in 12 weeks or 14 weeks, it is a good plan to arrange for two es. It is advisable to point out that P. malacoides and P. Forbesii make l flowering examples in pots 3 inches in eter. A good strain of seeds should be red, and one of the best houses for house Primulas is undoubtedly Sutton's, eading. As a rule, a 5-inch pot will be enough for a packet of seeds. They should be filled with drainage material to about half their depth, over which is placed a layer of Moss. Fill the receptacles with light soil and give the pots a thorough watering a few hours prior to sowing the seeds. Even and thin sowing should be the rule, and only a slight covering of soil is needed. Place a piece of glass over each pot and turn it daily until germination has taken place, when it is removed. During this period a warm greenhouse is needed, and the plants must be shaded from strong sunlight.

A fine specimen of Primula sinensis from seed sown in April

Directly the seedlings are well through the soil a position near the roof-glass will be best, and particularly at this stage dryness at the base should be prevented. When moisture is required the pots are submerged to half their depth in a bucket of rain-water, and allowed to remain until the water percolates to the surface of the soil. When the seedlings have made two or three rough leaves they should be placed singly in 60 size or thumb pots, and then grown on a shady shelf in a cool greenhouse or frame. At this stage a light compost is needed, viz., loam and leaf-mould in equal parts, with a sprinkling of sharp sand.

It is important that the young plants are not starved at this stage, so directly they have nicely filled the small pots with roots they ought to be moved into receptacles 5 inches or 5½ inches in diameter, in which they will flower. Good plants of P. obconica will need 6-inch pots. A suitable rooting medium consists of good quality fibrous loam one-half, sweet leaf-mould one-fourth, and one-fourth manure from an old Mushroom-bed, the whole being passed through a ½-inch mesh sieve. Add sufficient sifted old lime-rubble to render the whole porous, say a 6-inch potful to every bushel of the mixture. If an old Mushroom-bed is not available a little dried cow-manure is a good substitute.

The pots are well drained and the soil is pressed moderately firm; at the same time pot low enough so that the leaves will rest on the compost when the operation of the final potting is completed.

This will prevent any need of stakes, which are occasionally seen in gardens, owing to bad potting. Arrange the plants in cold frames where a little shade can be afforded when the sun is bright, and give water in moderation until the roots are well established. During the summer months a cool bottom is essential, and if the lights are removed at night the plants will greatly benefit with the dew. When the weather gets cold and there is danger of frosts remove the plants and give them a light, airy position in a cool greenhouse, where they will soon begin to push up their flower-spikes.

Insect pests are not troublesome, excepting green-fly, and these must be destroyed by fumigation in the early stages or they will cripple the young leaves and do irreparable damage.—T. W. B.]

NOTES OF THE WEEK

Forthcoming Ideal Home Exhibition

THE tenth "Daily Mail" Ideal Home Exhibition will be held at Olympia, London, from March 2nd to 27th, and in many respects will be quite different from its predecessors. The arrangements in the main hall, annexe, new hall, galleries, and minor halls are on fresh lines, while the principal

features have been designed on novel plans. The fifteen gardens in the annexe will not only be varied in treatment and type but will be so grouped as to give the effect of one great garden with winding paths. A notable feature of the new hall will be 10 full-sized furnished houses ranging from an old-world mansion to a bungalow, and hard by is to be a land bureau at the service of the home-seeker.

Potatoes in clamps

Reports as to the keeping qualities of Potatoes vary considerably. Where they were stored in dry condition and properly clamped so as to be protected from the frost they are mostly keeping well. Some rotting has taken place where the crop was stored in a wet and dirty condition. In some eastern counties there are general complaints that there are a good many diseased and discoloured tubers. In the north and north-east of the country frost has penetrated many of the clamps, and a fair proportion of the tubers has been rendered useless.

Cornus Mas

The Cornelian Cherry is a small deciduous tree, a native of Europe, and has been cultivated in gardens in this country for a long period. It bears clusters of brilliant yellow flowers produced with great freedom during the month of February. When the bushes attain a moderate size they bear oblong Cherry-like fruit, but by no means freely. For massing it is most effective, giving a wealth of bloom at a time of the year when gardens are bare. This is a good plant for continuing the flowering period in early spring, as it opens as the Witch Hazels are passing. Like the Witch Hazels it flowers on the wood bare of foliage, and for this reason if a background of dark evergreens can be provided it enhances the value of the plant immensely. It is perfectly hardy, growing in any good garden soil. This might with advantage be more freely planted than it is. R. FINDLAY.

The Japanese Mahonia (Berberis japonica)

This noble evergreen and its allied forms are now blooming freely, quite a fountain of sweetly-scented yellow flowers tumbling out of the tops of the stout, handsome growths, which are freely clothed with luxuriant rich green foliage. We meet this plant too frequently denuded of its splendid leafage for half its height, this detracting from its decorative value. This may be avoided if the plants are pruned hard back immediately their flowers are over. They will then break lower down the stems and in the course of time again become bushy, well-shaped plants. It seems a sacrifice at the time, but it amply repays in the end. It loves partial shade.

G. M.

Restis verticillata

One of the most beautiful—as it is also one of the most graceful—plants for large vases to stand in the open air during the summer is the above. The stems are Rush-like, but stout and arching, and clothed with pale green, hair-like growths, after the manner of Asparagus, these in their turn terminated by whitish flowers. The lovely appearance of a well-grown plant renders it a most desirable subject for the purpose here stated. M.

Althæa cannabina

When passing through the Dean's garden at Chichester some time ago I was attracted by a very fine plant of the above. It is a tall, graceful plant, which apparently dies to the ground line each year. When I saw it the branching growths were from 6 feet to 8 feet in height, carrying quite a number of pretty pale rose, Mallow-like flowers, each from 1 inch to 2 inches across. G. M.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The Rocky Mountain Bramble and other shrubs

LIKE Lady Byng of Vimy, I also wondered when reading, in the issue of January 9th, that this Bramble needed the shelter of a wall in cultivation. My experience of this shrub has been that it is quite hardy. Fourteen years ago I planted about half-a-dozen in a garden a few miles from Leeds, Yorkshire. These are still there and going strong. None were planted against walls, but in a mixed shrubbery, the soil cold and stiff. The annual treatment they received consisted of cutting out old branches to make way for young shoots. Every spring they flowered profusely, and were outstanding objects of the border while in flower.

While on this subject of shrubs the list under the initials "E. A. S." of "Plants in bloom in the open on January 31st in a Cornish garden," in GARDENING ILLUSTRATED for February 6th, two were mentioned which I should like more information about, namely, Rhododendron præcox and Olearia Haastii. R. præcox was in bloom on this date and O. Haastii opening. What I cannot understand is, how does it come about that in a Cornish garden these two are so near flowering together, while here in Yorkshire there is a difference of five months? R. præcox will be in flower before long and O. Haastii at the end of July. On looking through catalogues issued by firms north and south there is this difference of five months in the dates given for flowering. Had there been a difference of five weeks then I should not have been surprised.

P. CLAPHAM, F.R.H.S.

Scholes, near Huddersfield.

Rose Etoile d'Hollande

Our attention has been drawn to the recent correspondence in your columns on the subject of Rose Etoile d'Hollande, and especially to a letter in your issue of January 30th from Mr. W. E. Wright, and we feel we must point out to you that Mr. Wright's experience with this Rose is entirely different to that of ours, for if there is one dark red bedding Rose that has been introduced during the last few years which has given us satisfaction it is Etoile d'Hollande.

It is a splendid grower, with a grand habit for bedding, good foliage, the colour is all that can be desired, and it retains this colour much longer and far better than almost any other red Rose we know of.

It has a glorious perfume, a good stiff stem, and the shape in the bud and half-open stage is all that can be desired, and everyone who walks round the Roses in our nursery has spotted this variety; so much so that we have had an enormous demand for it, and have entirely sold out for this season, despite the fact that we had several thousands of it.

We mention this fact merely to show that we are not writing these lines with a view of clearing our stock, but simply to do justice to the merits of what is undoubtedly one of the finest dark red bedding Roses we have to-day. In fact, we consider it the finest.

We fear that Mr. Wright cannot have got hold of the right variety.

Huntingdon. WOOD AND INGRAM.

—— I wish to thank "Victoria" for his very enlightening letter in answer to my inquiry on the above Rose, and am very pleased to hear that he resides in the same county as myself, which is very much more suitable to Rose-growing than South Wales, and I shall certainly accept his invitation to view Roses when in bloom. His plants, I n are grown on seedling Briar, which no do makes all the difference. I was speakin the behaviour of this Rose from my experience. The trees when planted w well grown, but they turned out absolutel failure in two seasons, probably due to be grown on the Manetti stock. I should like to thank Mr. Perkins for his kind le I have received and the information he g on this Rose, and between them I thin may give Etoile d'Hollande a further t as it is with the results of experience of oth that a plant or tree gets justice.

W. E. WRIGH

Stockton House Gardens, Near Rugby.

Raspberry Lloyd George

Apparently the soil in the garden of y correspondent, "A Scottish Gardener," somewhat poor one. This is a pity as I afraid that unless this Raspberry is grow a good strong soil—preferably a heavy loa the berries lack flavour.

A friend of mine who has grown variety on his hungry, sandy soil in Surr most disappointed. After two seas growth the flavour of the berries last year very poor and watery; this despite atter in the way of manuring and mulching. intends, however, to give it one further t but is not at all sanguine as to results. canes grow away fairly strongly, but parently the soil lacks the necessary stituents to produce good flavour in berries. Those I sampled were almost t less.

The flavour of the berries of this va grown in my garden, the soil of w is heavy loam, is excellent, and quite on with that of well-known varieties. Flavo purely a matter of individual opinion up certain point, of course. EASTCO

Wellington Apple

I have great pleasure in answering Thackeray Turner's question, "Can I t a better dessert Apple for July?" I sume he means the July following its ga ing. Not having any experience of its ing qualities into that month I am unal say what its qualities as a dessert Appl as late in the season. What I do kn that there are very few who would ca its sharp taste from November until M which is the longest period I have kep fruit. I should certainly say Fearn's Pi Renette du Canada, Sturmer Pi Wagener (a Apple seldom grown), Ki Tomkins County, Allen's Everlasting, Barnack Beauty are a few among other would have more call as late-keeping d Apples than Dumelow's Seedling, othe known as Wellington. W. E. WRIG

Stockton House Gardens, Near Rugb

Bud protection

Fruit-buds seem to have come th safely in this district in most gardens the time of writing (February 9th), but is no telling what bullfinches may do, a spell of cold weather to hold growth about where it is, and it would be as w growers who have not already done take the necessary precautions. Cordo the most easily and cheaply protected, a amount of fish-netting answering the pose, but in the case of large bushes, stock of netting is limited, other mea will have to be taken. Possibly one

t precautions is to take a sufficient quan- of quassia extract and dilute as advised. this add a fair-sized piece of soft soap, well, and spray the bushes thoroughly h the mixture. When partially dry dust r well with a mixture of lime and soot. is will be washed off in time by rains, but ave always found the quassia and soft-soap ture render the buds distasteful to the ls. All such bushes as above noted are be found in some gardens in a wire en- ure, but I do not care for the practice ess provision is made for the access of the ls at certain seasons, for there are times n the work of some birds is decidedly eficial. This hardly applies to feathered nds, like the bullfinch and starling, loss of and fruit in the season of 1925, following r attacks, being very considerable. The lings were very numerous and persistent year. Starting with the small fruits, y followed on with Plums and Apples, and shed with Elderberries, all bushes to which y paid their attentions being well stripped. y come in flocks, but the bullfinch is not n seen in more than one, or at most two, ples. Their movements are rather erratic; t is, they patronise a certain district one son and the next miss it altogether. This r, fortunately, up to the present time we e seen nothing of them. The above was tten before reading the interesting article Walker's transferable fruit cage in last k's GARDENING ILLUSTRATED. I should nk it would be extremely useful to those h the means to secure it. My own notes erred mainly to cottage and allotment dens. E. BURRELL.

Eucalyptus trees

have lately acquired several young alyptus Whittinghamensis trees, as they well in this district and have stood the nters successfully for the last 20 years or They were first planted in Professor ssell Wallace's garden here, in a sandy m or clay, which appears to suit them, as y grow from 30 feet to 40 feet high. I h to inquire (1) how to proceed to get the t results from these trees; (2) is there a k which gives reliable information about alyp us trees? JOHN ADAMS.

tellawood, Victoria Road,
Broadstone, Dorset.

Ve refer our correspondent to the article Eucalyptus, by John Hill, of Paignton, e February 13th, page 98. We have re- ed this inquiry to the author of the article question, who kindly replies:—

E. Whittinghamensis is a garden form E. Gunnii, one of the hardiest and a ies which will do well almost anywhere, the best positions are those on low-lying l where there is plenty of moisture, or by or stream sides. In such places it would uire very little attention apart from ing during its first years of growth. tivation of the soil and a mulching of ure in spring would certainly be of some efit. I do not know of a good book on alyptus. Although it is such a large us, very little, comparatively speaking, is wn about the genus in the northern isphere."

Handpicking caterpillars

his is a rather tedious job both for gar- ers and allotment holders with restricted e. I should like to hear either of some ple device for keeping the butterflies off greens, or something suitable and inex- sive for killing the caterpillars, either der through a sulphur duster or some- g to mix with water and used with a erean and rose that would take only a minutes to apply, say once a week when necessary. I know of several things which would be much too dear. Paraffin mixture will help keep them off young plants, but most unsuitable for anything edible approach- ing maturity, likewise a soft-soap mixture. Then there is the Onion fly, which defies any amount of lime, soot, etc., said to be effec- tive, and can only be to some extent dodged by early sowing under glass and transplant- ing. Perhaps one of your numerous readers could tell us of something really effective and thus earn the thanks of many fellow culti- vators. H. P.

The Cricket Bat Willow

WITH reference to the observations on the cricket bat Willow in a recent issue we have pleasure in sending an illustration showing what it can do in four years as a screen or wind-break. It is very simply managed. The plants are put in at about 9 inches apart in good soil; the better the soil the quicker the growth. When the buds begin to swell take a sharp knife and cut them over about 1 inch above the ground. Tread them firmly at the stem of the plant so that the plants will not be pulled out of the ground with the knife. From each plant one ought to get four or five shoots, which accord- ing to conditions should put on a growth of 3 feet or 4 feet the first season. If satisfied with the density of the screen st leave the plants alone and let them run up. If the screen is required to be still denser repeat the cutting over the following spring, which ought to give double the number of shoots and therefore a much denser screen. The screen in our illustration was only once cut over. DICKSONS AND CO.

Edinburgh.

An excellent screen in four years
Showing what the valuable Cricket Bat Willow will do under suitable conditions

Lapagerias—a plea for an old climber

At one time the culture of these handsome greenhouse climbing plants was more general than it is to-day, as outside large establish- ments there seems to be a disposition to drop them, yet there are few flowering denizens of the rafters more attractive than Lapagerias. The two best-known varieties, L. rosea and L. alba, rose-pink and white respectively, when the tubular blossoms are seen depend- ing from the roof add beauty to any house. Possibly one reason for their exclusion from the average greenhouse is because of an im- pression, which has gained ground, that Lapagerias need to be grown in an abnormal temperature if one is to do any good with them at all. This is a misconception, as they can, and are, satisfactorily dealt with in the greenhouse where the temperature meets the requirements of mixed collections of plants. Brown fibrous peat, old loam, coarse sand, and broken charcoal, with some crushed clinkers from the stokehole provide a medium in which Lapagerias thrive. Good drainage is imperative. LEAHURST.

Some good late Pears

At one time or another I have grown almost every Pear which is worth growing, and not, perhaps, unnaturally, I have certain favourites. Yet so much depends upon stock, situation, and soil, and so much do Pears vary in their characters that I would be loth to recommend many of the varieties which have, with me, done excellently. To provide a supply of dessert fruits from November to March is the aim of all growers of the Pear, and for this purpose I have found the undernamed sorts reliable in different dis- tricts. Most useful and regular-bearing are Emile d'Heyst and Doyenné du Comice, the latter often being described as the "best" Pear. Fondante de Thirriot used to be a favourite with me; so, too, was Marie Louise. Conseillor de la Cour produces handsome and well-flavoured fruits, and no one can omit Winter Nelis—small, it is true, but of ex- quisite flavour. Marie Benoist and Beurré du Boisson ought to be more freely planted. Easter Beurré, of course, is quite in the first flight, but it is, I think, wrongly named, for, in my experience (from wall trees), Christ- mas, and not Easter, is its season. The well- known Josephine de Malines is always a favourite at the table, and if Olivier des Serres is rather small its quality is un- deniable. This list may be finished with President Barabe. When I first planted the variety, round about 1900, it was comparatively new, but, with me at least and in a warm, fertile garden near the sea, it was a success. The varieties herein named will, under suitable conditions, give the desired supply from November till March, when Pears are, perhaps, more appreciated than in late summer and the early autumn months when there is a wider variety of dessert fruits upon which to draw. W. McG.

Mabie.

Accommodating Annuals

THE class of flowers known as "annual," by reason of their only annual duration, contains many beautiful subjects for the hardy garden, just the kind of things that amateurs would do well to cherish more. Annual flowers have, until quite recent times, received scant attention from a supposed weediness that was natural to them, and also a short though merry life. They were regarded as ephemeral, lasting for a short time only; but this was due to more than one cause. The ground was ill-prepared, the seed sown as thickly as dust, and the plants indifferently thinned, with no after attention, not even to removing a seed-pod to promote a succession of bloom. It can scarcely be expected that plants placed under such conditions would retain health and robustness sufficient to give a gay and continuous succession of flowers. There is no better season than the present for starting the culture of these annuals, as this is the time to prepare the seed list, and a few good things may be well pointed out. The seed catalogues of most of the best firms are now distributed, and to prevent disappointment or delay order as soon as possible, to prevent the possibility of the proper season for sowing escaping. Prepare the soil by digging it deeply, if nothing has been done to it, and when the time comes sow the seeds, generally from ¼ inch to 2 inches deep, varying the depth according to the size of the seeds, and on no account sow too thickly. It is customary to sow about double the quantity of seed there is any need for; the plants come up thickly, struggle for existence in a crowded mass, and even when thinned out seldom recover their robustness of habit. Most annuals require at least a space of 6 inches, and to be thinned out before the growth becomes weak and spindling. All flowers as soon as they decay should be picked to prevent the seed ripening, which checks the flowering and weakens the plant. The kinds that are here enumerated are all good.

PLATYSTEMON CALIFORNICUS.—One of the most charming and effective of Californian annuals, and came to us from that country in 1833. It grows about half a foot high, and needs but a common light soil, with ordinary attention in thinning out, so as to produce a bushy plant well covered with its creamy-white or pale yellow flowers. The seed is very cheap, and should be sown in spring.

SWEET PEAS.—Since these have received the hybridist's attention we have a rich assortment of colours, larger flowers, and a stronger habit of growth. It is scarcely necessary to suggest a use for this fragrant flower in the garden. Its graceful habit and freedom of blooming point this out. If there is an unsightly spot to be hidden, a flowery screen can be made with the Sweet Pea, and a row or two should certainly be grown in the reserve garden, where we look for the flowers for cutting. A sowing may be made in March in the open ground. The staking of the plants and other matters of detail need no comment, except that the seed must not be sown so thickly that a severe thinning out has to take place. Sometimes in the press of work this is neglected; the plants grow weakly, and though given plenty of space afterwards, never properly recover.

POPPIES.—These offer great variety from the coarse-growing P. orientale to the frail and beautiful Iceland Poppy, the former suitable for the border or to form clumps by itself, the other to margin flower-beds or to make small groups on the rockery. Papaver orientale is a rich beauty, but it can be used too much. To have a surfeit of such a bold-growing plant is a mistake. There are now several varieties, bracteatum, of course, being the best known. P. nudicaule and its varieties album and miniatum are easily raised from seed sown in the spring, and such annual Poppies as Danebrog, Peacock, Pæony-flowered, Carnation-flowered, French, and umbrosum are beautiful garden flowers.

NICOTIANA AFFINIS (the Sweet-scented Tobacco) makes an excellent pot plant, and flowers freely in the border. It can be easily raised from seeds sown in March, and makes a quick growth.

SALPIGLOSSIS.—An annual that bears a profusion of quaint, variously-coloured flowers. It makes a handsome bed, and a mixed packet of seed will give great variation in colour of the flowers, which are beautifully pencilled, as in the Alstrœmeria. The seed may be sown under glass in March or April, and placed in heat to induce quick germination if the seedlings are required for pots. While under glass keep them hardy and stocky by ventilating the frame whenever the weather will allow of it. It can be raised from seed sown in the open.

LOVE-IN-A-MIST (Nigella damascena) should be sown in preference to N. hispanica. It is an annual easily raised from seed sown in the spring, and a row might be sown in the kitchen or reserve garden to supply cut flowers. Though it is not fragrant nor showy like the Sweet Pea, it is a singularly beautiful annual, the bluish flowers nestling in a bed of mossy growth, and suggesting the common English name. It is one of those old favourites that, with the increased attention given to hardy plants and annuals, has not been overlooked. The best is that known as Miss Jekyll.

NASTURTIUMS OR TROPÆOLUMS. — These annuals always have been grown largely, and are good substitutes for the Zonal Pelargonium. Their great failing is that after July is over they quickly lose their beauty, a fortnight or three weeks turning a gay block of colour into a flowerless patch. This was evident in the year 1921. In that memorably hot and dry July the Nasturtiums were at their best, but after that month they quickly lost their former beauty. It is here that the Zonal Pelargoniums have an advantage; they show no such ephemeral character as the annuals.

CORNFLOWER (Centaurea Cyanus).—The Cornflower has been used in many beautiful arrangements in the flower garden. Its lovely blue flowers can be worked into the choicest wreaths, bouquets, or posies, and the plants can be easily raised from seed if this is sown in the open ground in April. If it is desired to have extra strong plants and early flowers a sowing should be made under glass in heat and the seedlings potted on. Harden them well previous to planting out. The bright blue variety should be grown in preference to the rose, purple, or striped kinds, but the white is indispensable. A sowing should be made in an odd spot for the supply of flowers for decoration to prevent the plants in the flower garden being spoilt by continual cutting.

MIGNONETTE.—This should be sown in quantity, as it is always in demand for the drawing-room. Reseda odorata pyramidalis is a splendid type, the spikes strong, bold, and the flowers very sweet. A bed of standard Roses may be made less ugly by a carpet of Mignonette. Clumps in the border, by the margin of the shrubbery, or a bed wholly devoted to it, will not be too much of a flower everybody loves.

CLARKIA PULCHELLA and its white variety are very useful for cutting. Sown in September, the plants come into full bloom early in June. Successional sowings up to middle of May will furnish bloom up to autumn. The later sowings should be m in rich ground, into which the roots can st deeply in a time of summer drought. I sowing in poor or shallow soil is time was

LIMNANTHES DOUGLASI.—One of the annuals for early flowering. It is extren hardy, and will thrive where the soil is as well as in ordinary garden soil. It o sows itself on light soil and gives no fur trouble.

NEMOPHILA INSIGNIS.—One of our fi annuals, and when sown in autumn there but few annuals to equal it in the early spr The various Nemophilas are well suited edgings and for filling small beds as they of compact growth. To ensure a good play the best time to sow is August in l soil when the soil is light and where plants will not become too robust before winter sets in. In Scotland this annual as a rule, seen at its best. The annual

SCABIOUS in very light soils will someti come through the winter fairly well, but general way they suffer too much from damp and cold to be of much value the sec year. The dwarf-habited strain is of m worth employed in the same way as bedd plants. The seed should be sown earl warmth, so that strong plants are read put out in May. They come into bloo month or more earlier than if raised late in a cool temperature. If sown in Apr the open ground they will not come into bloom before the end of August, or even l if the summer is cool. It is a good pla sow seed about the middle of August, so the seedlings get fairly strong by the en the autumn. Wintered in a cold frame, keeping them quite hardy, they may be into the open ground at the end of M This is a simpler way of getting early bl than by sowing in warmth in spring, and plants individually will bear a much la quantity of flowers. A.

Sweet Peas for exhibition

ON page 55 in the issue of GARDEN ILLUSTRATED dated January 23rd C Waite states it is a simple matte grow Sweet Peas for exhibition. I be differ, as, having been an exhibitor of S Peas for the past 20 years, I find it is r simple matter to produce blooms that going to stand a chance in keen competi The writer advises obtaining the best see agree with him in this respect. His a on sowing in large pots in October placing in a temperate house until all weather has passed away is wrong. Sweet Pea is a hardy annual, and the c the conditions it is grown under the be True, seeds sown in spring may be hast along with a fair amount of warmth fo first month or so if the plants are pin back to check growth and cause the break. In this case the warmth of the g house causes abundance of roots, but the second growth commences they mu removed to a cold frame or a shelf in a greenhouse. Trenches in which exhib Sweet Peas should be grown will also re something more stimulating than parings put into the bottom. The tren should be at least 2 feet deep, accordi the condition of the soil, unless one is pared to replace the bad subsoil with s thing more substantial. The trenches sh be prepared in early autumn, not at the of planting, so that the soil will have a time to settle. These should be 2 fe 3 feet wide as well as deep, and in the bo should be placed 6 inches of good manure, if available; if not, farm manure. After covering this with 6 inch soil with which a sprinkling of lime has

1. The woodland garden near the old Norman church in the grounds of Albury Park. In the foreground may be seen the feathery panicles of Senecio tanguticus. This plant, with its handsomely cut foliage and masses of yellow flowers, is well adapted to a moist and shady situation such as this.

2. Streamside garden suitably planted with Gunneras, Osmundas, Rogersias, Irises, Spiræas, Cathas, Trollius, and other waterside plants.

3. Border of pink Lavatera edged with the lavender Nepeta Mussini.

4. Another view of the wild and woodland garden. The sides of the running streams are bayed up and freely planted with moisture-loving Primulas, which are such a great feature of these beautiful Surrey gardens.

IN THE WILD AND WOODLAND GARDEN AT ALBURY PARK, GUILDFORD, THE SURREY HOME OF THE DUKE AND DUCHESS OF NORTHUMBERLAND

mixed another coating of manure should be given. This may be the contents of an old hotbed or that on which Mushrooms have been grown. After filling the trenches with soil it should be left until February, when a dressing of bone-meal or superphosphate of lime and wood-ashes should be forked in with another such dose, or, as an alternative, soot and wood-ashes a week or so before planting out. This should be done as early in April as possible, provided the plants have been well hardened off and the soil in a suitable condition. Each plant should be set 1 foot to 18 inches apart in a double row, and the soil should be shaken from the roots and the whole length let in with a dibber or long pointed trowel. Water each plant and give support with a twiggy stake, such as the remains of an old besom. If the plants droop, shade with newspapers and keep the roots moist until they pick up again.

THE MAIN SUPPORTS.—In growing Sweet Peas for exhibition bushy sticks are useless, as the plants should be grown as single stems and tied as the growth proceeds. For this purpose Bamboo canes or stakes 8 feet to 10 feet in length should be used and these made firm with wire attached to strong posts placed at either end. Two stakes should be provided for each plant. Another method I have adopted with equal success is to fix up three strands of wire on either side the row. One wire is placed near the ground, one at the top 8 feet or 10 feet high, and the other one in the middle. A ball of agricultural binder twine is now obtained, and this is cut in lengths, tying at the bottom, looping round the middle, and fastening at the top. These strips should be 6 inches to 9 inches apart, according to the distance between the plants. When the plants have made a good start it should be decided how many shoots are to be grown from each plant. Strong-growing varieties should be allowed three, medium two, and for the weaker ones, such as the salmons and the more delicate ones, one shoot is enough. All the remainder, after the strongest has been selected, should be rubbed out.

TRAINING THE PLANTS.—By the middle of May the plants will be making headway if all has gone well, and when the warm weather appears, with showers occasionally, I question whether there is any plant that grows faster than the Sweet Pea. These shoots must be tied loosely to the supports at least once every week. Most readers are acquainted with Tomato growing and know how important it is to remove the shoots that appear in the axils of the leaves. It is just as important to remove the side shoots on plants of exhibition Sweet Peas. These should be pinched out as fast as they appear, doing this every time the plants are tied. Exhibition Sweet Peas should not be allowed to carry flowers other than one here and there for identification until a week before the show. Thus the plants obtain all possible energy.

AFTER-TREATMENT.—Towards the middle of June the sun will be stronger and the ground drier, so something should be done to help keep the roots moist. The Dutch hoe should be used along each side of the row from the commencement of growth to prevent the soil becoming baked. Now is the time to apply a mulch 3 inches or 4 inches deep of stable manure, or, failing that, leaves or lawn mowings. If drought continues give a thorough soaking of water once a week, but not unless it is really required. If the trenches were properly prepared as advised very little feeding will be needed until about one month before the show, when soot-water and liquid-manure may be given in a weak state twice a week, or one of the advertised Sweet Pea manures given as per directions. Readers should be wary in using such chemical manures as nitrate of soda and sulphate of ammonia, as these are certain to bring the dreaded disease known as streak, for which up to the present there is no known remedy. Possibly, if the shows are late the plants may have reached the top of the supports. To remedy this the plants must be carefully brought down to the ground and the first stem should be taken along the row for a distance of 3 feet and then trained up again, following with each plant in rotation until the whole row is brought down to 3 feet from the top of the supports.

CUTTING THE BLOOMS.—This is best done late the evening before the show, standing the blooms in a cool place for the night. All those with the top bud not expanded will be in full beauty by the time the judges go round. Study the schedule and see that each bloom is separate from its neighbour and that each vase is correctly and plainly labelled. A small handful of rushes cut into short lengths and placed upright in the vases will help to keep the blooms in position. Nothing better than just one or two large leaves f the plants for decorating the vases.

W. E. WRIGH
Stockton House Gardens, Near Rugby.

Lily pond and Rose garden, with an edging of Stachys lanata

In a West Surrey garden

A BEAUTIFUL garden in the Farnl district of the West Surrey hills that been some years in the making is approaching completion. The last part just been formed, and though all that it tains, and especially its shrubby backgro has not as yet grown, the new garden sh a wealth of bloom and abundant promise the future. Steeply-rising ground, necess ing some form of terracing, is a gain in e garden, and is doubly valuable when, a the portion shown, these rising levels e above the general garden level. A succes of flights of steps, ever leading the eye ward, is always of good effect, and when steps can be low and wide and not too n in the flight there is a sense of ease an pose that is one of the most precious qual that can be given to a pleasure ground. steps lead up through small turfed lawn bounded by dwarf shrubs and border flow each terrace having rather its own chara Hydrangeas and Crinums are on the lo levels; next above them come more Crin with Stephanandra, Phlomis, Veronicas, Cassinia, and bold foliage of Acanthus the broad-leaved Saxifrages. On the up most level the lawn sweeps round in a circle. Here the naturally sandy so poorest and hottest, and here are Cistus Helianthemums in quantity, with a bac of Vaccinium, Rhus cotinus and fru Barberry, the old Fir plantation of the p with its carpet of Heath and Bracken, f ing a complete background to the whole

G.

ROSES

Roses in the forcing-house

NO time should be lost in getting plants under glass, if that has already been done, as the best re follow a steady growth. That splendid ing Rose, Liberty, was a great success year, and it promises to be the same season. At present this variety is un passed for richness of colour, although l mond, is, perhaps, a more satisfactory va for mid-winter blooming. One fact shou remembered as regards Liberty, and th do not discard old plants. This Rose i better from old plants than it is from grafted last year. If the plants are cared for when the flowering season is and they are allowed to make a nice gr under glass before turning them outdoor the summer, a well-ripened growth wi the result. We usually place the plants doors on beds of ashes, taking care the not suffer from want of water, and the the fall they are laid upon their sides t off and remain thus until brought into house.

Start them in a steady temperature at —say, about 48 degs. to 50 degs. by n and rising to about 55 degs. by day, when growth is well started 60 degs. by should be given, and about 54 degs. by n Until the foliage becomes too crowded p of Rambler Roses in pots may be start the same house, but as soon as they s the other plants too much they are shift another structure. These Ramblers ar lightful objects when well flowered, a secure this there must be thorough ripe of the growths during the summer. south end of a glass structure or a south against which to place the plants outsi

cellent position for such Roses after ome from the greenhouse in August. st always be remembered that Roses rly forcing should be repotted in the summer, and unless this can be done it er to top-dress the plants in autumn.

stions are often asked as to what ant to give pot Roses, and I must con- fter having tried a great number that has been the most helpful, augmented uid cow manure and soot-water. Do tempt much feeding until the pots are roots. When this is so, then Roses liberally treated, but even then it is o give weak and often rather than and seldom. A noted grower once in- l me that he always had in the tank of which was in the greenhouse, a small cow manure, so that at every watering ants had a very mild dose. Where no al manures are mixed with the com- his practice would be excellent. Free- rom aphis and mildew should be aimed d it is possible to achieve this with t-day appliances. Nothing mars the of a pot Rose so much as tainted . As soon as a few aphides are seen, e fumigators to work, and the same e said of mildew, a good preventive of is to boil together one gallon of soft ½ lb. lime, 1 lb. sulphur, ½ lb. soft When cool, use half-a-pint to two s of soft water, syringing into the or sponging the same with it. I it is a mistake to encourage too much pheric moisture at first, as this tends ng on mildew. On bright days it is ary to spray about and also to syringe e, but on dull days my advice is be l. Reverting again to Liberty, I was sed to learn from a large grower of Rose that the Manetti-stock proved for the variety than the Brier, there a greater amount of blossom and longer . I should not care to try the variety the Manetti outdoors, but under glass y be best. I know the Manetti is sup- to render the blooms of Niphetos pure , and American growers are largely em- g this stock for the Catherine Mermet under glass, being far more satisfactory them than own root plants. E.

Planting

es, shrubs, herbaceous, and other should be all in their positions as soon as possible, and those planted during the autumn and winter should be examined, and any that are loose in the soil should be made firm and given support if necessary, as it is fatal to newly-planted trees if allowed to sway with the wind.

In a West Surrey garden: Looking down from the uppermost (fourth) level

TREES AND SHRUBS

Evergreen flowering shrubs

ONE is frequently asked to recommend flowering shrubs with evergreen foliage, but where conditions are not favourable to Rhododendrons and their allies the choice is far more limited than many suppose; indeed, of thoroughly hardy shrubs there are very few that meet these requirements. Of course, all shrubs flower more or less, but the usual stipulation is for those bearing showy blossoms. Omitting tender subjects, and those that are exacting in their cultural requirements, the following list embraces the shrubs that can be generally recommended:—

BARBERRIES.—These include a considerable number of flowering evergreens, chief among them being Berberis (Mahonia) Aquifolium, with leathery pinnate leaves, and clusters of golden blossoms borne in early spring; Berberis buxifolia, whose yellow flowers hang suspended singly by long stalks about the end of April; Berberis Darwini, whose orange-coloured blossoms are at their best in May; Berberis empetrifolia, a spreading little shrub, with golden-yellow flowers, in May; Berberis stenophylla, which vies with B. Darwini in being the finest of all the Barberries; and Berberis Wallichiana, Holly-like leaves, and pale yellow flowers in June.

THE MEXICAN ORANGE-FLOWER (Choisya ternata).—At one time regarded as tender, but now proved to be as hardy as the common Laurel, and in addition bearing clusters of Orange-like blossoms, this has made a good deal of headway in popular favour within the last few years. It is certainly a valuable outdoor shrub.

ESCALLONIAS.—In districts where the Escallonias are hardy they form a group of charming evergreens. It is, however, only in the southern counties, and in favoured spots around the coasts, that they can be regarded as shrubs for the open ground.

MAGNOLIA GRANDIFLORA is in its way unapproachable, the handsome shining green leaves, combined with the large white chalice-like blooms, form a picture the companion of which may be sought for in vain among hardy shrubs or trees. It must be, however, admitted that the Magnolia in question is in most districts more adapted for a wall than for the open ground.

OLEARIA HAASTI.—A New Zealand shrub, which in most parts of the country has proved to be quite hardy. It forms a much-branched bush, clothed with deep green Box-like leaves, while the heads of white blossoms, like small Daisies, are borne towards the end of July and in August.

ULEX EUROPÆUS FLORE-PLENO and ULEX NANUS.—These are two beautiful flowering members of the Furze or Gorse family, the former forming a gorgeous feature in the early spring, and the second blooming from early autumn to Christmas.

VERONICA TRAVERSI.—The hardiest of all the New Zealand Veronicas that attain the

Looking up from the second level

dimensions of fair-sized shrubs. It is of neat, compact habit, and, standing by itself, naturally forms a rounded symmetrical specimen. The neat Box-like leaves are very regularly arranged, and about the month of June, when the branches are thickly studded with spikes of pretty mauve-coloured blossoms, it is a very ornamental shrub.

THE LAURUSTINUS (Viburnum Tinus).—A good deal depends upon the weather as to the time at which the Laurustinus blooms, but given mild weather it will often flower, more or less, throughout the winter.

THE STRAWBERRY-TREE (Arbutus Unedo).—Though more of a tree than a shrub, this is a very beautiful evergreen, and one that will flower freely even in districts where the fruits are but rarely seen. C. B.

The Red Dogwood (Cornus alba) in winter

Remarkably effective at the present time are the great drifts of Red Dogwood which clothe the banks of the lakes and streams, their deep, rich colouring being most conspicuous on sunny days from quite a distance and a landmark for the winter landscape.

I have observed during a period of years that the greatest intensity of colour is developed during the early part of the year, or is this due to the lighter and sunnier skies as the days lengthen? In any case, the effect is more vivid during the latter half of January and all through February than at any other season. Cornus alba, so named on account of its white fruits, is a va shrub and one that will grow practica any soil or situation. It is, neverth very happy in a deep, moist soil wh left to itself, it will destroy all other he for which reason I have on more tha occasion planted it among beds of near the carriage drive, where in a few it has smothered them. With me proved one of the few things which can to be rabbit-proof, and therefore availa woodland planting. Old overgrown p tions, though very beautiful at a distan not produce the same rich effect as do which have been cut back to within inches of the ground each year, nor effect so graceful as in the stout 6 feet wand-like growths of the latter. G.

REMINDERS FOR THE WEEK

Southern and Midland

Parsnips

There should now be no delay in sowing the seeds, as they require a long time to germinate. Ground that has been trenched and well manured for a previous crop is the most suitable. The drills should be 15 inches apart and 3 inches deep.

Peas

Make a further sowing of these when the soil is in a fit condition. The rows that have been previously sown should be given protection against birds and slugs, and when they attain 2 inches to 3 inches in height twiggy sticks should be placed on either side. Plants growing in boxes should have ample ventilation and grown on as hardy as possible.

Onions

In gardens where these succeed from seed sown in the open the present is a good time to get them in. The bed should be made firm on the first dry day and a dusting of soot and wood ashes given before drawing out the drills 1 inch deep and 1 foot asunder. Seedlings will be now growing freely where sown in boxes and should be grown in a light, airy position.

Begonias

Tubers that were placed in warmth a few weeks back will now be throwing their buds, and if it is desirable to increase these they may be cut through into several portions, each containing one or two buds. The cut sides should be dusted with lime to prevent decay before potting. It is not too late to sow Begonia seeds where a temperature of 60 degs. can be given.

Border Chrysanthemums

Old plants that have been wintered in cold frames are now throwing up young growth. These may be divided and set in boxes of soil, placing them in a cool greenhouse for a week or so to encourage root formation, afterwards returning to the cold frame. Cuttings should also be given frame treatment when once they are well rooted.

Petunias

These are useful both for pots and bedding purposes, and are very easily raised from seeds sown now in light, sandy soil. A warm house or pit is necessary for germinating the seed, and when this has taken place the young plants must be kept near the glass and carefully watered or many will damp off.

Verbena for pots

Verbena venosa is an excellent plant for growing in pots during the summer as the lightness of growth is attractive when growing amongst such stiff-growing plants as Zonal Pelargoniums and others. Soil that contains a good supply of sand or grit is suitable in which to sow the seeds. The plants should be pricked off and grown several in a 6-inch pot.

Aquilegias

To obtain good plants for setting out in the autumn it is wise to sow the seed without delay in pans or boxes, germinating in a warm greenhouse. The long-spurred varieties should be chosen, and these are now greatly improved both in size and colours, and are a valuable addition in the mixed flower border.

Hardy Heaths

These are valuable plants for growing on large rockeries or banks, for which they are admirably suited, and where a well-selected collection is made a succession of bloom can be had for practically the whole year. It is not advisable to plant these on wet or clay soil. Now is a good time to plant, and cuttings that were struck during autumn may be transferred to their flowering positions. Decayed leaf-mould is valuable for forking in among the Heaths. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Scotland

Hardy fruit

Strawberry-beds may now be cleaned down and, if it has not already been done, a mulch of well-decayed manure should be laid between the lines. Embryo flower-buds in newly-planted beds ought to be picked out as soon as they are observed, and stray runners on older plants should be removed. If a plantation of young Raspberry canes has been made these ought now to be cut over at about 9 inches from the ground level. Permanent canes should be retained, cutting the tip out of each plant. Where birds are troublesome among the buds of the Gooseberries, or among the Plums, they must be circumvented in some manner. Dressings with soot are useful, but it is at times necessary to net the breaks closely. Orchard trees, now that all others have been attended to, should be given a look over, spraying them if needful.

Early Peach house

As soon as the pollen is freely produced in the early Peach house fertilisation ought to be seen to, using either a camel's-hair brush or a rabbit's tail. If scale has been troublesome a sharp lookout for stray insects which were missed at the cleaning ought to be kept while the blooms are being fertilised. Meantime, keep the house a little warmer and lay the syringe aside. The necessary humidity can be supplied by damping pathways and borders twice daily during bright weather. When the petals begin to drop freely syringing may be restarted and a thorough watering should be given.

Late vinery

Heat may now be applied to the late v remembering that it is unwise to allo much warmth at first. A liberal dress some good fertiliser should be scattere the borders and watered in with tepid In most vineries there is a tap in th water pipes above the tank, and th ought always to be taken off the wa fore the borders are watered. Little v tion will be needed for a time and th may be slung almost horizontally un buds break.

Chrysanthemums

Continue to move on young plants of house Chrysanthemums as becomes sary, and before they are pot bound. especially necessary where specimen which are to produce large blooms ar cerned. The propagation of border va ought to go on until the desired num each sort has been secured. As soon cuttings are rooted they should be bo rather closely. It is very interesting in raise border Chrysanthemums from One is always sure to get a novelty although the prevailing colours appea white and yellow. Seeds sown now in heat will produce plants which will exceptionally freely from the end of until frost finally disposes of them.

Hardy Ferns

Do not be in too great a hurry to away the withered frondage from Ferns. Many of them suffer consid from late frosts by the removal of wha all, is the natural protection of the The finer Athyriums, Woodwardia ra and the Royal Fern (Osmunda) are c point. Not only are frosts dangero cutting winds during late spring are to be dreaded.

Kitchen garden

Asparagus-beds ought now to be c down and squared off. If it is poss take some soil from the alleys betwe beds it may be placed over the surface, any case fresh soil is advantageous, a old potting soil passed through a c riddle is better than nothing. Celery tr can be opened. I like to have these n an early date for various seasons. time, for instance, there is usually som manure for the trenches, and it might for other purposes were they not mad Then, again, the trenches are invalua hardening off such things as Onions, flowers, and similar things while, at date, and before it is time to plant the they may be utilised as a bed for s Marigolds, Stocks, and so forth, whi be pricked off into them. W. McGui

Mabie Gardens, Kirkcudbrightshire.

Oncidium cheirophorum. The delicate yellow flower sprays are welcome at this season

Oncidiums

E. R. ASHTON, Member of the Orchid Committee of the Royal Horticultural Society

E dainty little Oncidium cheirophorum ɔw in flower is one of the exceptions nongst the notoriously short-lived ıums. Of sturdy constitution and modating habit, it may be relied upon ɜ a good account of itself annually, its .e little yellow sprays being always wel- in the dull winter months. Grown in ɔans and suspended or placed on a shelf he glass, in an intermediate tempera- ts cultivation presents no special diffi- ; but the rule generally applicable to s section of removing the sprays after t period should be followed.

the larger species of Oncidium, of O. varicosum is the best known, the given me by the late Mr. Charles- of Haywards Heath, is well worth fol- ;. His method was to repot annually, ɔ include a considerable proportion of Oak leaves in the compost, and to give ants a thorough rest after flowering ıt undue shrivelling. In repotting this s it is advisable to bring the base of the growth well down into the compost, : rhizome has a tendency to grow up- and leave the new roots exposed to the s of slugs and woodlice. I have tried ing the young spike as soon as it rs in alternate years with some benefit, ıly in exceptional cases can any success ained in retaining the beautiful O. vari- ı in health and strength for any length ıe. Fortunately it is one of the species s still imported on occasion, in view of its doubtful constitution. In former years O. tigrinum, O. Forbesii, and O. concolor were often met with, but as the importation of Orchids is now a costly and somewhat unremunerative business these species are less frequently seen.

O. splendidum is also desirable and can still be obtained. It is allied to O. tigrinum and the tall, upright spikes of brown and yellow are freely produced in early spring. The thick, leathery leaves indicate that it requires full exposure to the sun and a high temperature. O. luridum I found in quantity in Jamaica, and should opportunity occur it may be brought home and re-established without difficulty, although the inflorescence is not very attractive. To the amateur collector it may be observed that the plants should be packed quite dry, and that no attempt be made to give them soil or moisture in transit.

With all these tall-growing species of Oncidium it is of vital importance to remove the flower-spike after a short period to avoid undue exhaustion and possible death of the plant.

Davallias

There are many useful varieties of the Davallia, and it is surprising that those who require many fronds for cutting do not pay more attention to the family. If individual plants do not produce fronds so freely as the Adiantums, yet they have the advantage of lasting longer as well as being of greater substance. Whether grown in pans on the stage or in wire baskets suspended from the roof, Davallias are very handsome. The most useful is D. elegans, which is very free; while D. Mariesi does excellently in quite a cool house. A SCOTTISH GARDENER.

A winter-flowering Hippeastrum

At a recent meeting of the Royal Horticultural Society the winter-flowering Hippeastrum, H. aulicum, was shown by Messrs. Gill, of Falmouth. It is a very old plant, having been introduced from Rio de Janeiro in 1819, but still it is not often seen in gardens to-day. Most of the Hippeastrums bloom during the spring months, but H. aulicum can be had in flower during late autumn and winter, when they are most valuable, and highly appreciated for greenhouse and dwelling-house decoration. It is a most showy species, the stout scape bearing two or three, and occasionally more, bright flowers. In colour they vary slightly, but, as a rule, they are a deep reddish-scarlet veined with crimson. Frequent repotting is not needed, but directly the flower-spikes are removed, the season's growth is made, and if the pots are full of roots they should be fed with liquid-manure every week until the leaves begin to show signs of maturity. When growth is finished stand the plants in a cold frame fully exposed to the rays of the sun until about September, when they are placed in the greenhouse. Directly the spikes appear soak the pots in a pail of water. During the resting period no water is needed, and when the plants are active a temperature of 50 degs. will suffice. T. W. B.

TRAINING ESPALIER FRUIT TREES

Many readers, having planted trained fruit trees (or about to plant them), are anxious for further particulars about training them. Apples and Pears require practically the same treatment. The Plum also responds to the method of training described in this article, but requires some modification in pruning

MANY persons wish to grow these nicely-trained and carefully-pruned trees, but do not, because they (*a*) think there is something occult in the process, or (*b*) something exceedingly clever, and that it is quite hopeless for them to attempt to so train and prune the trees. Any intelligent grower may do it after three or four lessons on the young tree itself. We will first look at Fig. 1, which represents a young tree—four, possibly five, years old—which has, so far, been trained as an espalier, to be grown either against a wall or against stout stakes fixed vertically in the ground. Espalier trees may be trained against a wall, every three or four courses of brickwork serving as "lines of direction" for training each pair of branches. It will be observed that the branches appear to have their origin and to grow opposite each other; but they do not naturally so grow, nor are their points of origin exactly opposite. If we turn to Fig. 2 we find at *a* and *b* two buds which we depend upon for the third pair of branches to be produced at *a* and *b* (Fig. 1). And at *c* there is a bud immediately below the crossbar. In Fig. 2 that bud is shown at *c*. We see that the bud is rightly placed for continuing the main stem in a perpendicular straight line, and that the resulting shoot, therefore, will grow as perpendicularly as circumstances permit, and it will only require to be fastened back to the wall, wire, or stake. That fastening must be done with great care or it will crack at the junction with the main stem from which it sprang, wither and die. Should such misfortune occur, we must seek higher for our next leader, and probably have to make a side growth suffice.

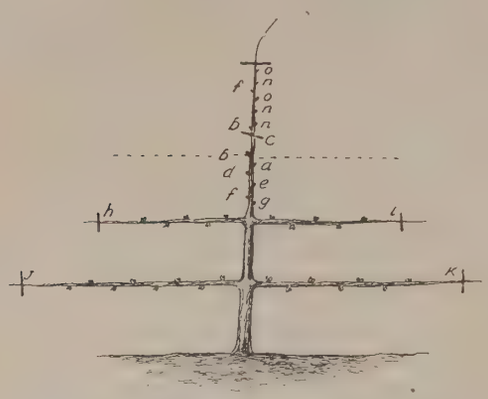


Fig. 1.—A young espalier, showing buds to prune to in order to maintain the form

The spurs having been pruned on the two tiers of branches, it remains to shorten the leading shoot of each branch to *h, i, j, k*. We now pay careful attention to the central part of the tree—the main stem—from which we require another pair of new or young branches to form the third tier, and we require them to be, as nearly as possible, at an equal distance above the second tier as the second is above the first tier. At the same time we also particularly desire the stem to continue in a straight line vertically, and consequently a bud is required in the right place to continue its growth in that direction. Thus we require three buds not very distant from each other, one pointing to the right, a second to the left, and the third pointing straight upward. We find those three buds at *a, b,* and *c* (Fig. 1); the buds *d, e, f, g* will not be required to produce growth, but as they will naturally develop growth—especially after the leading shoot has been cut down to the bud which is on the front and immediately below the crossbar at *c*—they should be allowed to show a little "green" and then be rubbed off the stem. Sometimes, unhappily, a certain tree will fail to produce at a certain part of the stem buds which are capable of producing satisfactory growth for our purpose, and we are defeated at that point and have to seek higher for suitable buds rightly placed, as shown in Fig. 1 at *n*, or, in a very exceptional case, at *o*, the leading shoot in that case being cut back to the bud at *g* below the top crossbar.

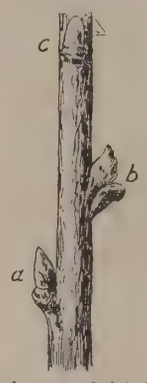


Fig. 2.—Showing a right bud to which to prune for a continued straight stem or branch

In case of buds failing to grow, and thereby causing a deficiency of a pair of branches, the defect may be remedied by the operation of shield-grafting or a form of budding; but the defect will be noticeable for several years. Such grafting or budding could take place on each side the top part of the stem opposite the dotted lines.

The tree represented by Fig. 3 is a useful type of tree for filling up high but narrow spaces, either on walls or in the open, where they can be supported by durable stakes. Many persons are interested in this form of tree, but are debarred from planting it because of the cost of ready-formed though small trees. We will commence with a small and straight tree with one stem, as at *a* (Fig. 3a). At the right time for pruning a recently-planted tree we cut the tree down to the bud immediately below the crossbar. From these two buds we obtain the two shoots *b* and *c*, one on each side. As these grow they are carefully and gradually bent to form the branches *f, g*, but which, whilst tender and pliable, are easily cracked at their base, are bent to the form of the dotted lines *h, i*, and as the shoots harden they are gradually tied down to form a nearly straight line on the right and on the left.

Fig. 3a.—Small straight tree with one stem, showing how to obtain the form

At the end of their first season of growth, and after the leaves have fallen, and they have made any appreciable gro the early spring, each shoot *b* and *c* be pruned to the buds *d, e* on the unc The growth therefrom will naturall upward, but may easily be tied down tinue the horizontal branches right a and to turn the corner to commence velop into the second right-hand and le branches respectively.

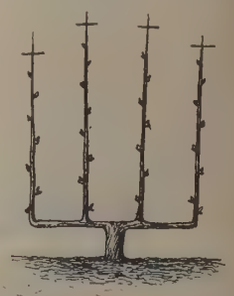


Fig. 3.—A useful type for filling up but narrow spaces. Pruning to m tain the form.

Behind the two buds *d, e* or *e, d* buds, one on the right and one on the the top side, and we shall make it the to produce the centre pair of vertical br indicated in Fig. 3a by the dotted line they almost naturally take their plac only require a little assistance to m vertical and parallel lines, the assista ing supplied by vertical stakes, or stretched tightly from stake to sta nailed to a wall, or tied to wires st horizontally upon walls at a distanc inches apart. All surplus growths o rigidly formal trees should be remo soon as they appear; any negligence respect will be detrimental to the fruit of the tree as well as to its beauty.

The two shoots which are to form t outside branches of the tree will rea corners, and probably turn upward to a of 2 feet or more; thus the forma branched or gridiron-formed tree r made to attain its full size in about fou

Fig. 4 represents a part of a row o cordons trained at an angle of 45 deg for that reason are termed oblique cor

Whether they be Apple-trees or Pe espaliers require practically the same ment. The Plum responds to this me training, but the pruning requires some fication, particularly certain sturdy v of vigorous growth, but not prolific l Very fine examples of Apples and Pe annually produced—and have been least several generations—by trees so and pruned.

Keeping fruit trees clea

The great value of the tar oil w carbolineum preparation referred to(February 13th, p. 95) lies in its egg properties, as it actually destroys, or infertile, the eggs of insects by simp tact. It has the further quality of tho cleaning the trees, and the effect of th on their appearance and general healt markable. The brand I use and reco is "Carbo Winter Wash," which fs filled all its promises and given sple sults. It may be used any time dur

nter—personally, I prefer February. ely a dormant season wash and must applied to opening buds or it will nem. I find the best strength for use part of the stock solution to 12 parts out the makers give directions, with knowledge of this wash and its use. It bids fair to render, in normal most of the summer spraying sary.

is a good deal to be said in favour of ise-band, which is used, primarily, as or the winter moth, but also catches many other pests. If the bands are the trees well into the summer they ve useful in trapping the codlin moth, hibernates beneath them. Centipedes may often be observed under grease-bands, and they should be left undisturbed, as they destroy large numbers of hibernating and other insects, and know the grease-band as a happy hunting-ground. "Tanglefoot" is a good substance to apply to the band, but neither this nor any other grease should be applied direct to the bark of the tree; a paper band should always be used.

Grease-bands are of little value unless applied early. They should be in position by the first week in October, as this is often the moth's busiest egg-laying month. Banding in November, which is by no means an uncommon practice, is rather like locking the stable-door after the horse has been stolen.

C. H. M.

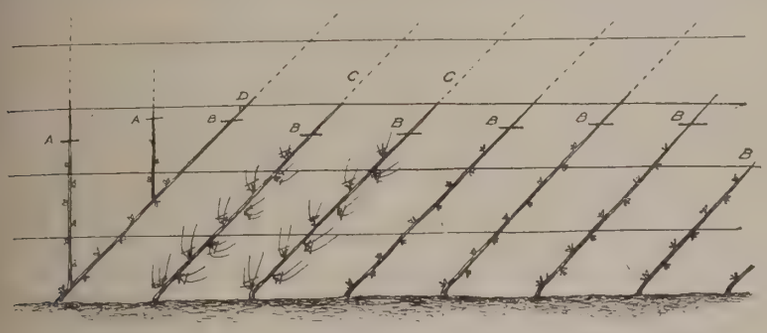


Fig. 4.—A row of oblique cordons, showing where to prune to continue straight stems

Fertilisers for Vegetables

Points from Mr. Costin's lecture at Worthing

soil in West Sussex, it was pointed t by Mr. F. W. Costin (Horticultural perintendent) in a lecture before ing growers, was to a great extent arth with a certain amount of Coombe nd valley gravel. While brick earths enerally deficient in lime, the percent- nitrogenous materials, such as potash osphoric acids, were high, but this did necessity mean that these soils would responsive to an application of these ils in a combined form or in the form ilisers. For, although the materials be present in the soil, they might be it. The value of artificial fertilisers s entirely on its percentage of nitrates, ates, or potash; no manuring, how- ell done, would make up for any de- in cultivation. Nitrate of soda was ost quick acting of the nitrogenous es, and was the best form of nitrate to It was not, however, generally liked e of its drying effect on the land, and iling effect on the texture of the soil. alies had a bad effect on the soil tex- used extensively, especially if the soil t possess a proper lime content. The atic fertilisers had very little effect on tual growth of the plant, but a very le balancing and ripening effect, and o chief forms of this sort of fertiliser uperphosphates and basic slag. If the cked lime, basic slag was the best to enerally a better result was obtained he heavier types of land. There were he group of materials known as the enous phosphatic dressings, as bran and the bone compounds. Then there he potassic group, where there was a r of ingredients which were useful in ng plants to withstand the attacks of s diseases, as well as having a balancing pening effect.

he various forms of potash, kainit was good one to use for green crops, not only on account of its content of potash, but also because of the amount of common salt it contained. Sulphate of potash was, in his opinion, the best of the salts to use, especially for Potatoes when they were considering the quality of the crop. But muriate of potash, too, had given extraordinarily good results from a quality point of view.

Mr. Costin emphasised the importance of good cultivation and manure as a foundation for the various green and root crops. Cabbages required nitrogen on most soils, but it must be balanced with an adequate application of phosphates and potash, and on heavy land phosphates were more necessary than potash. After the dressing of farmyard manure he suggested for Cabbages superphosphate, muriate of potash, and nitrate of soda. Sprouts required much the same treatment, except that on good land the amount of nitrate should be reduced, as they did not require the sprouts to become too vigorous and sappy. Summer Broccoli and Cauliflower required much the same treatment as Cabbage, except that for Broccoli to stand the winter it would be better to cut out the nitrogenous dressings. For Onions and Leeks the farmyard manure should be followed at planting time with sulphate of ammonia at the rate of 1 cwt. to 1½ cwts., 3 cwts. superphosphates, and 1 cwt. sulphate of potash; if the land was deficient in lime a mixture of superphosphate and steamed boneflour instead of superphosphates only. Celery and similar plants required a liberal treatment in the way of stable manure, and the artificial manures should be much the same as for Onions and Leeks, with the addition of a top-dressing of nitrate of soda at the rate of ½ oz. to the yard run of drill. Peas and Beans, and the Leguminoseæ family generally provided themselves with sufficient nitrogen, but in a cold, backward season, or on poor, light soil, a dressing of nitrate might be necessary, and he recommended for these crops sulphate of ammonia at the rate of ½ cwt. to the acre, 4 cwts. of steamed boneflour and superphosphates in equal parts, and ½ cwt. sulphate of potash, to be applied at the time of sowing, or as an alternative as a top-dressing when the shoots begin to show.

Beet, Parsnips, and Carrots required deep, well-worked land previously limed, and dressed with well-rotted manure. For these crops he recommended 3 cwts. superphosphate and steamed boneflour, and 1 cwt. sulphate of potash just before sowing, and 1 cwt. sulphate of ammonia as a top-dressing after thinning. Lettuce, Spinach, and other leaf crops, and Radishes also required deeply-worked rich soil and nitrogenous dressings in the early stages of growth, and a good way to apply was to mix 2 cwts. sulphate of ammonia and nitrate of soda in equal parts to give to an acre, and as a top-dressing at fortnightly intervals. Phosphates might also be necessary to balance growth, especially for Radishes, and in that case he recommended about 3 cwts. to an acre.

Fig. 5.—Showing the wood bud to which to prune at *b*

Potatoes required a good, freely-worked soil which had been well aerated, and with a good water content. Farmyard manure should form the base for any system of manuring for Potatoes, and potash was a prime necessity for such a starch-forming plant. For quality he recommended sulphate of potash, but in some experiments muriate had been found better. The experiments at Rothamsted with nitrogenous manures had shown that the addition of 1 cwt. sulphate of ammonia would produce a ton more Potatoes, so it might be profitable to apply 3 cwts. sulphate of ammonia. Many cases had shown good results where an application of superphosphates had been made, but the need for extra phosphates was not so general or so well pronounced as that for nitrogen and potash.

The treatment of Potato sets

There are many opinions as to the best way to treat Potato "sets" before planting. I always consider that the treatments roughly fall into three groups: (*a*) Setting up in boxes as soon as lifted; (*b*) storing the Potatoes until about the beginning of February and then boxing; (*c*) planting unsprouted "seed."

(*a*) This practice of setting up Potatoes in boxes as soon as lifted is very largely practised, especially by gardeners who are saving their own "seed" to use the following year. The usual practice under this method is to roughly fill the boxes when lifting, and then at some convenient time through the winter the Potatoes are properly set up; that is, each "set" with the rose end uppermost. The advantages to be gained under this treatment are:—

(1) Greening of the "sets."
(2) Weakly tubers can be detected.
(3) Diseased tubers can be detected.
(4) It saves disbudding.
(5) Because the tubers are well started into growth before planting, earlier Potatoes are obtained.
(6) Better returns.

Advantage (1): The greening of Potato sets is in my opinion of doubtful value except with first early varieties. I have noticed that

Some of the early-flowering Tulips shown by Messrs. J. Carter and Co. in the centre of the Royal Horticultural Society's Hall, Vincent Square, on February 9th

The Tulips included Red Admiral, General de Wet, Rising Sun, Fred Moore, Grand Duc, and Prince of Austria

many first early varieties are apt to shrivel badly through the winter if kept under certain conditions. The greened "sets" always appear to me to keep better. With second early and late varieties I have never been able to prove to my own satisfaction that I have got any advantage with greened sets. In fact most of my experience is that my best results with second early and maincrop varieties have been obtained from Potatoes stored until February and then set up. Advantage (2): If the sorting over of the Potatoes is correctly done most of the weakly tubers can be picked out before planting. When sprouting commences tubers which do not start strongly should be weeded out; any tubers which are very much behind the rest in producing sprouts should be regarded with doubt. Such tubers are either rogues—*i.e.*, not the true variety—or else they will probably result in a "hard set"—*i.e.*, a set which either produces a very weakly shoot when planted or, in extreme cases, does not grow at all. In each case the "set" remains very hard and does not decay. "Sets" which develop weakly sprouts or remain hard after planting are generally those affected with leaf curl or some other allied disease. Advantage (3): Readers may think that the advantage quoted above and this one are similar. The difference is this: For our purpose diseased Potato sets can be divided into two classes—those which produce no outward and visible sign of the disease they carry and those that do. The only method of recognising the former is by the methods mentioned under advantage (2), but the latter are easily dealt with under (3). The chief disease which falls into the visible group is late blight, or, as it is called in the north, "Demie." Tubers badly affected with this disease are easily seen and discarded, but slightly affected tubers are more difficult. Under the boxing system the tiny patches of this disease tend to sink in, and detection is made more easy. Advantage (4): I am frequently asked, is it necessary to disbud Potato "sets"? and my answer is always that if Potatoes are properly sprouted disbudding is not necessary, because if the job is correctly carried out only the strongest of the sprouts are developed, the others remaining dormant. Advantage (5): Appears to me to be a very important one, especially for the small grower. Second early Potatoes if well sprouted before planting will produce a heavy crop a fortnight later than a first early. Compared with second early varieties, first earlies do not usually crop so heavily. I can generally get 25 per cent. to 50 per cent. increase in weight with varieties like Great Scot, British Queen, and King George a fortnight after I commence lifting my first earlies, provided my sets are well sprouted at planting time. Advantage (6): The net result of boxing is that better results are obtained, but it should be remembered that boxing alone is not sufficient. If the selection advocated above is not carried out a good deal of the value of boxing is lost.

(*b*) Storing the Potatoes until about the beginning of February and then boxing: This is a favourite way of mine of treating Potato sets, except first early varieties. I consider that I can get all the advantages mentioned under (*a*) except that my tubers are not greened before the spring. As mentioned above, I do not think the autumn greening is essential for second early and maincrop varieties. The treatment of new seed will generally fall into this group, because it is rare that we can get hold of new Scotch seed through the usual channels before spring. (*c*) Planting unsprouted seed is usually bad practice, because it is such a risky process. It gives us no chance of detecting disease and there is no other vegetable that is prone to so many diseases as is the Potato. J.

Lettuces under glass and in open

A brisk demand for Lettuce obliges maintain a constant supply during the and early summer months. I begin c at the latter end of April and continue so up to the end of July. My main sow made about the middle of August a young plants are ready for pricking c the winter by the beginning of Octob grow an early Cabbage variety, two ki Cos, and the Drumhead, the last being in favour, forming big solid hearts and ing well in hot, dry weather. In some Hicks' Hardy Cos will pass the winter out injury, but in this neighbourhood it reliable, so that I find it safer to trea the same way that I find it necessary more tender kinds. They are simply ted from heavy rains and severe frosts plenty of air. Planting begins in a cool in February, and I commence cuttin latter end of April, no artificial heat given.

Lettuces under glass are liable attacked by disease and mildew, but that with careful watering and free v tion very little is to be feared. My have been negligible. Plants from the sowing put out in March or early in form the succession, and the Cos and head varieties are planted at the same Early in February seed of Cos and head is sown in boxes in a cool hous young plants being put out when enough. From the time the plants sta growth, no matter what the weather m they are never allowed to want for mo If necessary they are attended to twice This involves a considerable amou labour, but it is repaid by increased si quality generally, nearly every leaf tender, which means that there is very

My experience is that Lettuce grown way can be easily disposed of. Con- soon find out the difference between nd those grown in the ordinary man- The ground is prepared by means of digging in winter, so that it is well ıed by frost and wind, a liberal dress- manure being forked in when the ıre broken down; for I see no use in manure deeply, Lettuces being sur- ting. When the plants come into free liquid manure is frequently given, and hey are about half grown nitrate of given in order to hasten maturity. I ngly in favour of sowing where the ıre to remain when the weather is hot . In the case of the Cos varieties the t check may cause them to run, and erefore better to avoid transplanting. in drills which are previously soaked anure-water. The seed comes up in n a week, and it is easy to water when ry. The thinnings can be used for and even in the hottest weather are ly tender. If sown about the second August good hearts will be formed by ı, and by laying them in frames or a use the supply will be maintained up ary. BYFLEET.

BEES

Feeding bees with candy

annot perhaps help our bees dying 'sease, but there is no excuse for ing them to die of starvation, and t is probably true that quite 10% of in this country succumb every year g to want of food in the late spring

OUGH candy-feeding for bees is not be generally recommended, it is, from w onwards until the warm weather in ets in, the only safe method of aug- g the supply of food in a hive.

e bee-keeper is at all doubtful whether nies have sufficient stores to last them uit blossom time a cake of soft candy be given to each lot during the next so.

f course, proper precautions have been n the autumn to ensure that each stock om 30 lbs. to 40 lbs. (according to h of colony) of food stored in the the bee-keeper need not worry about ; at the present time, but if not the ng recipe for making candy may be —

lbs. of best white sugar (cane)—never account use brown—add 1 pint of ter.

either an enamelled or an aluminium tand this beside the fire and stir con- until the sugar is all dissolved. This important. Now add half a small nful of cream of tartar. Place the pan quick fire, or, better still, a gas ring, low the liquid to boil for about four s, then remove pan from the fire and it in another vessel containing cold until the syrup begins to cloud over.

ctly cloudiness appears commence to rously, at the same time sprinkling in f pea flour. This latter acts as a sub- for the natural pollen, of which there a shortage in the hive.

n the syrup becomes so thick that is difficult it should at once be out into some suitable receptacles. ı squares with the bee-ways cut down azed on one side make very convenient each, when full, holds about 1 lb. of

n the candy is set and quite cold it be in the form of a moist, solid mass sily cut into with the finger-nail.

If the candy is hard and crystalline the bees will be unable to make use of it without leaving the hive to obtain water. If too soft it is liable to run down between the frames and suffocate many bees, which become smeared with it.

In making candy it is advisable as soon as the syrup has reached the boiling point to cover the pan with a lid; the enclosed steam will then melt any particle of undissolved sugar which may be adhering to the side of the pan. A few undissolved crystals may cause the whole mass to crystallise during the stirring process. Should this by any chance happen, the candy must be melted again in another ½ pint of water and boiled once more for about four minutes.

If you are fortunate enough to have a sugar boiler's thermometer candy-making is simplified. In this case the pan should be kept on the fire until the temperature reaches 236 degs. Fahr., and then removed immediately and allowed to cool before stirring as above.

Failures in making good candy are generally due to overboiling and stirring the syrup whilst too hot. Before beginning to stir it should be possible to hold the hand against the bottom of the pan without feeling any discomfort.

Candy costs from 10d. to 1s. per lb. to buy, and if made at home the cost is practically that of the sugar only.

In placing the candy over the feed-hole in the bottom quilt choose, if possible, a warm, sunny day, and do not use any smoke, as the less the bees are disturbed at this time of the year the better.

Breeding will now have commenced, and the addition of an extra quilt or two is advisable.

Above all, make sure that the roof of every hive is water-tight. Wet quilts and damp hives have been the ruin of many a colony.

Wells, Somerset. L. BIGG-WITHER.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FRUIT

Raspberries and basic slag

(C. C. B.).—Raspberries should succeed in your soil, providing it does not get waterlogged in winter. It should be borne in mind that Raspberries are more or less surface-rooting subjects, therefore your digging between the rows is a mistake. Such treatment destroys a large number of the "feeding" roots, and is probably the cause of your failure. Manure will not help the plants if the finest and best roots are destroyed annually by digging. Basic slag is well adapted for all kinds of fruit-trees, and should be applied during the autumn or early winter months, 4 ozs. to 8 ozs. per square yard. If applied now the full effect would not be produced this season. Basic Slag is, perhaps, the best phosphate where there is a lack of lime in the soil and plenty of humus. It is useful in all parts of the garden if applied before Christmas.

Birds and fruit-buds

(H. Whiteway).—At this date all fruit-buds are fast plumping up, and each year we find finches and even sparrows sometimes amusing themselves "in search of insects" some are wont to say, but in doing this they destroy all chance of a perfect blossom appearing, and remedial measures must be adopted to check their progress. For Gooseberries, Currant, and small bush fruit-trees in general we have found a mixture of finely-sifted lime and sufficient soot to darken it as a good preventative against bird attacks at this season, and by adding a little common or agricultural salt to the mixture it will assist to make the whole more sticky, putting this on with the garden syringe. It is claimed that lime-sulphur sprayed over the trees prevents bird attacks. This insecticide can be purchased from most of our horticultural sundriesmen. Small mesh netting placed over the trees and bushes also acts as a deterrent, but this is out of the question with big trees or many in number, and is rather expensive. We think the first named will answer your purpose.

FLOWER GARDEN

Pruning Rose Gloire de Dijon

(Brixtonia).—Your diagram gives us a good idea of what your Rose-trees growing against your fence are like. The basal shoots appear to be robbing the laterals emanating therefrom, as each ought to be of stouter growth than given in your letter, and we suggest that these main shoots should be cut back at pruning time during March, and so divert the flow of sap to these side shoots, which should be about 8 inches apart. As these said shoots are more or less weakly it would be advisable to reduce their respective lengths by one-half, as, if left much longer, though producing a few blooms, they would be of a puny nature. After the first lot of flowers have gone past we should suggest shortening the older shoots back to the origin of the side growths.

Raising summer flowers

(T. Edney).—We presume you intend raising the Antirrhinums, Stocks, and Godetias from seeds, with a view to having plants in bloom this summer. Without any glass the Antirrhinums will be rather late, and if only a small number of plants are needed they could be purchased from some local market or nurseryman. However, if seed is decided upon, sow it the same time as the Stocks and Godetias, viz., during the first and second week in March, providing the weather is congenial, if not wait till it improves. Provide the boxes with ample drainage and, if possible, cover them with a sheet of glass, which must be turned daily. In any case some form of protection will be needed during heavy rain or the seeds will be washed out. If there is any danger of frosts you could easily lift the boxes inside.

Raisers of hybrid Campanulas

(F. Wheatcroft).—Campanula persicifolia Telham Beauty was, we believe, raised by the gardener at Telham Court, who disposed of his original stock through Messrs. Barr and Sons, of Covent Garden. Campanula persicifolia Fleur de Neige (not Fleur de Niege) was introduced by the late Mr. Miller, of Clarkson's Nursery, Wisbech. Whether he was also the raiser we have never heard. The name suggests French origin, and we should not wonder if it really was raised by Messrs. Lemoine, of Nancy, who raised, some years ago, a whole series of pretty and interesting forms, including cup-and-saucer varieties and double blue ones like Coup d'azur, La Fee, which may be the Fairy Queen our correspondent inquires about under an Anglicised name. He should write to Mons. Victor Lemoine, Horticulteur, Nancy, France, for his list, which would give him most of the information he requires. Everst was, we think, raised, or at least introduced, by Messrs. Ladham, of Shirley, near Southampton, and their list would give particulars of this. It is very difficult to keep track of all these garden forms, as hardly any British firm gives the name of the raisers of the novelties they offer. Many French firms make a point of this. C. persicifolia Moerheimii was raised by Messrs. Ruys, of Dedemsvaart, Holland, and there is another pretty form of German origin called Blaukehlchen, which we expect will presently crop up in English lists as "Bluebird" or something almost equivalent. C. persicifolia Backhousei is a seedling strain that throws both blue and white flowers and not of any outstanding merit.

The showing of hardy herbaceous flowers

Would you kindly answer the following questions through the columns of your esteemed gardening paper? Would you allow, if you were judging at a flower show, the following items to be classed as hardy herbaceous flowers: Roses, Carnations (border), Antirrhinums, Pentstemons, and Gladioli? Such was the case at our horticultural show, held here last August. A gardener friend and myself strictly adhered to the statement in the schedule, but we were outclassed, although we had a splendid exhibit of hardy herbaceous flowers for the month of August; that is to say, nine distinct varieties. I fell into a serious argument over the case, therefore I am seeking expert advice over it, and if I am right in two or three cases I shall take it up at our meeting next month.

Chigwell. J. W. F.

[Herbaceous plants are those whose stems die down annually, the rootstock being perennial, and producing a new above-ground plant each year. Annuals are those which complete their cycle of life—from seed to seed—in one year.

Of the flowers mentioned, Roses and Carnations are not herbaceous. Antirrhinums are either annual or biennial, and Gladioli are not "hardy." Pentstemons are among the "doubtfuls" and might be allowed.

There is frequently a great deal of confusion with regard to these classes which might easily be avoided. The remedy is in the hands of the schedule makers. Where flowers are a popular feature special classes should be provided for Roses, Carnations, Sweet Peas, Dahlias, etc., and a class for "hardy garden flowers" or "hardy perennials" (excluding shrubs and bulbs) or "hardy annuals." The simplest term is "hardy flowers" (together with the names of any kinds not to be included). Whatever is intended should be made perfectly clear in the schedule, as the judges are, or should be, bound by such wording.

The Royal Horticultural Society has issued a set of judging rules for the guidance of local societies, and these are now generally recognised and accepted as the official standard.]

TREES AND SHRUBS

Ceanothus not doing well

("J. B.," Constant Reader).—Generally speaking, the Ceanothus family are free of growth and thrive in almost any kind of soil, though one bordering on lightness is far preferable to that of a retentive nature, but, above all, thorough drainage is most essential to their success, making a free, clean growth and generally long-lived subjects. We rather think there must be something wrong with the subsoil or the drainage imperfect, and would strongly advise you to lift the plants very carefully, taking away the old soil a yard in width as well as in depth, putting in 6 inches of old brick-bats or stone, and over this some Grassy turves the Grass side downwards, afterwards filling with fresh soil, turfy loam if procurable, with a good percentage of flaky leaf-soil and a little broken brick or coarse sand, thoroughly blending the whole. We advocate cutting out every bit of decaying wood and shortening the healthiest shoots at the same time, and see what the resulting growth may do towards the plants' recovery, the whole of which may be done as soon as convenient and the soil workable. The roots should be thoroughly examined, cutting out any decayed pieces, and avoid planting too deeply, and do not allow surrounding plants to obstruct light or sun playing at the base as well as the top.

VEGETABLES

Making a hot-bed

(F.).—In making a hot-bed a much steadier heat is obtained by placing the manure in heaps, turning it over several times before placing it in the pit or bed. If placed direct it heats very rapidly, and quickly gets cold again. Thoroughly mix all the materials together, and turn when heated through, not allowing the manure to get very hot. Make the bed as firm as possible to retain the warmth, and as soon as the steam has evaporated, or after two or three turnings.

Carrots forked

(M.).—Your Carrots are what is known as "forked," and is due to the action of fresh manure. Carrots should never get manure in a fresh state, as they fail to grow freely, and come forked as yours have done, and consequently useless. Land that has been manured for a previous crop—say Potatoes—will grow Carrots well, or they may follow such as Onions, Leeks, or Celery, of course taking care to add no more manure at the time of sowing, as that which is in the ground is quite sufficient for them. You must also dig the ground deeply, so as to allow the roots to go down freely.

MISCELLANEOUS

Working hours of a single-handed gardener

(Scraper).—Apparently the man agreed to attend to the duties you enumerate, but now is dissatisfied, and the most obvious thing for him to do is to seek pastures new. However, it may be possible to come to some arrangement, and we would point out that it is almost universal for a man to get one half-day off per week, say, from 12 or 1 o'clock, and extra pay for Sunday duties. A single-handed gardener, if he lived near his work, would probably attend to the garden duties during the week-end and no trouble would accrue, but difficulties arise sooner or later when a man is expected to be on the job at practically all times to attend to work connected with the dwelling-house. It is natural and fair for the man to get alt Sundays and one half-day off per week, being given for the work on Sundays, usual hours are 6.30 or 7 a.m. to 5 p.m 1 o'clock on Saturdays, with the periods for meals, and if the labou worthy of his hire these hours are enough, whether he is a single-hande dener, general utility man, or otherwis

Liverwort in damp garden

(F. G. B.).—The substance you sen number of plants of the Liverwort (Marchantia). Liverworts occur on damp places, and their occurrence in garden after heavy rain denotes, we that your drainage is at fault. An a tion of lime at the rate of ½ lb. per yard would, of course, help the drain the garden. We should advise you good lump quicklime and add just e water to slake it down to a fine powder spread the lime on the top of the so lightly prick it in with a fork. We the opinion that, although lime will hel trouble, it will, alone, not be suff Draining the garden will be the onl manent cure for your trouble. Ther also a number of the small black slug p in your box of material. These will no be a source of trouble to you, and we s advise you to put down a number of tr your garden to catch these pests. Pie board or like placed flat on the soil little bran placed under each piece make traps. The traps should be examined a week and the slug collected and dest Please note that we do not reply to q through the post, but only throug columns of GARDENING ILLUSTRATED.

CATALOGUES RECEIVED

Stuart Low and Co., Bush Hill Middlesex.—Carnations.

Andrew Ireland and Hitchcock, Tey, Essex.—Seeds; spring list.

T. Smith, Daisy Hill Nursery, Ne Seeds of hardy plants.

Robert A. Morris, 225, Bristol Stree mingham.—Seeds; also Gladioli, Begi Lilies, Roses, Dahlias, Carnations, etc

A good grafting wax

Amateurs who are fond of grafting trees often meet with their chief diffic the operation of "waxing," or coveri graft with a sealing substance. E "waxing" is an all-important part grafting operation, as it is necessa success that the wounds should be pr sealed and airtight.

Here is a simple recipe for an ex home-made wax, which, if used as a will give excellent results. The necess gredients are:—One lb. of resin, 1 methylated spirit, and 2 ozs. of be Melt down the resin and the fat sepa and when thoroughly liquid mix togeth slowly add the spirit, stirring well mea Care must be taken to keep the away from naked flames as the ingre are highly inflammable.

This preparation thickens as it cool is best used on the grafts when abo consistency of vaseline, just thick eno prevent it running down the stems an the wounds. It is applied with a brush, simply painting it over and com covering the junction of stock and scio spirit will soon evaporate, leaving a and air-excluding wax. This is much and more effective than the solid pr tions, which have to be plastered or finger and thumb, and the vessel contain can be kept corked and warmed up ag future use. C. H

Ryders ADVICE O GARDENERS

f were asked what I considered the rst important thing I could say to a stomer, it would be "**Send your der Early.**"

Samuel Ryder

Nv is the time to Plan your Garden. Post without delay for your copy of the ous RYDER CATALOGUE GUIDE. Is Garden Book de luxe contains 104 es of interest to every gardener. Full list ll Flower and Vegetable Seeds—profusely trated in colour and black and white otographic reproductions — Fertilizers for Crops, Potting Compost, Gardening Hints, ails of £1,000 Competition, Etc., Etc.

Ryders

(RYDER & SON (1920) LTD.)

St. Albans

SUTTON'S SEEDS

PEDIGREE STRAINS OF VEGETABLES

For reliability in cropping, excellent appearance, and superior table quality, it is acknowledged that our pedigree strains of Vegetables are unsurpassed.

SUTTON'S COLLECTIONS OF VEGETABLE SEEDS for Gardens of all sizes.

19 varieties, 5/9
30 varieties, 8/3
36 varieties, 11/3
38 varieties, 13/6
} Post Free

Full particulars by return of post

SUTTON & SONS
The King's Seedsmen
READING

1926 PEDIGREE-QUALITY Sutton & Sons Reading

WARNING.—In future every packet of "Sutton's Seeds" will bear this seal, and none is genuine without it.

Hardy Herbaceous and Alpine Plants

A large healthy stock in great variety

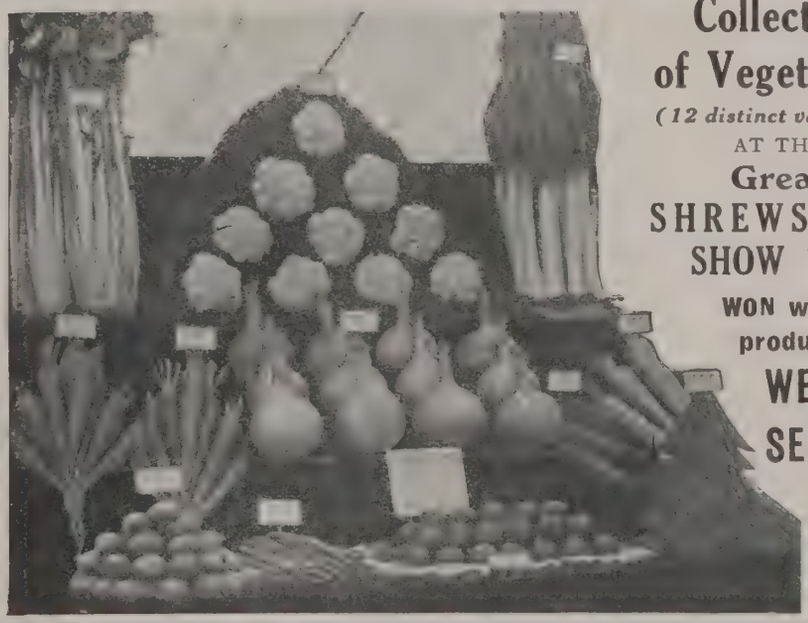
NOW is the time to PLANT

SEND for CATALOGUE to

Cheal & Sons Ltd.

Nurseries . CRAWLEY

The CHAMPION PRIZE (OPEN TO GT. BRITAIN)



Collection of Vegetables

(12 distinct varieties)

AT THE

Great SHREWSBURY SHOW 1925

WON with the produce of WEBBS' SEEDS

AND

Webbs' Manures

VEGETABLE SEEDS From 4d. pkt.
FLOWER SEEDS From 3d. pkt.

See CATALOGUE.

The "CHAMPION" Collection consisted of the following:—

Ailsa Craig Onion	1/- pkt.	Marrowfat Parsnip	10d. oz.
Perfection Pink Celery	1/- ,,	Volunteer Beet	1/- pkt.
Champion Prize Leek	1/- ,,	Early Mammoth Cauliflower	1/- ,,
Conqueror Tomato	1/- ,,	King George Pea	2/6 ,,
Prizewinner Carrot	1/3 oz.	Goldfinder Potato	4/- peck
Royal Favour Cucumber	1/6 pkt.	Exhibition Runner Bean	1/- pkt.

WEBB & SONS, LTD. (The KING'S SEEDSMEN) STOURBRIDGE

The passing of Professor Bateson

An appreciation

Can we possibly realise what the civilised world has lost? What England has lost? What we who live in Wimbledon and Merton have lost? The Professor was President of the Wimbledon and District Gardeners' Mutual Improvement Society. We frequently had lectures from him, went down to the "John Innes Institution," went all over the place, had talks with him, a man of no pride with his vast amount of knowledge. He would talk to any man and answer any question we would put to him, also taking the trouble to explain, and bringing plants to prove his assertions. When our Society went to "John Innes Institution" we saw various fruit-trees—Apples, Pears, Plums, and Cherries pollinated with different varieties—covered over with very fine netting. There were also thousands of Primula crosses showing variation in flower and leaves. We have not yet realised our loss. When we think of Professor Bateson and "Mendelism" the wonders of his work on this subject astounded the whole world.

Alas! he has gone, but never to be forgotten. F.R.H.S.

Wimbledon.

HORTICULTURAL SOCIETIES' NEWS

Cirencester and District Gardeners' Society

There was a good attendance of members at a recent meeting of the above Society, when Mr. Herbert Cowley, Editor of GARDENING ILLUSTRATED, gave a lecture on Flowers in their Mountain Homes, illustrated by a fine series of lantern slides of high alpines in their natural habitat.

Starting from Mentone and passing via Ventimiglia and La Mortola, through the Roja Valley and Val Casterino, the lecturer then described the ascent of high mountains in the Alpes Maritimes, illustrating certain species of Lilium, Primula, Dianthus, Ranunculus, Saxifraga, Anemone, and Tulipa that were observed on the way up.

The meeting was presided over by Mr. E. Blundell, late Professor of Agriculture at the Cirencester College, and among well-known gardeners present, some of whom took part in discussion, were Mr. T. Arnold, late head gardener to the Earl of Bathurst, Mr. W. H. Waters, of Colesborne, head gardener to the late Mr. H. J. Elwes, Mr. C. A. Tutt, head gardener to Major Gordon Dugdale, and Mr. Underwood, head gardener to Mrs. Wilfred Cripps.

SHORT REPLIES

Tulip bulbs for examination

Reader.—These appear to be infested with bulb rot. We must hold over our reply for further examination.

NAME OF PLANT

N. G. B., Ayrshire.—Cornus Mas (the Cornelian Cherry), see note, page 112.

NAMES OF FRUITS

Caver.—Apple Beauty of Kent.

J., Suffolk. — 1, Wellington syn. Dummelous Seedling; 2, Colville Malingre; 3, possibly Winter Majestris; 4, probably Betty Geeson.

M. C. M., Suffolk.—Apple Boston Russet, sometimes known as Roxbury Russet. A good late dessert variety in season from January to March.

LATE NOTES

Pieris Forresti

The beauty of this shrub at the present time is remarkable by reason of the brilliant colouring of the ends of the current year's growths. It is far from plentiful at present. Even if it never flowered it would still be a valuable asset to any garden. P. formosa I have often seen very effective from the colour of its young shoots, but the above surpasses it M.

Berberis nervosa

This is a pretty dwarf Barberry of the Mahonia type and one which, for some reason, continues to be rare. I came across a few nice plants of it recently. I have known it for several years and it rarely exceeds 18 inches in height. Its leaves, much after the manner of those of B. nepalensis, are of a charming coppery-purple shade. M.

Pruning Plums

Very little difference was noted in the behaviour of heavily-pruned Plum-trees and trees receiving much less pruning in tests conducted over a number of years with several standard varieties of Plums on the grounds of the New York State Agricultural Experiment Station at Geneva. Since little pruning gives just as good, if not better, trees it is regarded as a waste of time and effort to pay too much attention to the pruning of Plum-trees. The chief recommendation is to thin out thick growths where necessary and to remove broken or injured branches.

Crassula lactea

I suppose I ought to refer to this plant as Kalosanthes, but the older name appeals to me, as it does in the red variety C. coccinea. The white-flowered form may be had in bloom during the winter, and it is not at all fastidious in its requirements, any ordinary compost suiting it quite well. Cuttings struck during the early spring, grown on during summer, and well ripened during autumn in a frame, will give good results in November and December. Of dwarf habit, plants are very useful either in the greenhouse or in rooms, and their characteristic spikes are certain to attract attention.

A SCOTTISH GARDENER.

The Winter Sweet (Chimonanthus fragrans)

It is unusual to find this growing and flowering freely in the open. Indeed, so strictly has the wall treatment been adhered to that many are under the impression that by this means only can its deliciously-scented flowers be produced. It is sound advice to plant at the foot of open sunny walls, where, if the plants are not grown in too rich soil and pruning takes place at the proper time, *i.e.*, immediately the flowers are over—very little pruning is necessary even then—plenty of flowers should result. It may, however, be planted on sunny slopes entirely in the open—at least, South of London—with equal success, where in due course very large bushes laden with flowers may be enjoyed. At no time are these leafless shrubs very conspicuous, owing to the rather dull colour of the blossoms; nevertheless, when grouped in the foreground of low evergreens they possess a peculiar attraction to which one is specially drawn by reason of their rich fragrance and soft, silvery-brown colour. Sprays 2 feet long may be cut when approaching the bursting stage and placed in vases in warm rooms, where they open freely and prove most acceptable during January and February, when such flowers are by no means plentiful. The flowers of C. fragrans grandiflorus are purer yellow and larger than in the type a good bush I have blooming at the pr time appears to possess a more robust stitution, the individual flowers being nearly 2 inches across. E.

Solanum Wendlandi

It is only on rare occasions that we with this handsome plant growing happ the open air, therefore it appeals to o once as a subject of unusual interest an traction—especially so if in bloom—grown this way. On the wall of a I saw it last autumn in vigorous he flowering and fruiting, and was impr with its handsome, rich green, deep leaves, clusters of lilac-blue flowers, thick fleshy-looking shoots. I have neve fore seen this Solanum growing with luxuriance. It would appear to be a suitable subject for a warm wall in southern counties, being quite distinct any other climbing shrub, both in growth, and flower. It hails from C Rica and should be provided with a protection during the winter, for alth the tips of the unripened shoots die somewhat each year, the lower buds b away freely after the former have been away. G. M.

Ipomæa Purga

Medicinally known as the Jalap P Ipomæa Purga makes a very fine displa a climbing plant in warm situations, es ally near the sea. When in charge garden in which, at that time, many rare uncommon plants of foreign origin grown successfully, and which lay in proximity to the Solway Firth, for n years I. Purga was noteworthy. Plante the base of a south wall, among the roo a very large specimen of Fuchsia Riccar the Jalap Plant was most attractive du October, its twining growths run through the branches of the Fuchsia, w its trumpet-shaped flowers, of a rich pu shade, were very telling. The plant is tu ous, the tubers resembling small b Potatoes. In the position referred to I. P was perfectly hardy, and the growths b to push up early in May. I tried, in a s lar position, another variety, I. simul which was sent to my then employer f Vera Cruz, but it was far from being success which I. Purga annually was.

Mabie. W. Mc

Benn Brothers' Other Journa

The Cabinet Maker.—Special Yorks Number: Round the Yorkshire Tr British Industries Fair: London and mingham; Leverhulme Furniture Solc New York.

The Chemical Age.—British Indus Fair; Description of Chemical Exhil "Problems of Colour Measurement," by L. C. Martin; Chemical Trade Returns January; China Clay Trade Review Secti

The Electrician.—Manufacturing Ru Insulated Cables; Research: The Gov ment and the Public; "Electrical Ec mies," by S. J. Watson.

The Fruit Grower.—Weights and Meas Agitation; New United States Plant bargo Threat; The Control of Apple Cap

The Gas World.—Capital Employed in Gas Industry; National Gas Council and Government Electricity Scheme; Gas at British Industries Fair.

The Hardware Trade Journal.—Hardw and Cutlery at the British Industries F Ironmongers and the Supply of Dome Labour Savers; More About Wireless Val Enamelled Hollow-ware Industry; C cluding Speeches at the "Safeguardir Inquiry.

GARDENING ILLUSTRATED

2451—Vol. XLVIII. FEBRUARY 27, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

hopanax recini-m 131
s, sowing seeds 130
, Bush 138
ping: Examin- and certifica- of apiaries ... 127
r late than 129
ls Sprouts, v. small 128
inthemum grow- 132
anthemums, -flowering ... 140
CYCLAMENS AND PRIMULAS AT READING 136
Dahlias from seed ... 129
Delphinium Nora Ferguson 128
DIDISCUS CŒRULEUS (SYN. TRACHYMENE CŒRULEA) 134
Elæagnus pungens aureo-maculata ... 128
Ferns, Tree, the stems of 136
Fruit garden, lime in the 139
Fruit trees, winter spraying of 129
Garden paths, durable 135
GARDENS OF CAWDOR CASTLE, THE 132
GENTIANA SINO-ORNATA 130
Gentians, a companion for 130
Gladioli of the Primulinus section at Wisley, 1926, trial of ... 128
Gladiolus, pronunciation of 128
Gooseberries for exhibition 139
Heaths, hardy, planting 128
Hellebores as cut flowers 129
Horticultural society, the standing of a ... 140
Iris roots, about 135
Jasmine, yellow Winter (syn. Jessamine) (Jasminum nudiflorum) 130
Mulberry trees, transplanting 139
Onions 138
Pæony, the future of the 134
Phacelia campanularia 134
PLANTS FOR SHRUB EDGES 135
Plants in bloom in the open on February 15th in a Cornish garden, list of 128
Polyanthus from seed, the 136
Primula obconica, the alleged poisonous properties of 128
Raspberry Lloyd George 128
Reinwardtia trigyna 136
SAXIFRAGA WALLACEI 127
Saxifrages, late flowering 127
Scholarships for agricultural workers ... 140
Scholarships for young gardeners ... 140
Seed germination ... 129
Snowdrops 128
TORQUAY 131
Vines, mealy bug on 129
Violas from Canada 134
Yew hedge, treatment for 131

Late Flowering Saxifrages

LPINE plants that begin to flower in July and August are welcome in all collections that aim at being representative, where the rock garden is taken seriously not a mere matter of informal spring ng. To my mind the really enjoyable garden should be full of interest at all of the year; even during the dullest is a good effect should be aimed at by nclusion of the many naturally slowng forms of various Conifers. As many Alpine plants are themselves more or vergreen this matter of winter effect is t all difficult to compass with a little ous forethought.

is, however, a after May and are past when y various Dian- and Campanulas ly step in to tide ver a time that, from their efforts, t easily be rather rless until such s as Gentiana sep- la, G. Lagodech- Oxalis lobata, thers take up the and many of the that flowered r in the year, ally if they have duly prevented straining their s by carrying a crop of seeds, eir second wind, ravely start again g us on until the owers of autumn things into their and give us a parting display for the that period of white, blue, and purple, dominating shades of the Campanulas, Saxifraga aizoides, its forms auran- and atrorubens, with welcome splashes low, orange, and deepest blood red in that are slightly moist or partly shaded, noted, for none of them will stand a g unless grown as at home in the silt ingle of mountain streams. It is true aga aizoides has given us a form that apted itself to much drier situations in autumnales, that grows in the high one crevices near the top of Mount orough in Western Yorkshire. This flowers of a rich shade of orange- , but so far it does not seem to have ed to anyone of us to bring this useful nto the garden. All the more have we to thank Mr. R. V. Prichard for giving us four hybrids of Saxifraga aizoon, with flowers of pink, salmon, crimson, and rose respectively to add colour to our gardens in late July and August. As the other parent selected by Mr. Prichard is of the easiest cultivation in any partially-shaded position the new hybrids have happily inherited this useful quality and offer no difficulty to the intending cultivator. To this good habit must be added a pretty, dark green mat forming foliage of leathery texture and the greatest freedom of flowering at a height of 4 inches to 6 inches, and it will be realised that we have here four very useful additions to our Saxifrages. There is only one fly in the ointment, and that is the name Mr. Prichard has attached to these four pretty plants regardless of the four different colours represented by them. The other parent was the pretty form of Saxifraga umbrosa known in gardens as Saxifraga primulina, or S. umbrosa var. primuloides. Neither of these names seems to be recognised by the classifying botanist, but for garden purposes it stands for the most delightful miniature form of the well-known London Pride. Clarence Elliott has a particularly good form of this which he brought from the Pyrenees some years ago, and I own a still smaller and neater form of it with flowers as glowing as garnets, and never exceeding 6 inches. Both these forms are neat and thrifty in any cool corner, and it is to the influence of this that the new hybrids owe their great ease of cultivation. By a drawing together of the names of the two parents, primulina and aizoides, Mr. Prichard has coined the word "primulaize," and however useful the name may be in registering the origin of the race, I find it so cumbersome and lacking in euphony that I hope it is not yet too late for Mr. Prichard to reconsider his choice of names and send these four pretty plants out into the world with a name befitting their undoubted beauty and usefulness. I know that Mr. Prichard is following a precedent, created by the hybridisers of Orchids, but somehow the Orchids seem to lend themselves better to hybrid names as well as species or genera, at all events I cannot at the moment recollect an instance in modern Orchid nomenclature that affects me similarly painfully as the word "primulaize" does.

Apart from this single cavil I have nothing but praise for these hybrids, and shall welcome the day when they will be seen frequently in the gardens of hardy plant lovers.

W. E. Th. Ingwersen.

Saxifraga Wallacei bears a profusion of white flowers in June and July

Saxifraga Wallacei

For a mass of white flowers from May till July there are few Saxifrages to equal this old garden favourite. Like all the Mossy varieties, it does better under cool and moist conditions than the encrusted varieties. It may be said of Mossy Saxifrages that they thrive best in well-drained soils in half-shade or a northerly aspect. The mossy carpets of greenery that they make form a useful groundwork for Crocuses or other bulbs to push through at this season. Saxifraga Wallacei, otherwise known as Wallace's Saxifrage, is of garden origin and was raised over 40 years ago.

H. C.

Bee-keeping: Examination and Certification of apiaries

Arrangements have been made by the Ministry of Agriculture and Fisheries for the inspection, on application, of apiaries where bees are raised for sale. Where no brood diseases are found to be present in an apiary,

an official certificate to that effect will be issued. For the present it will not be possible to include acarine disease in the scheme, and the certificates will relate solely to freedom from brood diseases, though they will not be issued for apiaries where acarine disease is seen to be present. The frames containing the combs of the colonies that are passed on inspection will be stamped to that effect, and this will afford protection to the purchaser. Owners of apiaries where bees are raised for sale are invited to make early application for inspection. All applications should be addressed to the Secretary, Ministry of Agriculture and Fisheries, 10, Whitehall Place, London, S.W. 1. Fees at the rate of £2 2s. per day, with a minimum of £1 1s., will be charged for this service.

Pronunciation of Gladiolus

In this month's "Flower Grower" the "Glad Philosopher" writes:—"I am glad to note that the officials of the various Gladiolus Societies are making an appeal for the logical and sensible pronunciation of the name of their favourite flower. Whoever was responsible for the departure from the easily spoken form, "Glad-i-O-lus" made a bad mess of it, for two-thirds of the people who venture to speak of the flower apologisingly express doubt as to whether they are pronouncing its name correctly or not. Then let us arrange our Glad-i-O-li in a VASE—not our Glad-I-o-li in a "VOZ"!

Trial of Gladioli of the Primulinus Section at Wisley, 1926

The Royal Horticultural Society will carry out a trial of Gladioli of the primulinus section at Wisley during the coming season. Ten (or five) corms of each variety for trial should be sent addressed to The Director, R.H.S. Gardens, Wisley, Ripley, Surrey (goods to Horsley Station, Southern Railway), so as to reach him by March 31st. Each variety should be accompanied by an entry form, copies of which may be obtained of the Director on application.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Elæagnus pungens aureo-maculata

THIS note is prompted by that headed "Two interesting Oleasters," page 81 of GARDENING ILLUSTRATED, dated February 6th. We have in the gardens here a massive and very showy bush of E. p. aureo-maculata growing in a shady border in the Rhododendron garden; soil peaty loam. The bush is, roughly, 12 feet to 15 feet high and as much through either way. Its foliage is not unlike a glorified Golden Privet, only much more handsome, with long branches, rendering it eminently suitable for cutting for house or church decoration. The plant apparently in no way resents being so pruned, but breaks away again freely. It is easily propagated (in common, I believe, with most Elæagnuses) by cuttings inserted in sandy soil in cold frame in September, or by layering in October.

Eurya japonica variegata and Eurya latifolia variegata are two other desirable shrubs, somewhat similar in general appearance to the golden-leaved Elæagnus above mentioned, but they grow ordinarily to a height of not more than 5 feet to 6 feet, and are half-hardy only, I believe, elsewhere than in the favoured south-west of England and parts of Ireland. Soil, two parts loam, one part peat and sand. These plants are quite hardy here in Cornwall, and look well when judiciously planted in association with Rhododendrons or similar flowering shrubs.

(CAPTAIN) E. A. SAUNDERS.

The Gardens, Carclew, Perran-ar-Worthal, Cornwall.

Large v. small Brussels Sprouts

Some time ago, in these columns, I ventured the opinion that the modern large Sprout is inferior to the smaller type of former days. This opinion has been forcibly confirmed during the present winter. Sprouts are extensively planted, and in a large break of many varieties (some grown for trial) the large specimens were almost all rotten at the centre. On the other hand, the small, bullet-like types were, and are, perfectly sound. Moreover, the large varieties lack the flavour of the smaller ones. To secure an unbiassed opinion I sent a dish of each to a well-known seed merchant who specialises in vegetable seeds, asking him to test them when cooked. Unhesitatingly he gave his decision in favour of the smaller buttons. It is all very well to say that the large Sprouts fill the basket, but this is a very lame argument.

A SCOTTISH GARDENER.

List of plants in bloom in the open on February 15th in a Cornish Garden

Acacia riceana
Ampelopsis sempervirens
Andromeda (Pieris) Formosa
Andromeda (Pieris) japonica
Arabis
Arbutus Unedo
Aubrietias
Berberis Beallii
Berberis Darwinii
Camellia japonica
Carnations (Perpetual border)
Chionodoxa Lucillæ
Clianthus puniceus
Christmas Roses (Helleborus præcox)
Daphne Mezereon (Mezereum, red and white)
Doronicum plantagineum
Drimys Winteri
Exochorda grandiflora
Forsythia suspensa
Genista fragrans
Hacquetia epipactis
Hepatica angulosa
Hesperis matronalis (Sweet Rocket)
Hyacinths
Hydrangeas (nearly over)
Iris reticulata
Kerria japonica (syn. Corchorus japonica)
Lapagerias (rosea and alba)
Laurustinus
Lonicera fragrantissima
Lunaria biennis (crimson and white)
Narcissi (various)
Olearia Haastii (opening)
Osmanthus Delavayi (almost out)
Periwinkles (4 kinds)
Polyanthuses and Primroses (in great variety)
Prunus Laurocerasus (Laurel)
Prunus Pissardi
Pulmonaria angustifolia azurea
Pulmonaria mollis
Pyrus japonica
Ribes sanguineum var. albidum
Rhododendrons (in great variety)
Roses (nearly over)
Sarcoccocas
Sempervivum tectorum (House-leek, out of season)
Skimmia Fortunei
Snowdrops (various)
Vaccinium pennsylvanicum
Valerian (crimson and white)
Violets
Wallflowers

E. A. S.

The Gardens, Carclew, Perran-ar-Worthal, Cornwall.

Snowdrops

One of our greatest treasures at the present moment is a group of Galanthus Ikaria, a most handsome plant with deep blue-green leaves and immense snow-white drops poised on stems a foot high. Some of the kinds are not, in my opinion, quite so fine as in former years, or it may be I am judging them a little too early. Perhaps we shall be able to obtain further supplies during the present year, as I notice a few good ones blooming among a thousand bulbs of (supposed) G. Elwesi which came direct from Smyrna.

E. M.

Delphinium Nora Ferguson

"Victoria" may well praise Delphinium Nora Ferguson (issue Feb. 13, page 97), as it is not only beautiful but a good grower. It was raised by Mr. F. W. Smith, gardener to the late Mr. George Ferguson, of Weybridge. Although practically the same colour as Statuaire Rude it is far more robust that delicate variety, which few have ceeded in keeping alive more than two ye As a real blue Delphinium let me recomm Pannonia. A great grower of Delphiniu and a good judge of them, declared it t the best yet offered for sale, and I think h right.

B. NEWBUR

The alleged poisonous properties o Primula obconica

References to the supposed poisonous perties of Primula obconica turn up un ingly at more or less frequent intervals. I express the opinion—the belief, inde that the modern type of this very valu plant is far from being dangerous to the a age individual? The original type, fam to gardeners of three decades ago, may deserved the suspicion which attached t but the present-day varieties, I am confi may be handled with impunity by all sa very few. Personally, I have always immune, and I have handled many thous of P. obconica in my time, and for qui considerable number of years I have n had foreman, journeyman, or apprentice has been affected by handling "obconica any stage. I have come to the conclu that, in the case of P. obconica, the old "Give a dog a bad name, etc.," is applic

Mabie, Dumfries. W. Mc

Raspberry Lloyd George

I am obliged to the writers of the concerning Raspberry Lloyd George, which appeared in the issue of February These notes appear to confirm me in opinion that, as an all-round Raspb Superlative is yet, if not the very bes least among those in the top flight. years ago, when in charge of a garden was justly famous for its fruit, I built "strain" of Superlative which, I th would not have been easily surpassed. method was this: When a cane was obs which gave superior fruits, even among ones, suckers were selected from such, in a nursery bed, and when occasion arose were substituted for those of less merit the course of half-a-dozen years a very torious plantation was secured. The were exceptionally robust, and the indiv berries were even larger than well-g Loganberries. I was much gratified, recently, when I was told that this "str was worthily upholding its reputation. in selecting, time, and patience will al repay those who desire the very best in way of Raspberries. I am at one with W. E. Wright in his opinion of Y Superlative.

A SCOTTISH GARDEN

Planting Hardy Heaths

In reference to my article on above, appeared in your issue for January 16th in reply to the criticism of "E. M.," appeared in your issue of January 30 may at once say that 30 years' succe growing of Ericas in many parts of islands and abroad, and in all kinds of and situations, lies behind my "E. M." writes, "to trench Rose-beds ing rotten manure, etc." May I ask why he has carefully deleted the word as written in my article? Surely every den boy knows quite well that Erica not need manure, *i.e.*, as manure, and *very* rotten manure can, and often does, the place of leaf-mould for working int tain soils to render them more open and grow fine-rooted subjects, such soil, fo stance, as may well occur in damp Rose-beds. Also "E. M." writes, "will tolerate shade—or very little of it." me hasten to assure your readers, numb whom must surely know, that many

ɔ.t beautiful Heath gardens in this country r situate entirely in woodland. And further, sregards *wet*. This word implies much. ;re are Ericas that will grow well into the :s of actual bog. Many others will stand ssive wet, always providing there is suffi- ɔt drainage to prevent actual stagnation, ccurs in bogs.

ne of the largest growers of Ericas, and a ɔ t successful grower, grows his Ericas, or east the bulk of them, on what was, 20 s ago, very boggy meadow-land, and ch is, even now, often too wet to get on in ter time, the only species not grown in very wet land being Erica cinerea and una vulgaris and their varieties, which, ourse, are mountain and moorland plants. ɔ the very beautiful gardens of Abbots- d there is planted a Heath garden of, ghly, three-quarters of an acre, the soil g *wet* and *heavy clay*. Here for nearly ears have been growing all the varieties ly in these islands, excepting one moor- variety, E. cinerea. As regards E. ea and its varieties, these do extra- narily well in open woodland; and I have essfully grown them by the waterside in very shady places. I have found that re the shade is heaviest the plants get a : taller, but this is an advantage, as the e of bloom is also lengthened and the ers open earlier and last much longer.

M.'s" final shot, *re* Liliums. These I : grown amongst Ericas for many years et and other soils, and I have never had ilure. This year I am planting out a ɔle of thousand of various Liliums from ɔm-side to cliff-top and in many inter- iate positions. JOHN HILL.

ɔighton.

Better late than never

have always understood that Narcissi and cinths, when grown in the open, should ɔlanted by the end of September, when ible, and it has been my usual practice to ɔw on with Tulips in October. As this not possible last autumn I had almost nciled myself to a lack of spring-flowering s for one season when, having a chat two well-known horticultural friends a days ago, both assured me that Darwin ps, if obtainable, would flower quite well ɔ spring, even if planted in February!

ɔighton. F.R.H.S.

Seed germination

ɔe other day I happened on a note on this ɔct in a local paper. The writer stated one might safely *know* that Parsnip s were good for two years; Carrots, ɔs, Onions, Parsley, Peas, and Salsafy hree years; Beans, Radishes, and Toma- for four years; Beetroot, Spinach Beet, ɔsicas generally, Mustard and Cress, uces, and true Spinach for five years; ry, Cucumbers, Endive, Marrows, and ɔns for six years. I should be very much ɔed if some readers of GARDENING ILLUS- ED who have already made a study of subject would kindly let us know their rience. I have, myself, been keenly ɔested in this question of how long old s will retain the power of germination, have tabulated the results of numerous riments in various parts of England, but sitate to yet express any definite opinion, am still experimenting in this direction in Cornwall and await results.

ɔmato seeds, I know, will retain their ity for as much as nine years; Carrot s I have never tried after two years old; ɔard and Cress and Radishes have failed atedly when but two years out of the sman's hands, and I have abandoned ɔg to grow good Lettuces from any but ɔ seed. On the other hand, I have succeeded in growing good Parsley from a packet of forgotten seed four years old, and Sage (not mentioned in the local paper) from seeds five years old. (CAPTAIN) E. A. SAUNDERS.

The Gardens, Carclew,
Perran-ar-Worthal, Cornwall.

Dahlias from seed

I have read with interest recent notes dealing with the raising of Dahlias from seed. Doubtless the practice may give pleasure, and there is always a faint chance that one may raise a really good thing, but, considering that Dahlias, in every colour in which the family can be had, may be obtained for a few pence per plant, it appears to me to be a waste of time to trouble with seedlings. I much prefer to leave the raising of such to the specialist, who has conveniences for doing so, and who gives us the benefit of the best of his productions. Not once or twice; but often, my attention has been directed to beds of seedling Dahlias in other gardens, and, taken as a whole, they were unmitigated and unredeemed rubbish. Admitting that they flower freely, wherein lies the value of inferior and badly-coloured blooms? Surely, in the case of Dahlias and similar things of a somewhat coarse description, it is more sensible to lay out a few shillings on good sorts than to plume oneself on having raised what, in nine cases out of ten, is but a collection of weeds. A GALLOWAY GARDENER.

Winter spraying of fruit trees

I have had a fine experience of "Carbo Wash," supplied by a firm advertising in last week's GARDENING ILLUSTRATED, viz., Bugge's Insecticides, Ltd., Eclipse Works, London, E. 3. Now I have 60 trees in my garden here; the other trees are in a garden about 10 minutes' walk from here. I sprayed my trees last February with this "Carbo Wash," diluting the wash 1 pint to 12 pints of water, and they were quite clean right up to to-day, when they were sprayed again with the same wash. But in most of the gardens about here fruit-trees abound, and, unfortunately, the owners do not look after them. During the summer and autumn I was prepared for an attack of American blight, but on looking very carefully over my trees six different times I could not find a single trace of American blight, so I ventured in some of the other gardens, and, judge my surprise to find it very prevalent indeed, and my trees were clean and free from insect pests during the summer and autumn, so I can confidently recommend this Carbo Winter Wash, as no doubt it is the finest wash procurable. The only thing in using it one has to be careful and spray the way the wind is blowing, as it makes one's face and hands smart if not careful. F.R.H.S.

Wimbledon.

[We endorse all that our correspondent has to say in favour of Carbo Winter Wash, but we would point out that it should be applied before the buds start to move in spring. In southern gardens it is now too late to apply this wash for this spring. As a winter wash it is all that could be desired.—ED.]

Mealy-bug on vines

I have watched with interest the correspondence on this subject, and thank "K. M." and "G. T. B." for notes on the tar remedy, which, in their case, seems to have been successful. My experience with it was some 40 years ago. New methods of extracting gas from coal may now be employed, hence a difference in the tar, unless it varies in strength like paraffin and methylated spirits, which probably prevented these being more generally used as insecticides. Though I cleared out the bug with two successive winters' dressings with the tar, I found it necessary to warn any not acquainted with it, as it made the young shoots so brittle they flew off at the least touch and with their own weight, sometimes with a loss of many bunches and vacant spurs, as contrary to the 22 years subsequently when no tar was used. As tar and clay are messy both to mix and use, and, moreover, somewhat risky if the tar varies in strength, I consider XL All Nicotine Insecticide entirely supersedes it, mixed in two minutes, easily and cleanly applied with a small paint-brush, and, being a liquid, penetrates every hole and cranny (which a thicker painty substance would cover over), and exterminates them with one dressing carefully done. Being inexpensive, it could be used at each winter's dressing in case of red spider lurking about, without risk. The prussic acid remedy explained by "H. W. G." seems effective, and though it entails four tedious operations, would no doubt kill any insect life in the house, and would be more generally used in isolated houses (in a range it would be risky to plant life in adjoining houses) were it not for the danger to the operator.

It is similar to the more deadly hydrocyanic gas method now practised with fruit-trees before sending away by our leading fruit-tree growers for sale in airtight sheds with movable floors on rails, enabling the trees to be put in and withdrawn without the operator going near. The gas being so deadly to human life, it is not safe to enter till 12 hours after being opened. This kills all insect life and would be just the thing for fruit and plant houses generally were it not so dangerous to the operator.

S. P. BECKENHAM.

—— I have read with interest in the columns of GARDENING ILLUSTRATED remedies for mealy-bug in vineries. The remedy mentioned by "H. W. G.," January 30th issue, is no doubt effective, but needs very special care in its application. Many vineries are used for other plants which are not always convenient to move, and such an application as prescribed for Vines would not suit other kinds of plants, as Ferns. Some three years ago I had mealy-bug to such a degree that I had several hundred bunches rendered useless. I have never known a worse attack. The remedy I applied, after clearing off all Grapes, was nothing but the hose-pipe on two days per week, occasionally three days. This remedy I have applied each year since, *i.e.*, from the time they break to blooming, then again after Grapes are set until they begin to colour. The wash I use is merely soft-soap and paraffin, after removing all loose bark.

For cheapness and safety I think the foregoing cannot be beaten. F. F.

Hellebores as cut flowers

In an issue of GARDENING ILLUSTRATED of almost exactly three years ago there is a paragraph on Helleborus orientalis, by your correspondent Kirk, in which he says "all are alike useful and durable when cut." That is the exact reverse of our own experience. For weeks past we have had plants in the garden bearing dozens of strong, tall spikes, from the greenish-white through each shade to the self-pink, but within two hours of gathering they are hanging limply over the side of the vase.

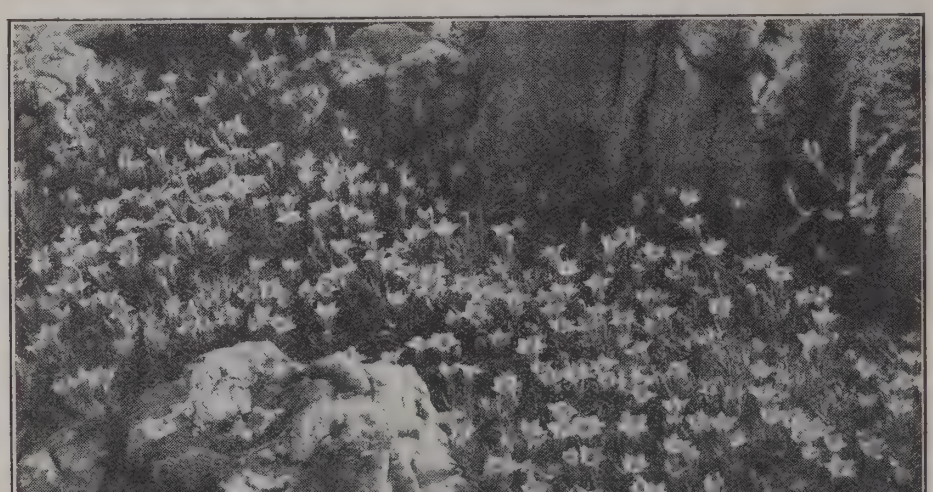
We have tried many tricks, such as scalding, or burning the stalk-ends, putting in hot water, putting aspirin or carbonate of soda in the water, etc., methods which have proved successful with other difficult flowers, but of no avail with Hellebores. We should be very grateful if anyone could suggest a solution. During the last few weeks we could have had large bowls of them indoors if only we could have preserved them. M. K.

ALPINES

Gentiana sino-ornata

IN Nature all the Gentians of the ornata section appear to be inhabitants of the high Alpine meadows, and, in cultivation, require as an essential a verdure-covered surface. These three items should be borne in mind by all intending cultivators who wish to achieve success with this beautiful group of large, trumpet, autumn-flowering Gentians.

The accompanying illustration shows clearly what this reputedly difficult plant is capable of producing when suitably treated. The colony carried 643 open flowers and large buds as late as November 2nd, after withstanding two or three days of the roughest possible weather, with high winds, beating rain squalls, and finally snow. The soil of the district is free of lime and suits Heaths to perfection. The Gentians occupy a sloping depression in a delightfully natural outcrop rock garden. Gentiana Ferreri, close by, is also nicely established, and promises, if anything, to be even more gorgeous another season. The rock garden in question is partly on a slope covered with masses of Gorse and Heather, and isolated clumps of Silver Birch and shrubby Potentillas, and receives a good deal of natural drainage from the higher levels, thus providing these Gentians with two of the most necessary conditions, plenty of percolating moisture and a lime-free soil. The third necessity, a closely-covered surface, has in this case been obtained by close, massed planting.



Gentiana sino ornata

With right treatment this reputedly difficult plant is grown with great success

A companion for Gentians

Will you tell me whether you think the enclosed, which I think is Arenaria cæspitosa, or else a Spergula, is a bad companion for Gentiana Farreri and G. verna? It grows everywhere like a weed, and is making a turf all about the patch where these two treasures are growing. I find, by the way, that I can get G. verna to do by planting it in peat, cocoa-fibre, a little loam, and well-weathered, finely-sifted ashes close to a large flower-pot saucer sunk in the ground. The saucer, about 10 or 12 inches across and 3 inches deep, is filled with water when the weather is dry, and the water, of course, percolates and keeps the surroundings moist. But I feel afraid the companion is going to strangle the employer. Will you also tell me where the large-berried Pernettyas can be had? About 20 years ago I bought one in a pot at Brighton, which had lovely bright rose-coloured berries as big as those of the berried Solanums now to be seen in the flower-shops everywhere. At that time this Pernettya seemed unique, but it never did much when planted out, and I eventually lost it. It was certainly a lovely object and I should greatly like to replace it. M. L. WILLIAMS.

Little Innok, Swainswick, Bath.

[The plant sent is Arenaria or Spergula pilifera, and much too strong to be trusted as a companion with Gentians. Unless you can find a much frailer ground coverer between your Gentians they would do better without. You might try Claytonia australasica; it is a great spreader with dainty pearly chalices, but well under 1 inch high and not too strangling. We are glad to hear of your successful method to cultivate your Gentians. No doubt the slowly percolating water is a great factor to your success. The Patagonian Myrtle (Pernettya mucronata or speciosa) can be obtained from Messrs. J. Cheal and Sons, Crawley, or Messrs. Hilliers, Winchester. It seems best to plant two or three in a clump to make sure of fertilisation and plenty of berries. A good moist loam suits them well. They do not like lime, but the berries rarely reach the size of those of the Solanum as mentioned.]

Sowing seeds of Alpines

One of the most interesting methods of propagation of Alpines is by seeds, and as it is also one of the most satisfactory, there is much to be said in its favour.

Now that so many alpine nurserymen are publishing seed lists the amateur can hope to procure at a very small cost many of the most interesting plants for his collection. I have just completed a very large sowing of alpine and herbaceous seeds, and have now the pleasurable anticipation of seeing them come up thick and fast (except in the c where I am left to wonder why they have come up at all).

The seeds should be sown in pots or which have been thoroughly cleaned dried, one large crock placed over the and a handful of smaller ones over this, the crocks then covered with an inch or s leaf-mould.

The pan should then be a little more half-filled with soil (a rather sandy pot mixture will serve, pressed fairly firm); this a little soil should be sifted to mak fine surface for the very fine seeds.

The pan then being watered and drain is ready for the seeds, which should sprinkled evenly over the surface, an very little fine soil sifted over them pressed firm. It is a good rule, as fa possible, to cover the seeds with their depth of soil.

When sown, the pans should be place a cold frame and covered with pieces of s or if the pans are few a piece of thick bro paper will serve the purpose. It is an vantage to keep the seeds in darkness they commence to germinate, when should be placed in another frame and tected from the hot sun.

If at all troubled with mice place a baited traps nearby the seed pans, as are very partial to many seeds and will lessly dig over the pans.

When the seedlings are sufficiently they should be pricked off separately boxes and left until they are strong en to be potted or planted in their perma positions. W. INGWERSEN, JN

TREES AND SHRU

Yellow Winter Jasmine (syn Jessamine) (Jasminum nudiflor

[IN ANSWER TO MANY CORRESPONDENTS

J. NUDIFLORUM was the specie tended in my article, "Yellow Jasm in Pots for Decoration," issue Febr 6th, page 80. According to replies queries I have had I think it cannot well known as it is in this county (Worce shire). There are many species, but three hardiest and those chiefly planted side are:—

J. humile, yellow, blooms in summer; fruit bearer .. .. Prune au
J. officinale, white, blooms in summer .. "
J. nudiflorum, yellow, blooming Dec., Jan., Feb. .. .. Prune M
J. Bussianum, "Buss Red Jasmine;" flowers red; ca be planted outside.

There is also a golden-leaved form nudiflorum, but not so floriferous. O four mentioned, J. nudiflorum is the common, most accommodating, and har and I think the prettiest. Flowering in winter it is a beautiful sight when wherever seen. Although leafless at flo ing time its long slender shoots wrea their whole length with star-like bl make up, and more, for that defici Outside it can be trained against fences, porches, poles, tree-stumps, in s berries, on umbrella shapes (like Roses herbaceous borders, or anywhere where i please the eye. It can also be allowe ramble at will where suitable, a loamy and a sunny situation suiting it best.

BUSHES IN POTS.—Rotted turf or coarse sand or rubble mixed is the best ting medium. The cuttings may be root autumn and potted on into 6-inch pots. first year pot firmly. The buds on the when established, will break away str in April. They can be left full length o back a little in autumn. It may not fl very well the first time. In March follo

This picture of the sea-front gardens at Torquay in February suggests a scene on the Mediterranean

the same shoots back to 3 inches from r base. At prominent buds they are in s. You will then have a compact bush a many branches at the end of the second , when, in all probability, the plant will overed with blooms. These same shoots be left full length till after flowering, n they will have to be pruned back again, so on each year, success depending very h on soil and feeding. Anyone having ence might get a better effect from a ned specimen on a wire arrangement 18 es or 2 feet high, the yearly shoots being ned up or down this at a distance of ches. To enhance the effect when taken the house a piece or two of Smilax ed round some of the shoots to give the arance of leaves might be effective, but I ld prefer the "Shower of Gold."

much simpler and probably more grace-vay would be to take one main shoot and re it to some support, a cane or suchlike, as long as required, under 3 feet, and ving the buds to remain and grow ral, taking out the top of the plant when required height was reached.

ney could be grown in the ways men-ed, in any sized pot over 6-inch or in on a larger scale. The four plants I tioned were grown in 6-inch receptacles not potted on or repotted, which could done. They were merely grown as an riment, which ended satisfactorily.

YELLOW JESSAMINE.

Treatment for Yew hedge

have a Yew hedge three years old, now ut 2½ feet high, the individual bushes be-12 inches to 15 inches apart. It is very a at the bottom, and I should like to w how to treat it to overcome this. The nes have not yet all grown to a uniform height, so up to the present I have been cutting 3 inches or 4 inches annually off the taller ones to get them more level. Will it thicken up at the bottom if I continue this treatment, or must it be pruned more drastically? I do not want to lose more of its height than can be helped. Many of the bushes have a twiggy growth right down to the ground, but others are decidedly leggy.

A. H. WOLLEY-DOD.

[In answer to Mr. Wolley-Dod's question I would say that it is a mistake to cut the tops of Hollies or Yews when they are growing into a hedge. The ground for them should be dug at least 2 feet deep and 3 feet or 4 feet wide, and plenty of manure put into second foot of soil. As the Yews grow, any straggling shoots should be shortened, say in May, and the bushes kept in a pyramidal shape. It is a good thing to have one leader only to a Yew bush. The tops are apt to sprout all round, and I nip these back, but I never think of cutting the tops to make a level edge. I do not cut the tops back until they reach the height which I want the hedge to be. Young bushes are often rather leggy, but if the bushes are kept cut, so far as possible, in a pyramidal shape, with me they grow out at sides all right after a time. I have started hedges with Yews like large pencils and they are now 7 feet high.—ROLLO MEYER, *Watton Rectory, Hertford.*]

Acanthopanax recinifolium

This little-known tree is closely allied to the Aralia family, but is seldom met with in gardens. This may be accounted for by the habit it has of dying back in its young state.

The tree is unique in the type of its foliage from the majority of others, and for that reason is worthy of a place in the pleasure-grounds. The leaves are palmate, measuring from 9 inches to 12 inches long and quite as much in breadth, deeply lobed, becoming smaller as the tree grows older.

There are three good young specimens of this tree between 20 feet and 30 feet high in the flower garden in Greenwich Park. Planted on the hot gravelly soil of Blackheath they do not seem to be subject to the habit of dying back. This may be accounted for by being planted on the higher part of the Park, where the subsoil is a bed of gravel and the wood is always well ripened. A number of young trees that were planted at the lower end of the Park in a deep, less freely-drained soil, which is much colder and subjected to early frosts, the leading shoots of soft unripened wood got cut back. It would be of interest to know what success others have met with in planting this tree.

R. FINDLAY.

Torquay

IT is, I think, insufficiently realised by many of the tourists who rush south to the Riviera at this inclement season in search of warmth and sunshine that there exists in these islands favoured spots where the vegetation and surroundings have much of the exotic charm of more famous winter resorts.

The accompanying photograph of the sea-front gardens at Torquay was taken in February of last year, and hardly suggests at first sight a scene in England at that period.

The free use of Cordyline australis testifies to the geniality of the climate, and the famous undercliff gardens will be a revelation to many of the numerous forms of sub-tropical plant life that will survive the winter under these favoured conditions.

E. R. ASHTON.

THE GARDENS OF CAWDOR CASTLE

I HAVE just had sent me a somewhat exceptional seed list—what might be called a *catalogue de luxe*—namely, the "Garden Book" of Messrs. Alexander and Brown, of Perth, a firm unknown to me except by the trade list in question. On glancing through this handsome brochure of quarto size, printed luxuriously on fine paper, and lavishly illustrated in various tones and colours, what naturally occurs to one is that such magnificence must cost something, which must be paid by somebody, and that the purchasers of seeds must be those who ultimately "hold the baby." But on scanning their prices I find Messrs. Alexander and Brown quite as reasonable as most of their neighbours, and a great deal more reasonable than some. However, it is not my concern at present to pass judgment either on the prices of the firm or on their seeds, which last I have not yet tried. I am chiefly interested in the illustrations—not so much those in colour as the sepia-brown photographic pictures of some of the more notable Scottish gardens, beginning with Thurso in the far north, and proceeding, by way of Aberdeenshire, to the gardens of mansions further south. With most of the places pictured I have no first-hand acquaintance, but the finest picture is the full-page illustration of the upper garden at Cawdor Castle, which I think I may say I know, and have long known, by heart.

There are two gardens at Cawdor Castle, an upper and a lower. The lower garden is given almost exclusively to the production of fruit and vegetables and to the raising of young stock; and its neat and orderly cultivation and the luxuriance of the crops speak convincingly for the industry and skill of the head gardener (Mr. Chapman) and his staff. Those, however, whose acquaintance with this garden dates back a few years will now miss what was once a notable feature—namely, the tall Box hedge which skirted the south wall on the outside, and nearly, or completely, hid the masonry. Possibly the hedge had lived its span. I am not learned in the Buxus species, but I suppose the Box of the hedge in question must have been Buxus sempervirens (though all the Buxus known to me are sempervirent). At any rate, whatever the species, the hedge, in its heyday, must have been 9 feet or 10 feet high; and, as Box is a subject of slow growth, it must have been pretty ancient at the time it was grubbed up, some years ago. Who planted this hedge probably no one knows for certain. My own belief is that it was planted early in the 18th century by Sir Archibald Campbell, of Clunas (during the time he was tutor to his nephew, John Campbell, the young laird), when he reclaimed the ground and brought under cultivation what is now the lower garden. In the account Sir Archibald gave of his stewardship we find that "he has already taken in and levelled a considerable piece of ground, a part whereof was deep morass and the rest a hill, of which he made a handsome garden, where all sorts of fruit grow that are in Scotland," and he further proceeds to speak of the "quick-set hedges" he had planted. On the assumption that Sir Archibald Campbell planted it, the Box hedge must have been at the time of its removal in 1910 or 1911 some 200 years old, and was in its day probably the most notable growth of arborescent Box to be found in Scotland. In mentioning this Box hedge, now nonexistent, it would be difficult not to think of the noble Walnut-tree that grew near it, and, fortunately, still grows within a stone's throw of the wall along which the hedge ran. If there is in Great Britain any larger and finer Walnut-tree than the magnificent specimen at Cawdor Castle I should be glad to know where it may be seen. I have in my time (dear me, Posthumus, how the years fly!) gathered nuts under the shadow of this mighty tree (though I am bound to say there was precious little in them)—also under a fellow Walnut-tree, which touched branches with the tree now in sole possession, but which has long since gone the way all Walnut-trees ultimately must, as well as those who plant them or write about them.

The upper garden of Cawdor Castle occupies the easterly part of the terrace or plateau above the lower garden, on a level with the drawbridge entrance to the Castle and with the lawn in front, from which the main gate leads to the garden. This is a cloistral pleasure ground that does not readily lend itself to description, but the overworked epithet "old-world" would apply here if anywhere. If, conceivably, some Rip van Winkle or Christopher Sly were to wake from a doped sleep in this bosky enclosure he might pardonably fancy himself in the middle of the 18th century, if not even in the earlier Tudor time, when Bacon gardened at St. Albans; though if Rip were himself somewhat of a gardener he would soon discover his error of time on seeing round him an infinitude of plants that could not have been known to 18th century Capability Browns or even to 19th century Loudons or Paxtons, much less to Lord Chancellor Bacon. In the upper garden, except for a few old Apple-trees, there is little suggestion of the utility which is the note of the lower garden. The old stone walls stand mathematically four-square, but in the garden itself there is no obtrusive symmetry of design, if there is any discoverable design. There are flower-beds and borders, dividing hedges, grass plots, green arcades, shady walks, and other Baconian features, though in one characteristic at least it comes short of the Baconian ideal, having nothing which could be accurately described as a "pleached alley." On all hands there is great plenty of pleasant things, without, however, an observable attempt to make "collections" or to specialise in this or that direction. The catalogue illustration gives a charming glimpse of the old garden. The camera must have stood half-way up one of the long walks that lead from the park entrance at the back of the garden to the main entrance near the drawbridge. The picture gives a characteristic view of the east face of the Castle and of the trimly patterned "ladies'" garden under the Castle windows. The upper part of the old square keep, with its corner watch-turrets (the original nucleus which Thane William by royal licence built and fortified in 1454) stands out with admirable clearness, even to individual stones laid and cemented by the 15th century masons. The trees daguerreotyped on the sky beyond the crow-stepped gable are the old Elms which flank the drawbridge, and are rooted in the moat. The heavy-foliaged tree to the extreme right in the same corner of the picture is a many-branched Horse Chestnut which overhangs the copious spring that gushes here from the garden wall, deriving its supply of water from some source under the garden or in the woods beyond. If, on reaching the end of the long walk, you turn a few paces to the right and pass out at the main gate, you will find yourself full in front of the Castle, which faces the north; a cold exposure, but protected from the force of winds that blow from Caithness and the Moray Firth by a stately row of Lime-trees, a further witness, we must suppose, to Sir Archibald's enlightened love of planting. The wooden bridge by which the Castle is entered is a genuine drawbridge, duly hung on chains, though it has not now, nor does the masonry show that it ever a portcullis. It is possible that the bridge and the dry moat it spans, now interesting and picturesque feature Cawdor Castle, were due in the first in as much to peculiarities of the site as urgency of the times, since except for th occasional abduction of a bride, and pe an occasional cattle raid, Cawdor, or (as it was in those unsettled days, see have had little of the storm and stress kept other parts of Scotland so watchfu the defensive.

This short notice of Cawdor Castle a purlieus, slight as it is, must not om interesting feature of the upper garde Holly hedge that skirts the garden alon outside the east wall, which specim "quick set," at the risk of seeming to on one string, I must again credit planting zeal of Sir Archibald Campbell venerable hedges of Box and Holly, a row of Lime-trees in front of the Castle in effect a hedge, on the grand scal almost certainly the idea of the one pl carried out on or near the same date, a view to beautifying and improvin estate of which he was the tem steward, and which was, at the time, n abundantly furnished with trees. within the memory of those still livin hedge was an unbroken line of superb trees, of the full height natural to the s and of proportionate depth from ba front, sufficiently symmetrical, thoug touched by the pruning knife, each tree tailed into its neighbours, right and le whole forming a fence impenetrable would say, by anything except a squirr boy. Unfortunately, like so many monumental, this monumental hedge i a ruin, though no doubt everything ha done that could be done to save it. like men, have their determinate peri existence; some species a long period, a short. What age-limit Nature has as our native Holly (Ilex aquifolium) I know. It is possible that the Hollies upper garden have already reached the age limit and are now dying off. But out speculating in this direction, a pr sufficient cause of the destruction of trees—as well as of the Hollies which u be such a charming undergrowth feat the Cawdor Woods—may be stated in a word—*rabbits*.

The upper garden is no doubt a pl place, but its charm is the circumscribe intimate charm of the *hortus inclusus* the greater delight of large space a finite variety one must go to the C Woods, the crowning glory of the Cast the county. But that is another story.

CHRYSANTHEMUM

Chrysanthemum growing

EXPERIENCE of some years has t me that indoor Chrysanthemum among the most satisfactory plan week-end gardeners to grow. Cuttings r taken from the old stools any time fro end of December to mid-February, or, are making a start, unrooted cuttings obtained, reasonably, from the big gr in January or February and rooted cu in March or April. It is advisable to each cutting in a separate small pot, improvise a frame with a wooden box glass lid—preferably pieces of broken which do not fit tightly. That is so th moisture, which collects on the under su will dry off if we cannot get time to

THE GARDEN, CAWDOR CASTLE, NAIRNSHIRE

glass daily. These " frames " should be l in a greenhouse with little or no heat ıck thrown over at night will keep the out). In this way mildew should be led and in a few weeks the plants be g and well rooted. Very little watering quired at this period, so that should we nable to attend to the plants for even two -ends nothing very drastic will result.

ıce the pots are full of roots the plants ld be potted up into the next size pots. week earlier or later for the repotting es very little difference.

out May the pots should all be stood out ɔors in a sunny position and as far re- d from any slug-harbouring things, such vy, as possible. From now onwards water will be required, but Nature generally helps very considerably, and it is only after a few hot, dry days that we need worry. There is still the final potting to do, and this should be attended to by the end of June; also those varieties which should be " stopped " ought to have been dealt with by this time. Most of the large Japanese varieties need stopping, as also the Decoratives, but there are a few exceptions.

In August it becomes necessary to start feeding the plants, giving one teaspoonful per week of some good fertiliser, such as Clay's. This feeding should be done on the same day each week. By the end of September all plants should be housed, earlier if the weather is stormy, and once the buds are well coloured feeding should cease. Very little heat is required in the greenhouse, only just sufficient to keep out the severe frost. Soon after housing, the plants should be syringed with a good insecticide.

Once the flowering season is over cut down the plants, allowing three or four shoots only to grow from the root. Keep these well watered and they will make good cuttings. The plants that have produced the big show blooms will not give strong cuttings as the vitality of the plant has all been used on the bloom. To achieve these show blooms one must, of course, disbud and do all things to time as stated in the many good books of reference on this subject.

The above remarks are merely a guide to those whose time for gardening, like mine, is limited to week-ends. M. LEITH-LESLIE.

West Lodge, Bexley Heath, Kent.

THE FLOWER GARDEN

Didiscus cœruleus (syn. Trachymene cœrulea)

THIS, a native of New Holland, grows from 1 foot to 2 feet high. The stems are erect and much-branched, as may be seen by the illustration, each branch terminated by a flat umbel of small blooms of a pleasing rich blue colour. The flowers are freely produced from August to October. It is half-hardy and requires careful treatment, being impatient of a superabundance of moisture, especially when the plants are in the seedling stage. It is best raised in gentle heat. The seedlings should be moved in May to their permanent quarters. C. P.

Didiscus cœruleus (syn. Trachymene cœrulea)

A plant not infrequently received for identification

Phacelia campanularia

Of all the annuals quoted in catalogues, I think P. campanularia is one of the best, and yet it is not grown to the extent that one would expect. It grows from 6 inches to 8 inches high, and well-grown examples are quite bushy and shapely little plants. The flowers are about an inch across, freely produced, and a fine deep Gentian satiny-blue, a colour that must be seen to be fully appreciated.

It succeeds best in a dry, warm soil, and is admirably suited for the rock garden. It should be sown outside at the end of April or early in May, and for succession another patch can be sown about the beginning of June. For earlier flowering the seeds could be sown in boxes, raised in a warm greenhouse, and pricked off when large enough. The seedlings must never become starved or they will be incapable of revealing their full beauty when planted out. It is also useful for flowering in 3-inch pots in a cool greenhouse, and a batch in full bloom is very effective. T. W. B.

Violas from Canada

What interesting species of Violas there are, whose natural home is Canada, and how easily they are grown if care is taken to place them, as far as possible, as they are in their happy wild haunts. The following are some of the Violas we are growing here:—

VIOLA PEDATA BICOLOR (the Bird's Foot Violet).—A beautiful flower, the two upper petals of which are deep purple; a vivid contrast to the lower ones, which are of a light shade of blue. This Viola thrives on dry sandy slopes in full sun. A gem for the garden, being about 6 inches high. much more attractive than Viola p which is a pale blue.

V. PUBESCENS.—A showy Violet of a g yellow colour, growing to 16 inches in h It loves a semi-shaded spot. A coveri ashes should be given early in the spri slugs are very troublesome to its new growths.

V. GLABELLA.—This is a bright Violet, rather small but very pretty. well in the sun or shade.

V. SEMPERVIRENS.—This is of a t habit, with yellow flowers growing o stems. It loves a shady spot in sandy

V. ADUNCA.—A very dwarf species, times white, ofttimes purple. Thrives dry rocks in its native home.

V. CANADENSIS.—A tall Violet grow 18 inches in height. Flowers white bright yellow eye. Sometimes its petals are marked with dark blue lin revels in shade and moisture. R. Mo

The Gardens, Thorpe Hall.

The future of the Paeon

The untiring efforts of the American Society

We have just received (through Kelway and Son) a letter from Mr. Brand, from Minnesota, U.S.A., and Brand is President of the American Society, a body of considerable impo and as the letter puts into words o thoughts and desires, we publish it hope that eventually the Pæony may really popular in this country.

"I have understood as you state letter what seems to many of us in thi try to be a very strange thing indeed, t Pæony is not as much grown in Eng it is with us and with our Canadian across the lines.

"From what I have heard of the climate it must be ideal for the bring of Pæonies to their very best.

"In the northern two-thirds of the States and in the southern half of wherever flowers can be grown there flower that compares to the hold the has with the people. It is the flow eminent.

"We grow beautiful Roses, we g the flowers of the north temperate zo no flower is so much thought of and after as the Pæony. This has been tr since the introduction of the choicer such as have been coming out during 25 years.

"Your firm has been very fortunat high standing of the comparatively la which has been added to noveltie Pæony collection with us is considere plete until it numbers among its Kelway's Glorious, James Kelway, B Schroeder, Phyllis Kelway, and Lad Duff.

"The appreciation of the Pæony h brought about through the untiring e the American Pæony Society, whic Society international in scope; throug local Pæony societies, many of which considerable size; through the many lent Pæony shows which these societi during the Pæony season; and also the heavy advertising campaigns car by the large Pæony growers during th ing season.

"I am glad to believe from what read and heard of the English soil and that your results with the Pæony w more uniformly good than our result much hot, dry, windy weather is apt us right during the blooming season.

"I wonder you have no Pæony Soci

Plants for shrub edges

HERE there are spaces next to a path or a lawn at the edges of clumps of shrubs it has a good effect to have hing at a time in a bold group rather to have a filling of many kinds. For spaces nothing is finer than Acanthus, a good mass of one of the best of the -leaved Saxifrages (Megasea) is always actory, especially close to steps or any ıry. The fine foliaged Nordmannia olia (syn. Borago orientale) is a capital for such use. The flowers, which come are of no importance, but they are soon ed by the bold cordate leaves, bright at first, but as summer advances sober- a full, deep colour. The leaves, per- because they are thickly set with strong, hairs, seem to be proof against all by insects. It is a good plant for Lon- ardens.

ther useful thing for the shrub edge is all Aster, A. corymbosus. It is a neat nobtrusive plant all the summer, with all foliage and dark stems like fine Then early in September it bursts into alth of blossom that the picture shows. is a longer stretch of it in the same , but as it is some yards in length it is rouped with patches of Megasea cordi-

G. J.

Aster corymbosus on the edge of a shrubbery

About Iris roots

often noticed in old clumps of Bearded at the rhizomes have apparently lifted elves out of the ground, and whenever e this condition you can realise that it e your Iris were divided and trans- d. Possibly a few words regarding the g habits of Iris will explain this condi- First of all, it must be understood that izome flowers only once, and you will this if you examine the roots where eason's flowers appeared. These old will be found on the neck, or end, of izome, and if in the spring you break of these old flower-stalks you will dis- that it has already commenced to s where the break occurred. It is very that this rhizome will flower again, but will send out a new growth generally known as an "offset." These, in time, will develop into rhizomes and produce flowers. In time the old rhizomes will decay and disappear.

Persons who witnessed this process write wondering what is the matter with their Iris, as they appear to be decaying. Usually the trouble is found to be the natural habit of the plant, and not due to that disease, pseudomonas iridis, commonly called "Iris rot." If you have left your Iris undisturbed for three or five years the new rhizomes which have formed, not having sufficient room in the soil, often grow on top of each other, thus making it appear as if the plants had been lifted out of the ground. When this condition appears it is time to consider division and replanting. As August and September is the best time for such work in the garden these signs have been called to your attention, and we hope the suggestions will prove of value.

Nordmannia cordifolia,

Another plant suitable for shrub edges

Durable garden paths

How to construct cement paths

Garden paths in wet weather are apt to be an eyesore and a nuisance. By the aid of a bag or two of Portland cement and a few barrow-loads of gravel and sand a path can be provided which will be neat, clean, and durable.

The method is simplicity itself. Take four parts (by volume) of clean sand and gravel, and mix thoroughly with one part Portland cement on a non-absorbent floor or other surface. Afterwards add water gently and gradually, mixing all the time until a stiff paste is obtained. When set this mixture will be concrete, and you can mould it into any shape you wish.

By the use of a little pigment you can colour the concrete any shade.

For a plain concrete path, fix down each side a strip of wood about 1½ inch thick and 3 inches deep, and fill in with the wet mixture, levelling off with a "float" (a slab of wood with a handle).

Should slabs be preferred, make a few plain rectangular boxes without top or bottom, and hinged so that they come apart easily. Fasten these down to a baseboard, fill with concrete, and leave for a couple of days. There are your slabs.

During bad weather you can make them in an outhouse and store for further use.

If "crazy" paving is desired, break the slabs into irregular pieces and lay in a bed of cement mortar.

Just one caution. Do not mix more concrete at one time than you can use within an hour, because about that time it begins to set, after which it must not be disturbed. The secret of success in concrete work is thoroughness.

Cyclamens and Primulas at Reading

PASSING through Reading on a G.W.R. night express train recently all the passengers in the compartment in which I was travelling were astonished to see a range of greenhouses filled with bright-flowering plants and illuminated on this dark night with a flood of light. Passengers aroused from their slumbers rubbed their eyes and looked out upon a blaze of many beautiful colours. It was the range of greenhouses where Messrs. Sutton and Sons grow their Cyclamens and Primulas, and the glass-houses filled with these plants in great variety of colour were illuminated by very powerful lamps placed outside on the carriage drive.

This innovation has created great interest, particularly among those travelling by night on the G.W.R. main line.

This incident led to a subsequent visit to see the Primulas and Cyclamens at Reading.

By the time these notes appear in print the Primulas, although still very attractive, will probably be past their best, but the Cyclamens will be at the height of perfection and worth going far to see. Of the innumerable forms of Primula sinensis I cannot speak too highly of Coral Pink, Etna (rich fiery-crimson and the most brilliant of its set), Giant Royal White, and Improved Giant Crimson. The varieties Czar, Oxford Blue, and Reading Blue are sometimes described as blue Primulas, though shades of violet-blue would be nearer the mark. The size of the individual flowers is very remarkable; I measured blooms of Giant Royal White over 2½ inches across. Those who are on the look-out for novelties should make a note of Intensity, not yet listed. It is a P. sinensis variety with crimson flowers and a golden eye. The large flowers are borne on stout stems. It was raised by crossing Giant Crimson with Crimson King.

Of the Star Primulas (P. stellata) special mention should be made of Silver Star (a great acquisition with pure white eyeless flowers that glisten like silver); Vesuvius (even brighter than the famous Crimson King; it shows the most brilliant colour yet achieved); and Symmetry Star (a rose-pink of perfect form).

There are scores of varieties of the Cyclamen to be seen at Reading now, and it is not easy to make a selection, but no collection would be complete without Firefly (sealing-wax scarlet), Salmon Scarlet, Giant White, and Giant Salmon Pink. Apart from the flowers many varieties have most ornamental foliage.

All of the plants now flowering are grown from seed sown in August, 1924, and flowered in 48 size pots. By sowing every year a constant supply of vigorous well-flowered plants is obtained and the old corms are discarded.

House after house is filled with choice varieties, and the visitor to Reading at this season is well repaid for the time spent among the Primulas and Cyclamens.

HERBERT COWLEY.

One of many houses of Cyclamens at Reading

The Polyanthus from seed

While to perpetuate any particularly fine colour or form of this plant it is necessary to resort to division of the crowns, for the production of strong, free-flowering specimens giving large and brilliant flowers on long, sturdy stems, and in great profusion, seedlings are by far the best. Although, like so many other plants, the Polyanthus does not breed quite true, there are now some wonderfully fine strains in existence, so no one need be compelled to grow inferior kinds.

It is, of course, quite possble to raise this fine plant without the aid of a glass structure, but where such is available it well repays to employ it in the earlier stages. February is the best month for sowing the seeds of the Polyanthus, the earlier the better. As they are less liable to dry up the soil small boxes are preferable to pans when sowing the seeds. A compost of fresh loam and leaf-mould in equal parts, with sufficient sharp sand to ensure proper drainage, will be found suitable. Place sufficient drainage in the bottom of the boxes and make the soil moderately firm. Have the surface quite level and scatter the seeds rather thinly and evenly. Press gently with a smooth piece of board and then cover lightly with some of the compost finely sifted. Water gently with a very fine rose and cover with a sheet of glass and a bit of newspaper. A temperature of 55 degs. is just about right to ensure a good germi Like all the Primula family, the Poly is somewhat erratic in the way of nating, and, as the late-comers are, u the most choice, these must be wai and carefully preserved.

When large enough to handle, pr into boxes of fairly good soil and re the same house. Afterwards, when th plants are growing away freely, remo cold frame and grow steadily on unti enough to be planted in the Moderately rich soil that has been wel vated and is in partial shade sho selected. Allow from 9 inches to 12 from plant to plant, and should the w be dry, water well twice a week thoroughly established. Treated thus fine plants that will flower profusely lowing spring are assured. C. B

Preston House, Linlithgow.

Reinwardtia trigyna

This Reinwardtia is one of the most winter-flowering shrubs for the side of a warm greenhouse. To have ne sentable plants it is necessary to str cuttings early in spring and grow ther heat, stopping the shoots two or thre to induce a compact growth. Towa autumn an abundance of sun and necessary in order that the wood may thoroughly ripened. If this be atten an abundance of the bright orange will result.

The stems of Tree Fern

As such Ferns as Dicksonia antarct Alsophila australis increase in stat annual removal of the current season's gives the stems rather a bare and unfu appearance. At one time I had r useful collection of Tree Ferns of c able size, and it occurred to me that t trunks could be attractively furnishe periments were cautiously made unti found that the "parasites" did not i with the health of the Ferns, and, g extending the idea, in the course o years the formerly unsightly stems w verted into things of beauty. The plants to be employed were Adiantum

ieces of which were inserted into the They grew like weeds, and en- ed by this success small plants of Rex ias were added. They, too, grew ntly, and then pieces of Cissus dis- found a place. To these were added um argyrites, Panicum variegatum, aintpaulia ionantha. Finally, it was ined to give Orchids a trial, and for this purpose some spare pieces of Oncidium Lanceanum were chosen. As those who know the variety will agree, this is not a very easy Orchid, but on the stems of the Tree Ferns it grew vigorously, making healthy and abundant foliage, while it flowered freely. Watering at first presented difficulties, but ultimately it was found that by watering from the top of the stem with a rosed can the water ran down the stem and reached every root without marring flowers or foliage. Those who may possess a Tree Fern or two and who may be induced by this note to furnish the bare stem will, I am certain, appreciate the difference which such treatment makes in the appearance of their plants.

A Scottish Gardener.

REMINDERS FOR THE WEEK

uthern and Midland

Beans

s advisable to make a further and sowing now for the maincrop. If Beans are sown much later they are to be attacked by black-fly. The rows re already through the ground should he soil stirred around them with the

ts

maincrop should not be sown yet, but dens where early Carrots are in de- a few rows of an early stump-rooted may be sown in drills 1 inch deep and hes apart. The bed for the maincrop ave a dressing of old soot or wood- forked lightly in.

ce

nall sowing may now be made in a ed spot of the garden. The seed only be just covered, and soot must be over the bed at the first appearance of lants, otherwise slugs will quickly them.

se who contemplate raising herbs from vill reap much benefit if they sow them the next week or so in boxes of sandy aising in a frame and planting out April.

tual Carnations

ings that have been struck during the o months should now be fit for potting gly, as it is detrimental to leave them sand when once they are well rooted. s loam, silver sand, and wood-ashes is able compost for the first potting, and ould be made firm.

iniums

se are easily raised from seed sown n gentle heat, and if grown on and l out during May many of them will during the autumn. Both annual and ial varieties are useful for the borders quire the same treatment.

r beds

plants and bulbs that were set during n are now growing freely, and any the beds should be made good. The ould be stirred amongst the plants nally and a careful watch kept for slugs, and other depredators.

s

Grass on these is now growing freely, here the roller has been used during t month and all obstructions removed is no need to hesitate in using the , but it is advisable to do this when s not on the ground; also keep the e set fairly high for the first and time.

garden and herbaceous border

e is no need to keep the plants that aised from seed or cuttings during the n in their pots or boxes any longer, as nay now be safely planted in their ng positions.

Cucumbers

Now is a good time to sow a few seeds of Cucumbers where there are pits or houses that can keep up a temperature of 60 degs. to 65 degs. Unless this heat is available it is better to wait a little longer.

Achimenes

Although these beautiful plants are not as often seen in greenhouses as they deserve to be, they are amongst the easiest and most floriferous summer-blooming plants we have. The tubers should be started now and grown on in the same manner as the Gloxinia.

Fruit gardens

All pruning, tying-in, and nailing should now be completed as soon as possible or damage will be done if left till the buds are bursting. Any spraying that is not already done should be proceeded with. An eye must be kept on the bullfinch and other birds that are liable to take the buds of Gooseberries and other fruit.

W. E. Wright.

Stockton House Gardens, Near Rugby.

Scotland

Beds and borders

Now that the frosts have left us, at least for a time, it is well worth while to look round plants, and especially small plants, in beds or borders with a view to firming up such as may have been loosened by the action of frost. It is advisable to wait until the surface of the soil is moderately dry, and more particularly in gardens where the soil is rather heavy. Now comes the time when slugs begin to be active, and colonies of these pests are invariably to be found under the foliage of many herbaceous plants, such as, for instance, Pyrethrums and Phloxes. The majority of these may be disposed of by liberal dressings of dry soot, and a ring of ashes put round small or delicate plants may save them from extinction. In the herbaceous borders any rearranging or moving which was held up by the frost and snow may now be carried out with safety. Dead or unsightly foliage ought not to be left upon Polyanthi or any other members of the Primrose family.

The kitchen garden

Where labour is none too plentiful there may be a temptation to make good arrears of digging by hurrying over the work. This is false economy. The workmanship ought not to be scamped even if the work be behind, for slovenly digging inevitably bears witness against us at a later date. Shallots may now be planted, putting the cloves to half their depth in rich, mellow soil. Those who are the fortunate owners of south borders with a slope to the sun, and which have light, rich soil, may safely risk a sowing of Peas. For this purpose such varieties as Primo or The Pilot are suitable, both being very hardy. A line or two or Broad Beans, too, may go in, using Early Mazagan or some similar variety.

Onions

If the Onion-bed is not yet prepared let it be taken in hand without delay in order that it may be consolidated and in readiness when it is needed. Onion seeds ought to be sown at the earliest possible date. I have, in the south of Scotland, sown these and Leeks in the second week of February with excellent results in the open.

Tomatoes

Those who rely upon plants raised in spring for their supply of Tomatoes ought already to have made a sowing. Let the seedlings be grown on as rapidly as possible, but at the same time in a moderate heat, which will not unduly draw the plants. A regular temperature rather than a high one is best, and it must be remembered that if young Tomato plants receive a check they will stand still for quite a considerable time before starting into renewed growth.

Early Melons

Where it is possible to maintain a heat of from 65 degs. to 70 degs. at night (in normal weather) early Melons may be planted at once. No ventilation, or at least very little, will be required just at present; but as the month goes on it will be necessary to afford a little air in order that the plants may not be too soft. To do Melons well they require a strong, rather adhesive loam, to which may advantageously be added a little lime and some wood ashes.

Vineries

The work yet continues to be of a routine description. Syringe twice daily on bright days, and damp down borders and gangways at mid-day. Where the Hamburgh house is in bloom at this comparatively early date the management must be careful. The pollen must be distributed in some way—shaking the rods about noon is usually sufficient in the case of Hamburghs. The thermometer at night ought to be in the neighbourhood of 65 degs. Ventilate with care, when necessary, avoiding cold draughts. When the rods are in bloom the syringe may be laid aside, but the atmosphere must not be allowed to become too dry or setting may be of an indifferent nature. The necessary humidity can be given by damping the paths daily.

Plant houses

With the lengthening days and with more sunshine watering again becomes more insistent, especially in the case of growing plants such as Cinerarias, Schizanthus, Clarkias, and the like. Arum Lilies will now appreciate regular doses of weak liquid manure. A plant which is very effective in 5-inch and 6-inch pots at the present time may be named in Salpiglossis. The colours are, I think, more delicate under glass than they are in the open. Cuttings of Perpetual-flowering Carnations may, of course, be rooted at any time, but I think there are fewer failures from cuttings put in during the present month than at other seasons.

Boronia megastigma

Even a single plant will perfume a large conservatory deliciously. Genista fragrans and Mignonette in pots are always appreciated. For late-flowering a final batch of Primula stellata may be transferred from the 3-inch pots in which they have wintered into 5-inch pots. These must be kept perfectly cool.

W. McGuffog.

Mabie Gardens, Kirkcudbrightshire.

Onions

As is generally understood, there are various ways of growing Onions, and it depends largely on the object in view which is the best method to be followed, but in each case the crop, which is a very useful one, is worthy of every consideration, and therefore the bed ought to be prepared with the utmost care

AS an Onion grower of many years' standing, I have always made it a rule to trench the ground in autumn, incorporating with it at the time stable manure and decayed vegetable matter; also working in bone-meal, wood-ashes, and soot, leaving the surface of the bed rough for the winter.

PREPARATION OF THE GROUND.—It is not always possible, however, to commence work in autumn, but I have long come to the conclusion that it pays to do so. In any circumstances it should be got in hand during winter as weather and opportunity serves, so that by the time the sowing season approaches, the bed may be in good fettle. In selecting a site it ought to be one that is open and sunny, quite away from overhanging trees or anything likely to impede air, and the mistake should also be avoided of allowing any tall subjects like Peas or Beans to be too near the Onion bed.

METHODS OF GROWING.—Three methods are open to the grower after the bed has been brought into condition, levelled, and made firm—(1) sowing seed; (2) planting sets; (3) putting out plants raised from seed sown the previous autumn or in heat in spring. Before doing either it is well to go to a little extra trouble at the eleventh hour so as to ensure the bed being in right condition, scattering wood-ashes over it, keeping the level in view, and, after removing stones, raking it fine, seeing that the surface is made quite firm. Old growers pride themselves on making a good start on these lines. If it is decided to sow seed, March should see the work commenced, choosing a dry day, drawing shallow drills 9 inches to 12 inches apart. If one desires specially fine bulbs for exhibition it is better to err on the side of thin sowing, and allowing anything up to 18 inches space between the drills to allow of ample room for development and to enable hoeing to be done more easily. It is essential, of course, where large Onions is the object aimed at, to thin out as soon as the plants can be handled conveniently. In the case of those for exhibition 6 inches should be regarded as the minimum, though 9 inches is a more workable space, whilst there are many, like myself, who do not begrudge 12 inches of room between plants of the type of Ailsa Craig. Onions that are simply required for home consumption may be grown with a minimum space, and in the case of pickling Onions there is no necessity to thin out at all. The planting in early spring of sets—small Onions—has been followed a good deal during the last few years. It is a compromise between seed-sowing and planting out autumn or early-sown plants. On light soils I have, in favourable seasons, seen good results, though, personally, I am not much enamoured of sets, as, in my experience, they cannot always be relied upon. The third method, that of planting in the bed in April or May plants which have been raised from seed sown out of doors in August or in heat in January or February, is one which has now many adherents, particularly those who grow for the exhibition table. I have always found that fewer run to seed amongst those raised from seed in the greenhouse in the early year than either autumn-sown or sets. Obviously, plants reared under glass and subsequently pricked out in fairly deep boxes and hardened off in a cold frame before they can with safety be planted out of doors in April or May entail more trouble, but experience has proved that for the exhibitor, at all events, they are more to be relied upon. Those who have cultivated Onions for a number of years and who take special interest in their progress from the time of sowing to the lifting of the "weighty giants" at the end of August will appreciate what I say as to their being a deal of pleasure and a certain amount of fascination in growing these vegetables. They are welcome in many households, and many will agree with me that as an article of food they are worthy of the best attention one can give them in their growing season. The old idea that large Onions do not keep so well as small is not held so tenaciously as it used to be. It depends, in a degree, upon the variety, but it also depends upon whether the bulbs are ripened properly at the time of lifting, or before they are stored away for winter. If possible they should be put in a cool, airy room, laid out separately, and not piled on each other.

VARIETIES.—I venture to say that if a plebiscite could be taken amongst Onion growers of this country we should find that bulbs of Ailsa Craig would find most favour with exhibitors, and one has but to study seed lists of various firms to be assured of its importance. It is questionable whether any other Onion has been so specialised—selected and reselected to the same extent as this meritorious sort. It is as well, however, to look at the good qualities of others that may not be quite so generally known. One in particular I call to mind, a veritable giant when properly grown; I refer to Premier. The class for six Onions at the R.H.S. exhibitions has been won on no less than eight occasions, whilst at many of the principal shows throughout the country it has gained highest honours. Premier is a real asset to those who contemplate exhibiting. The bulbs, given generous culture, are large and keep well. It is a variety that bids fair to rival Ailsa Craig, and that is saying a good deal. I commend it to those whose object is the growing of super Onions this year. Other sorts deserving of mention which have had a long career and are excellent in many ways will be found in Bedfordshire Champion, Rousham Park Hero, Cranston's Excelsior, and James's Keeping, the last of medium size, specially suitable for home growing, and has the distinction of being one of the best, if not the best, of Onions for storing, bulbs often being found sound and firm after being lifted a year. Amongst red Onions the old blood-red still holds sway.

OTHER DETAILS.—Whatever method is decided upon, whether sowing seed in the open ground or starting with plants, there are certain details every Onion grower needs constantly to bear in mind. Perhaps no duty is more important than that of systematically using the hoe on the bed, week in and week out, once the plants have become established. There is no short cut in this respect, as every exhibitor will bear me out when I say that one has only to leave the hoe alone for a short time before stoppage of growth is observed. No tool is more valuable. The experienced exhibitor, before his plants have been long in their final quarters, will be able to pick out the likely ones, as their "leading off" indicates an early bulbing, and he will see to it that these have special attention. Weeds, of course, must not be countenanced under any consideration. The hoe will eradicate many, besides promoting the growth of the Onions, but it means a sharp lo being kept for any weeds that make appearance close to the bulbs, and p them out. It is surprising how weeds, only for a short time, will hinder pro It is not enough to use the hoe betwe drills, but between the plants also, an tion requiring infinite care to avoid dis

ONION FLY.—This is the bane of all growers, whether for home or exhibitio in June, when the fly makes its appea it should be attacked by dusting wit two or three times a week if need be, using soot at intervals from the time o ing seed or planting out. Once the gr made its appearance in the bulb—and a ing or falling of the leaves soon indicate something is wrong—the plants shou lifted with soil and burnt to prevent th spreading. Charcoal spread on the b tween the drills will sometimes attra fly to deposit its eggs there instead tween the leaves of the Onions. On than one occasion I have kept the fly by resorting to the same methods as th warding off the Celery fly, viz., syringi leaves with a decoction of essence of q chips mixed with water. It is a po favour of autumn-sown Onions that th less likely to be attacked than those f spring sowing.

STIMULANTS are helpful, but plants in made up in the manner indicated w need much in this direction until th well on their way, hoeing and keepi soil stirred meeting all their requireme the early stage. In a dry time, after or watering, liquid manure in a weak may be given once or twice a week, intervals a concentrated manure like or Standen's. Everything ought to b to encourage growth, to keep the bed lutely clean, and on this the hoe mus part. Growing good Onions means mitting work from start to finish, but t a deal of satisfaction about it, and it s if ever, fails to bring a splendid rewar

MIDLAN

FRUIT GARDEN

Bush Apples

A RECENT note by Mr. Blair, issue of January 2nd, page 3, conc the value of Apple-trees in a bush ought to induce intending planters to p trees of that shape. As the writer says trees have advantages, and are not, ow their dwarf stature, so much expo autumn gales and, consequently, to th of the fruits before ripening, as the form of trees. To those who may de plant such it may be advisable to sa they ought to order trees on the Paradise stock. Upon this stock Appl are naturally dwarfed, yet they bear early stage, regularly, and for a long Such trees require very little pruning— a little shortening of the leading sho keep them shapely, and the removal subsidiary growths in the usual way Paradise stock differs from the free that is, the Crab—in having fibrous r great abundance near the surface, w the Crab has long, bare, and "th roots. In order to nourish trees on dise, therefore, it becomes necessary to well or, in the absence of good manu which to mulch, to give the trees duri season of growth frequent watering some good chemical fertiliser in sc This results in the roots remaining n surface, where they are benefited alike heat of the sun and by the admission of append a list of Apples which I have on Paradise in bush form in the south- Scotland, and which I can cordially

. Schoolmaster is a variety infrequently vith, but it is an excellent variety, not : Dumelow's Seedling (syn. Wellington), great bearer. Newton Wonder is a Apple, bears freely and practically ılly, and its fruits are large and good rs. An excellent companion to Newton er may be found in Bramley's Seedling. me Bramley was inclined to grow rather rongly at first; but after being planted 'o years the bushes were lifted and the slightly shortened, and afterwards no ould have desired a variety which did . An especial favourite of mine was ld Apple, Rymer, which gives fine, firm I had a few trees of Tom Putt, but, candid, and although no exception could ten to its bearing qualities, the fruits but fit for jelly making. Cellini is a pple and bears immense crops. Frog-Prolific, Lane's Prince Albert, Tower of s, Stirling Castle, Potts' Seedling, and on are all good kitchen Apples and no recommendation from me. I pre- to grow choice dessert Apples on the but the following in bush form were ost satisfactory :—Lady Sudeley, Early parent, Ribston Pippin, Kerry Pippin, of the Pippins, Arlington Pippin, i, Baxter's Pearmain, Devonshire enden, Golden Pippin, Strawberry , Sturmer's Pippin, and Margil. The on of Cox's Orange may be noted. ısly I could never secure anything like and discarded the variety. I did so he less regret, as I consider both Alling-ppin and Margil to be quite as good as Orange Pippin. W. McGuffog.

ie, Kirkcudbrightshire.

ansplanting Mulberry trees

ave some Mulberry-trees which have n the same place for 10 years, and I nxious to try and move them. I am that they have flesh roots. Is it detri- l to the trees to cut these? Would you advise me the best time of year and st way of trying to move these trees?

denhead. "Mulberry."

e present is quite a good time for this providing the soil is in the right condi- nd if carefully transplanted no serious e need be anticipated. Of course, the n during the coming year will be d, but this will not impair the future eing of the trees. It is obvious that roots must be cut; nevertheless, this ot seriously affect the trees. Take out ch 15 inches wide all round each tree, ner side being 2 feet from the stem and enough to underpin the ball of earth, will at this point be 4 feet in diameter, hich may be reduced with a digging- ntil it measures about 2½ feet across, l being gradually worked out from the nd the latter carefully preserved, this necessary to facilitate removal. Re- ne tops of the trees also by cutting back anches slightly, as this is a great help re-establishment of the trees. Have w position ready for each tree before it d, and before spreading out the roots r new soil see that any damaged ends t clean away and the roots laid out at ormer levels. The soil should be fairly but free of raw manure; the position hould be sheltered from north winds, ell exposed to the sun on the south, ise the fruits will not ripen. When g is completed the surface roots should n 2 inches to 3 inches beneath the soil. a good stake to each tree at the time of g to prevent rocking, and follow this ood mulching of the surface with well- manure, leaf-soil, or Bracken, which most beneficial to all newly-planted It is not generally known that bearing branches and even large limbs will strike root with facility and are sometimes employed instead of cuttings when the object is to obtain a tree which will fruit in a few years. Such limbs must be inserted in autumn as soon as the leaves have fallen, and in good soil, to a depth of 2 feet, or according to the size of the branch. Layering either in spring or autumn is also a common method of increase.]

Gooseberries for exhibition

In Lancashire and Yorkshire the Gooseberry is grown to a much greater size than in the south, the temperature, soil, and less powerful sunlight apparently favouring its better development in the north. Another thing that contributes to its superiority in the counties mentioned is the energy and vigour with which its cultivation is carried on by cottagers and those who make it their speciality.

In making a start in the cultivation of Gooseberries for exhibition the preparation of the soil is important. The position should be open and sunny, but sheltered if possible from north and north-east winds. Mark out beds about 8 feet wide with narrow walks between. Trench the beds 15 inches to 18 inches deep, incorporating plenty of rotten manure and decayed turf if possible, and if the soil is binding a good sprinkling of road grit is beneficial. The trees should consist of three main shoots. Plant them 5 feet apart up the centre of the beds, taking care to spread out the roots evenly and not too deeply, but as near the surface as possible, covering them over with some good loam. Tread firmly and mulch. All shoots that have a tendency to grow down must be propped up with forked sticks, and those with an erect growth like Dan's Mistake must be brought down and fastened to pegs, in both cases to within 8 inches of the soil. Nothing further will be required than protecting the buds from the birds, which in some districts do considerable damage. Towards the end of March the buds will push and the fruit show. Spring frosts will be sure to put in an appearance, therefore protect the trees by covering at night with thin canvas or similar light material, uncovering again in the morning. Towards the end of May or early in June, according to the season, the fruits must be thinned, leaving only the most promising. In June commence feeding with liquid manure. Give it weak at first and gradually increase the strength and apply about a foot away from the stem. Drainage from the stable is excellent, and as a change a solution of guano and soot. Be very careful not to give it too strong, and only apply when the weather is wet. At all other times give an abundance of water and withhold the liquid manure just before the fruit turns.

When the trees arrive from the nursery they may be one, two, or three years' growth, and, as previously stated, should consist of three main branches. If the plants are one year old cut back to about 8 inches in length. These shoots the second year will have produced side shoots or laterals. The result is the same if the trees are two, three, or more years' growth. Cut back most of these laterals to two eyes, removing weakly ones altogether. The outer shoots should be pruned to half their length until the tree has arrived at its proper dimensions. Always select well-ripened shoots of the previous summer's growth when pruning for show fruits. The laterals must be kept well thinned and young, sturdy wood encouraged. Any very strong shoots that are likely to rob the tree of its support must be pinched. Usually pruning is carried out in November, but some growers, where birds are troublesome, leave the operation until spring.

With trees of many years' standing root-pruning is necessary, but my advice is to let these grow into bush form and to prune and use for general cropping, as young trees produce the finest fruits for exhibition.

Take up the trees, shorten the long, straggling roots, and replant in fresh quarters. Let this be done at the end of October or early in November, or as soon as the leaves assume a dark brown or bronzy hue, a sure sign of ripe wood. The bushes will suffer but little check and get well hold of the soil before cold weather arrives. Give a good mulch. A good selection is Red: Conquering Hero, Dan's Mistake, London, Lord Derby, Napoleon le Grand, and Roaring Lion. White: Antagonist, Careless, King of Trumps, Snowdrift, White Eagle, and White Lion. Green: Diadem, Drill, Telegraph, Thumper, Stockwell, and Gunner. Yellow: Criterion, Golden Gem, Langley Beauty, Leader, Leveller, and Mount Pleasant. F. H.

Lime in the fruit garden

Very many readers probably give but little thought to the need of lime in the soil for the various kinds of fruit-trees, and those known as stone fruits in particular. Some soils are very deficient of lime, while others have ample. I have learnt by experiment and observation that lime plays a very important part in the successful growth of fruit, and act accordingly. Stone fruits, like Cherries, Peaches, Apricots, and Plums, derive benefit from lime applications, many disappointments and failures, I am convinced, being due to the want of these. One instance occurs to my mind at the moment where in a neighbour's garden the Morello and dessert Cherries are both unrepresented, the plea for their absence being that the soil of the garden does not suit them. The garden is one which the owner takes a pride in because of its old-fashioned character, and for this reason readers will readily understand that it dates back very many years. The surface so long cultivated has become blackened with humus, the subsoil below a stiff clay, is never broken with spade or fork. Though chalk and lime abound in the locality, this particular spot, I am sure, has none of these valuable solids, hence fruit of several kinds is not a marked success. I am persuaded that an addition of lime, burnt refuse, or ballast, and a little fresh maiden soil, would produce such changes here that fruit of every kind would be forthcoming in the highest state of perfection. When one reflects for a moment on the strain imposed on fruit-trees in providing the proper element for stone production there is no occasion to wonder why so much fruit falls at the stoning time. Most good poultry-keepers know that eggs are not forthcoming unless the birds are given some gritty material. The same principle applies to fruit-trees, as "stones" cannot be perfected unless a supply of lime is within reach of the roots. Not only is this necessary for the fruit, but the tissues of the trees themselves are deficient if lime is withheld. The trees may grow strongly, much too strongly, in fact, but maturity of leaf, wood, and bud must be jointly assured, ere the crops hoped for are forthcoming. We are told that soils that actually overlie chalky formations are benefited by an application of fresh lime. I cannot vouch for this, but I have not the least doubt that some fresh burnt lime is beneficial.

At this season of the year, when new trees are purchased from the nursery, it is advantageous to apply lime to the stations prepared for the trees, more particularly stone fruit-trees. It will do no harm to Pears and Apples, nor the several bush fruits; rather its presence would, I think, be favourable for each and all. Raspberries need lime. Let those readers whose crops of these are light try what lime dressings in autumn and spring will do, jointly with a surface manuring in summer. A. G.

Scholarships for agricultural workers

Last offer of awards under the experimental scheme

The Ministry of Agriculture and Fisheries announces that under the scheme for establishing scholarships and maintenance grants for the sons and daughters of agricultural workmen and others, a number of scholarships tenable at University Departments of Agriculture, agricultural colleges, and farm institutes are offered for award this year. The scholarships are limited to sons and daughters of agricultural workmen and of other countryside workers in similar financial circumstances, and the awards cover all reasonable expenditure involved (tuition, board, outfit, travelling, etc.).

Provided a sufficient number of suitable applicants is forthcoming, 10 Class I. scholarships for degree courses in agriculture or horticulture, or for the course of M.R.C.V.S. at the Royal Veterinary College; 10 Class II. scholarships for two-year diploma courses in agriculture, horticulture, dairying, and poultry-keeping at agricultural colleges, and about 120 Class III. scholarships for short courses at Farm Institutes will be awarded. Forms of application and full particulars may be obtained from the Secretary, Ministry of Agriculture and Fisheries, 10, Whitehall Place, London, S.W. 1, or locally from the offices of County Councils. The last date for receiving applications is April 30th.

The scheme was approved in 1922 for an experimental period of five years, and this is the last offer of awards under the experimental scheme. After the selection of scholars for the present year has been completed the question whether or not the scheme should be continued will be considered.

Scholarships for young gardeners

Two horticultural scholarships have hitherto been available for award on the results of the General Examination in Horticulture. The older of these was known as the Major Scholarship, and the other as the Knott Scholarship, the latter being awarded out of funds provided by Sir James Knott, Bart., a Vice-President of the Royal Horticultural Society. Both were open to men only and were tenable for two years. There were minor differences in the conditions of holding them. This year, and in the future, they will be offered for award on the results of a special examination designed to test as far as possible the candidate's ability to profit by a course of instruction in technical horticulture. This examination, which will be held in April, will not deal particularly with technical horticulture, but with the subjects ordinarily taught in schools. The examination will be open to young men who are not less than 18 nor more than 22 years of age on September 30th in the year of the examination. Candidates must be able to produce certificates of good character and must be of good health and physique, free from any physical defect that would militate against a career as a gardener, and willing to subject themselves to the rules for students at Wisley. The value of the Major Scholarship is £50 per annum, and that of the Knott Scholarship £30 per annum. Both are tenable at the Royal Horticultural Society's Gardens, Wisley, for a period of two years commencing at the beginning of October in the year of the examination. In certain cases the second year may, with the consent of the Council, be taken elsewhere than at Wisley, but each request for this special treatment will be considered on its merits. In 1926 the examination will take place from 6 p.m. to 9 p.m. on Wednesday, April 21st. It will be held in as many different places in the British Isles as circumstances may demand, provided that a magistrate, clergyman, schoolmaster, or other responsible person accustomed to examinations has signified, by signing the candidate's entry form, his willingness to act as supervisor. Any candidate who wishes to do so may take the examination at the Society's offices, Vincent Square, S.W. 1, where arrangements for supervision will be made by the Society. Candidates must enter their names on or before March 31st, 1926, with the Secretary, Royal Horticultural Society, Vincent Square, London, S.W. 1, from whom entry forms may be obtained. An entry fee of 5s. must be sent with the completed form.

The standing of a Horticultural Society

I am asked by the Committee to write to you for information regarding the standing of our Horticultural Society. It has been inferred that we are liable to come under the Consolidated Companies Act or Friendly Societies Act. I would point out that we are not a society out entirely to make profit for our own use, but to encourage the spirit of horticulture generally. So long as we e our financial liabilities each year, and ca aside a few pounds for a rainy day, that we wish to do.

The main object is a day's enjoymen the encouragement of horticulture throu the district.

The Society was formed in 1869, an run practically every year since unde same heading. In years past, when ficiency occurred the members of the mittee had to pay out, and did so willi But for a few years now we have been to put some money into the bank and we a certain amount of other assets—pro such as tabling, trestles, etc., etc. I e the schedule containing the list of subscr

C.

[We have read through the document fail to see any necessity why this S should be registered. In the main it i on the same lines as the leading horticu societies in the country. We know of n that has been infringed. The item perty purchased" evidently means purch trestles, tables, etc., and should be so s Presumably the bank balance is controll the Committee, and the War Stock is hands of the secretaries and treasurers.]

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their pla be named should send fair examples of eac stem, leaf, flower, or fruit. (Snippets of and points of shoots are useless.) Not more four plants should be sent in any one week same correspondent. Where more than one is sent they should be numbered. Of conife cones should always be sent.*

Naming fruit—*Several specimens in dif stages of colour and size of the same kind g assist in its determination. We have re from several correspondents single specime fruits for naming, these in many cases bein ripe and otherwise poor. We undertake to not more than four varieties at a time.*

FLOWER GARDEN

Early-flowering Chrysanthemums

I have tried to grow early-flowering Chrysanthemums here in Yorkshire for several years. It is only in certain seasons that I get any flowers—*e.g.*, I got a fine lot of flowers in 1924, due, of course, to the open, mild season. This last autumn I did not get a decent flower; they were all too late, and hence got cut by early frosts. Would you be kind enough to inform me through your columns: (1) Details of cultivation that will ensure early flowering. (2) Is it better to "stop" the plants or let them grow on without stopping? (3) Does disbudding help to throw flowers forward or backward? I have a cold frame only. YORKSHIRE READER.

[In the north the growing season is considerably shorter than in more favoured districts nearer London. Our correspondent has therefore to be careful over several details to ensure early Chrysanthemums flowering before they are spoilt by frost.

(1) DETAILS OF CULTIVATION.—As soon as the flowers are over in the autumn we should advise the careful lifting of the plants and transfer them to a cold frame, packing them in fairly closely and shaking a little compost amongst them to fill up the interspaces. Label the varieties by tying a label to each clump, and give a good soaking of water to settle the plants into their new quarters. The treatment in the cold frame from early November to the end of February should be: Only have the lights on the frame during very wet weather and frosts; during the latter it will be best if the frame is closed and the lights matted up. The more light and air the old stools get the better will be the cut It is not always necessary to frame th stools of Chrysanthemums, but it is the safe way to ensure a supply of cuttings spring, no matter what the weather be. a sharp look out for greenfly (aphis), be they weaken the cuttings conside Fumigation is the best control for this Mildew is sometimes troublesome, and the plants should be dusted with flow sulphur. Either of the above trouble most likely to occur during the periods the lights have to be kept on the f Early in March you should prepare som ting boxes, and after preparation inse cuttings 2 inches apart, making them fir good soil for this purpose would be two good garden soil, one part sand, one par soil. Give the boxes of cuttings a watering in, and after allowing them to place them in a frame and keep the closed until they are rooted. When the plants should be potted singly into or 4-inch pots and placed back into the f Keep the frame closed for a few day then get the plants hardened off and e ally planted out into their flowering qu at the end of April or beginning of Ma very late districts we should be inclined a to use 4-inch pots, and not to be in too a hurry to get the plants out. In the it is no use being in too great a hurry, the plants are growing in 4-inch pots will be less likely to suffer for want of ing out. When the plants are out in flowering quarters they ought not to b much more trouble beyond staking, and an occasional hoeing to aerate th Weak liquid manure may be given o week from the beginning of July onw

STOPPING.—A very great deal can be to control the time of flowering by stop- You will find that the natural bud, precedes the natural break (*i.e.*, when ngle stem of the cutting would split up everal growths), appears from about the l week in June to the first week of July, ling to variety. Flowers from these l plants would be produced from mid- nber to early November, again accord- variety. It will be found in practice f all plants are stopped about the third in May it will have the effect of throw- l varieties into flower 20 days to a month than unstopped plants. This will, of , help considerably to get the plants lower before frost sets in. It may be ary to vary the date of stopping just a because no two places are quite alike, lso, of course, varieties vary very much. wever, our correspondent experiments ar by stopping all varieties about May nd then takes notice how each variety s, he will be in the position of knowing go on another year—*e.g.*, the varieties lower rather early might be stopped those that flower too late try stopping earlier.

Chrysanthemums can be very much im- l by disbudding; one stem one flower is he general rule for those who like good y blooms. It will be found that if the to be removed are taken away as soon y can be nicely handled it will enable id left to develop more quickly. You , of course, influence the time of flower- uch at this stage. The time of stop- he plants in May gives the key to the f flowering.]

sed Tulips

W.).—The Tulips are attacked by a fun- sease caused by a member of the family tium, probably S. tuliparum. If you me of the bulbs down through the centre l at once be seen how rotten they are ow hopeless it would be to try and pull round again with cool treatment and The disease mentioned above attacks lbs through the soil, and in your case lips in pots can only have been present one of two causes—(1) the bulbs were d when planted; (2) the soil was in- in which the Tulips were planted. We l advise you to burn all the affected and the soil in which they are growing n as possible. To keep the diseased ial about is dangerous if you are grow- y other bulbs. If you think that the as the cause of the trouble we should you to sterilise your soil for Tulip- g another year. Should the disease in Tulips planted outside in beds your ontrol is to destroy the infected bulbs ep the beds free from bulbs for at least eason. Two years would be safer. g the period when bulbs are not being dress the bed with quicklime and s of sulphur mixed together in equal and applied at the rate of 6 ozs. per yard. Spread the mixture on the top soil and well fork in.

VEGETABLES

toes for outdoors

all be glad to know which varieties of oes you consider the best for outdoor e.. AMATEUR.

ton's Princess of Wales, Magnum , and Satisfaction are all good varieties side. Put out strong plants about the or end of May, and choose a sunny n.]

f Runner Bean Bijou

A. H.).—This is being distributed by s. Watkins and Simpson, a strictly wholesale firm. Their novelties may be obtained through any well-known seedsmen. Should you, for any unforeseen reason, be unable to obtain this Bean through the usual channels, you might write direct to Messrs. Watkins and Simpson, 27-29, Drury Lane, Covent Garden, W.C., and they will advise you.

Celery cultivation

After reading your interesting article on the protection of Celery I was wondering if I could trouble you for information on treatment of Celery from the start. (1) When is the best time to sow? (2) What is the manner of preparation of trenches? (3) Best kind of manure to use? (4) How deep to put in manure? (5) Distance apart to plant? (6) When earthing-up should the soil be pressed tightly round the plant or not? (7) Should I choose high or low position for planting? BEGINNER.

Fulking.

[(1) Early in March, but a warm greenhouse or frame is needed to secure early plants. A cold frame will be suitable for a later supply. (2, 3, and 4) The trenches should be 4 feet apart and 15 inches to 18 inches wide. Remove the soil to a depth of 2 feet and break up the bottom of the trench. A liberal layer of partly-decayed farmyard manure, say 1 foot deep, is then placed in the bottom of the trench, over which is laid 6 inches or so of soil, choosing top spit for this purpose. (5) The distance between the plants should be from 6 inches to 9 inches, and double rows are advised. (6) Choose dry or rather fine weather for earthing-up, press the soil firm, taking care to prevent the hearts of the plants being covered with earth. If the trenches are on the dry side afford a soaking of weak liquid-manure the day previous to earthing-up. (7) Celery will thrive in almost any garden. We should select the low position if tolerably well drained in winter.]

MISCELLANEOUS

Fumigating with Prussic acid gas and its effect on painted coachwork

(A. J. S., Wales).—Fumigating with prussic acid gas for white fly in a greenhouse with a garage adjoining is liable to cause serious damage to the painting on the coachwork and the plating, as it is practically impossible to prevent a certain amount of gas escaping through to the garage. Unless the coachwork and plating on the cars is thoroughly dry, pitting is sure to result, although all may seem dry there might be sufficient humidity in the atmosphere to cause damage.

A compleat body of gardening

I have in my possession a gardening book dated November 5th, 1757, written by John Hill, St. James' Street, dedicated by Lord Bute. The title of the book is "A Compleat Body of Gardening." It contains 712 pages and printed in old fashion print. Could you, please, tell me if this book is of any value or not, and where I could dispose of it if I wish? V. T. W.

[This work is of little monetary value and is probably unsaleable. Fine copies are offered by big dealers at from 20s. to 30s., and less fine from 10s. There does not appear to be any demand for it now.]

Averaging Returns

(Market Grower).—We refer you to the interim report on fruit and vegetables issued by the Departmental Committee on Distribution and Prices of Agricultural Produce. See summary of conclusions and recommendations: 299. The practice of "averaging returns" is not infrequent among salesmen. It is illegal. Every grower is entitled to receive the actual price realised for his produce. 300. Another illegal practice occasionally resorted to is that of returning to the grower lower prices than those actually realised. This is dishonest. Growers are entitled to know the name of buyer of their goods, and they should exercise this right more extensively. 301. Some salesmen also act as merchants, buying and selling on their own account according to the trend of the market. It is illegal for a salesman to sell to himself goods he handles on account of a principal. Salesmen should state clearly on each sales account whether they have acted as salesmen or merchants.

Refuse from acetylene gas

I would be much obliged if you would let me know how I can use in my garden the refuse lime left in the making of acetylene gas. Has it any of the valuable properties of quicklime? Is it any use as a destroyer of wireworms, slugs, etc., in garden soil? When is the best time to apply it, and in what quantity? M. A. C.

[The refuse from acetylene gas is an impure slaked lime, which may be spread over the soil and dug in during the autumn and early winter months. It may be applied at the rate of ½ lb. per square yard. It will no doubt kill a large number of wireworms, slugs, etc., but if these pests are numerous other methods must be adopted. Wireworms can be considerably reduced by frequent hoeing and digging, and by sowing mustard seeds thickly in early autumn and digging the crop in when it is 6 inches or 8 inches high.]

NAMES OF PLANTS

W. J.—Cypripedium villosum.

Journeyman.—4, Specimen sent insufficient; please forward another example when in flower.

CATALOGUES RECEIVED

The Darlington Fencing Co., Ltd., 5, *Lloyds Avenue, E.C. 3.*—"Ware Wire."

Ryder and Son (1920), *Ltd., St. Albans.*—Seeds. Presentation copy of a coloured plate of Wallflowers.

Roderick M. Crocket and Co., 100, *Union Avenue, N.*—Plants and seeds.

Maurice Prichard and Sons, Riverslea Nurseries, Christchurch, Hants.—Alpines and herbaceous plants.

Sutton and Sons, Reading.—Garden Equipment; also Farmers' Year Book and Graziers' Manual.

Storie Stein, Glencarse, by Perth.—Seeds and seedlings.

J. N. Harvey, Dept. 5, Evesham.—Fibrex specialities.

John B. Vanderschoot, Hillegom, Holland.—Dutch bulbs, Roses, and herbaceous plants.

Benn Brothers' Other Journals

The Cabinet Maker. Empire Number. Exhibition Stands for Retailers; Furniture on the Film; Woodworking Machinery and Practice, Article 19; Furnishing Empire Homes.

The Chemical Age.—The Future Supplies of Oils and Fats; Professor H. E. Armstrong on Chemists and Co-operation; Results of the British Industries Fair.

The Electrician.—Electricity and Flax; Electricity and Rags; Electrification of Textile Mills; Architects and the Electrical Industry; Electricity at the British Industries Fair.

The Fruit Grower.—Better Distribution of Produce: Glasshouse Growers' Campaign; Weights and Measures Report; Housing of Hoppers.

The Gas World.—An examination of the

Accounts of Municipally-owned Gas Undertakings; The Finance and Accountancy of Municipal Gas Undertakings; Reports of Gas Company Meetings.

The Hardware Trade Journal.—(53rd Empire Annual) Buying Power of Empire Markets; Trade Conditions in the Dominions Reviewed; Openings for Hardware Manufacturers; Facts about the Sherardising Process; New Hardware at the British Industries Fair.

ROSES

Some excellent Roses for Scottish gardens

I READ everything that appears in the pages of GARDENING ILLUSTRATED, but anything concerning Roses is always of special interest. It was, therefore, with zest that I perused Mr. Wright's article on page 88 of the issue dated February 6th. I do not grow every variety mentioned by Mr. Wright, but note that he omits numerous grand varieties that succeed splendidly on this side of the Tweed. I am glad to notice the inclusion of Betty Uprichard (with us very fine, but not at all what I would term a profuse bloomer), Mrs. Henry Morse (very fine indeed, but a perfect slave to mildew), Ophelia (much stronger with us than is Mme. Butterfly), Los Angeles (a really lovely Rose, but here not a robust grower), Lady Pirrie (never fails to be attractive), Christine (very beautiful, though small, and retains its colour better than any other yellow Rose), Golden Emblem (a grand grower and fairly free bloomer, but cannot anything like equal Mabel Morse for form), Covent Garden (one of the finest autumn Roses we have and a grand grower), and General MacArthur (still indispensable, while with us the blooms are mostly very well formed if a little low in the centre). Now, some very fine varieties here, but not mentioned in the article above alluded to, include Colonel Oswald Fitzgerald, which is the most perfectly-formed red Rose we have ever grown. It is a splendid grower and profuse bloomer, its only fault being lack of scent. Frances Gaunt, a very finely-shaped buff-coloured Rose of free growth, good habit, and otherwise a very desirable variety. Marjorie Bulkley has only one fault, it does not open over-readily in wet weather, but is, all the same, one of the best of its colour—pale pink. Lady Inchiquin, if only a little stronger in growth, would soon be among the most popular of all Roses, its cherry-pink, perfectly-formed flowers being very beautiful. Miss C. E. van Rosseni—although the blooms of this very beautiful Rose are rather small they are of exquisite shape and freely produced, while the intense deep crimson colour is most pleasing. Mme. Melanie Soupert has no rival in its particular shade, if indeed in any shade, for a half-open bloom of this superb Rose is as near perfection as we are ever likely to get. Mrs. Henry Bowles is, unfortunately, not a robust grower, otherwise few other pink Roses could equal it for garden display and cut-flower purposes. Rev. F. Page Roberts has been called the dwarf Maréchal Neil, and this comes pretty near the mark as regards form and colour. A really fine medium yellow Rose; blooms large, mostly shapely, and produced quite freely. Wm. F. Dreer, although inclined a little to hang its head early in the season, is much better in autumn. Noblesse is a very sturdy grower and produces a fair number of exquisite large flowers, but is not very good in autumn. Edith Part is a paler Betty Uprichard, and also very desirable. W. C. Gaunt is another very fine deep crimson Rose with a nice upright habit of growth, and Pharisaer is one of the finest of all Roses. Other Roses that succeed well here and that are in every way excellent include Betty, Mme. Maurice de Luze, Mrs. David McKee, Mrs. Farmer, Mons. Carl Lédé, Mrs. Edward Powell, Mme. Segond Weber, Lieutenant Chauré, Alexander Emslie, Lady Elphinstone, Mrs. Redford Richmond, C. V. Haworth, Mrs. C. V. Haworth (much better than Sunstar), Lord Charlmont (very fine indeed), W. E. Wallace, Una Wallace, Lady Hillingdon (the only Tea we can get to survive), Mme. Edouard Herriot, Molly Bligh (a most exquisite pink Rose, but very subject to mildew), Prince de Bulgarie, and Hugh Dickson. All the above thrive well unless those noted as not robust growers, and all are free bloomers, while the bulk flower throughout the season. C. BLAIR.

Preston House, Linlithgow.

Royal Horticultural Society

A wonderful display for February and an overcrowded hall

THE fortnightly meetings of the Royal Horticultural Society continue to grow in interest and in magnitude.

On the occasion of February 23rd there were exhibits enough to fill a hall more than twice the size.

The need for a larger hall was very plain to see. During the afternoon the gangways were so thronged with visitors that in parts it was impossible to move, and many would-be visitors were unable to enter the exhibition. Alas! it will be at least two years before the new hall is completed.

The chief features of the show were the gold medal collection of Apples by Messrs. George Bunyard and Co., comprising 126 varieties in splendid condition; forced bulbs from Messrs. R. H. Bath, Ltd., of Wisbech, including Narcissi, Tulips, Hyacinths, bulbous Irises, Crocuses, and Fritillarias; and the gold medal collection of Cyclamens from Reading. These are described and illustrated on page 136.

There were, in addition to the usual exhibits, many examples of the garden artist's work and designs for gardens.

The Crocus lawn, by Messrs. Carter and Co., was one of the pleasing features of this great show.

Alpine flowers were much in evidence, and there were splendid collections from Crawley, Twyford, Oxford, Beckenham, Stevenage, Ashtead, Wolverhampton, and Keston.

Soldanella montana was well shown by Messrs. W. H. Rogers and Son, Southampton, and Messrs. Prichard and Sons, Christchurch, gained an Award of Merit for their new Saxifraga Riverslea.

Among the Saxifrages noted in various collections were:—S. Faldonside, S. Salomonii, S. Irvingii, and the pure white S. dalmatica, which Mr. Irving, of Kew, says should be S. scardica obtusa, under which name it was figured in the Botanical Magazine. The origin of this Saxifraga is unknown.

Forced shrubs were there in great variety, including Wistarias, Prunus triloba fl.-pl., Azaleas, flowering Crabs, Viburnum Carlesii, Japanese Cherry Hisakura, Lilacs, and Cytisus Kewensis.

The following Rhododendrons from Falmouth were noted:—R. argenteum, ciliatum, Cornubia, arboreum, and Nobleanum album Gill's Variety, which gained an Award of Merit. It is the best white variety we have seen at this season.

That delightful winter-flowering shrub Viburnum fragrans was well shown by the Rev. Rollo Meyer over a wonderful carpet of Iris reticulata and its pale form know Iris Cantab.

Messrs. R. Wallace and Co., Tunt Wells, whose exhibits are always so fi interest, showed flowering shrubs in variety and many dwarf Conifers suitab planting in rock gardens. That good R dendron, Unknown Warrior, enlivene group with its glowing pink colour.

The Tree Pæonies shown by Mr. J Talbot, of Uxbridge, were among the lovely flowers in the hall.

Perhaps the most valuable plant i whole exhibition was the new Mi Lycæna, Stamperland Variety, which g a First-class Certificate, shown by Robert Paterson, Stamperland, Gla The flowers were remarkable for thei and deep velvet-red colouring.

The high honour of F.C.C. was als stowed upon Crocus Sieberi versicolor n shown by Mr. E. A. Bowles, Mydo House, Waltham Cross. The outer r ings of this Crocus are very beautifi virtue of the purple feathering and white the interior of the chalice is golden-y with bright golden-orange stigma. H.

LATE NOTES

Some good Pearmain Apples

The Pearmain Apples form a distinct the most of them of excellent quality ar to be judged by, for instance, Wor Pearmain, which, though a very s Apple, leaves much to be desired as to fla There are three Pearmains which I espe value. These are Scarlet Pearmain, C mas Pearmain, and Claygate Pearmain. last is sometimes misnamed; but the Claygate is an Apple of very fine fla For a keeping Apple, useful for dess April, Lamb Abbey Pearmain is one o best varieties I know, although, admit individual fruits are small. Two varieti very little known, both good, hov These are Mabott's Pearmain and the Pearmain, the latter of which makes a able orchard tree. W. M

Mabie.

Francoa ramosa

This fine old Chilian plant is adm adapted for cutting, as its long, brar stems, bearing numerous white blos have a capital effect when mixed with less elegant flowers. The plants are from seeds and treated subsequently m the same manner as the ordinary herb Calceolarias are. In spring they furn large supply of flowers for a long time doubt the other kinds, F. sonchifolia a appendiculata, would be equally des especially the former, as its flowers are let, marked with a deeper spot in the of each petal. In F. appendiculat flowers are of a paler hue, but it is beautiful plant.

Berberis ochiodata

This is one of the most brilliant Bar I have ever seen as regards its fruits, hang in racemes about 2 inches long, the greatest profusion, from the sl arching branches. I was looking rou Sunningdale Nurseries when my att was drawn to this striking shrub. Th shine was playing upon the specimen in tion at the time, and so intensified the of the berries that they appeared to be transparent. The colour is bright Beautiful as the many varieties of W Barberry undoubtedly are, the fruits handsome form even surpass them growth and leaves suggest our native garis, of which it is most probably a f G. M

GARDENING ILLUSTRATED

2452—Vol. XLVIII. MARCH 6, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

erias 149
lavour in ... 145
bush form... 145
ellington ... 145
as, dressing for 156
sowing... ... 156
ns, Perpetual 147
ars, hand- 144
Morello ... 154
SIEBERI ... 150
the Cloth of (C. biflorus)
meadow... ... 150
rs in frames 154
precox 153
Dahlias and Gladioli 149
Dahlias from seed ... 145
Daphne Mezereum ... 152
Fig in pots, the 154
FLOWERS OF TIBET, SOME ... 146
Fruit trees, mulching newly planted 154
Gardeners and their hours 144
Gardeners' hours ... 156
Gardeners, jobbing, rate of wages for ... 156
GARDEN, IN A WEST SURREY ... 149
GLADIOLUS NOTES 155
Gladiolus Primulinus 155
Gladiolus, pronunciation of 155
Gooseberries, flavour in 144
Greenhouse roofs: keeping them clean 149
Heliotrope, the Winter 144
Hellebores as cut flowers... 144
Hepaticas, dividing... 156
Jasminum Beesianum (Bees' Red Jessamine) 145
Lime wash dark grey, turning 156
Limnanthes Douglasi self-sown 144
Mignonette 156
Moltkia petræa 144
Mutisia decurrens ... 152
Nasturtium, the Flame, from seed, raising... 156
Onions, the cultivation of 145
Pear Countess of Paris 154
PERENNIALS, HARDY, FOR BEAUTY AND UTILITY 148
Primula obconica, the alleged poisonous properties of ... 144
Primula Winteri... 143
Privet, Golden, hedge, planting a 156
Raspberry Lloyd George 144
Rhododendrons, early flowering, in East Sussex 152
Rhododendrons from cuttings 156
Rose Etoile de Hollande 144
Roses, Dutch 144
ROSES, THE MARCH PLANTING OF ... 143
ROYAL HORTICULTURAL SOCIETY'S SHOW, INTERESTING EXHIBITS AT THE 150
SEEDLINGS IN POTS AND BOXES, RAISING 152
Stachys tuberifera ... 154
Strawberries in pots 154
Tomatoes in "second-hand" soil, growing... 154
Tulip seedlings 156
Vegetables for exhibition 156

The March Planting of Roses

Roses may be planted any time this month with every reason for success. It is advisable to prune the bushes about the middle of March or at the time of planting—the harder the better—only two or three eyes being left on the strongest shoots

ften happens that circumstances make ecessary to defer the planting of Roses l late in the spring. We are often what we consider the latest possible r the successful planting of Roses, and it a very difficult question to answer, h depending upon the soil and weather. a fair amount of attention and care, will be quite satisfactory and give quite show of bloom the following summer, ted at any time before the end of or even during April. Generally g, after mid-April the chances of suc- e considerably lessened, although we thered some fine blooms from bushes as late as the last week in May. that have been retarded by moving in umn are to be d to those that een allowed to undisturbed ough the win- s the check by removal is evere in the case.

to the quality plants them- he condition of il is all im- . A great deal mortality late - planted is due to the at often there little depth of Jo matter how may be, Roses ot thrive in ground, one essentials be- ood drainage. only obtained oughly trench- double digging . Old manure be well worked g the digging, nanure being d by Roses, ly in light out it is im- nt that the , if procurable, be really old ell rotted. re often killed wing strong manures to come into contact with the roots, but the plan of thoroughly mixing the future food with the soil gives the young tender roots a better chance. Newly-planted Roses are very subject to mildew, as a rule, a very good preventive being to sprinkle the top soil with a little black sulphur before planting.

If, after preparing the bed, it is found to be at all sticky, it is advisable to delay planting until the soil is fairly dry and in good working condition. We have found that the plants will more than make up for the loss of time. At this late season of the year it is best to prune the bushes before planting—the harder the better, only two or three eyes being left on the strongest shoots—the weak shoots being entirely removed. The roots must also be trimmed with a sharp knife, care being taken to cut away all bruised portions and reduce the coarser roots. It is as well to keep the roots as near the surface as possible, where they can feel the warmth of the sun's rays, and if they are long and straight they should be laid horizontally. Many of the leading rosarians have great faith in a light dressing of bone-flour, a small handful being placed round each plant just below the surface. This is very mild in its action, and is easily assimilated by the young roots. The soil around the roots should be quite firm, and it will be necessary to go over the whole bed occasionally and tread each plant in. This is only necessary, however, when the soil is light and dry, for if wet it will set almost as hard as cement, and root development will be hindered. In a dry season, especially in light soils, water must be given frequently throughout the summer. Only plain water should be used, liquid-manure not being advisable until the plants are well established.

A well-filled Rose garden is the source of beauty and interest

Roses may be planted now

Notes of the Week

Primula Winteri

WHAT a gem this little native of North-West China is! Its delicate little soft lilac blooms, coming at a time when alpine flowers are scarce, are sure to give pleasure to all lovers of alpine plants. This plant, too, is wonderfully hardy and of comparatively easy cultivation. I find it thrives in a rich, moist soil in a shaded or partially - shaded position, and a mulch of well-decayed cow

manure in February will be found to be very beneficial. It can be propagated by seeds sown on surface of light sandy soil, slightly covered in cold frame in April. No lover of the alpine flora should be without this beautiful winter-flowering gem.

W. WATTS.

Moltkia petræa

This diminutive shrub possesses qualifications which should secure it a prominent place on the rock garden. It has a stiff, important, upright habit and bears greyish, lavender-like leaves. Its blue flowers are borne in terminal heads during summer, and they appear freely enough to make a good display. It is a plant well suited for the rock garden. It thrives in full sunshine in sandy peat.

H. STEVENS.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Limnanthes Douglasi self sown

IT is not often that one can criticise notes written by "A. G.," but in the issue of February 20th, in dealing with annuals he says, concerning Limnanthes Douglasi (p. 114): "It is extremely hardy and will thrive where the soil is poor as well as in ordinary garden soil. It often sows itself on light soil and gives no further trouble." That it is extremely hardy and so forth is indisputable, but when it seeds itself—well, that is just where trouble begins. Seedlings spread with uncanny rapidity. I have, indeed, found them to be as troublesome as Groundsel, and have had to extirpate them by hoeing. Limnanthes Douglasi invades Box edgings, it flourishes on gravel walks, and it may be found attempting to obtain a footing on lawns. So far it is certainly accommodating, but it does require to be kept severely in its place. By the way, L. Douglasi is, when in bloom, highly appreciated by bees, a fact which apiarians ought to bear in mind. Its "pet" name in this district is "Cream Cup."

Mabie. W. McG.

Dutch Roses

My own experience of Dutch Roses, and that of several friends, are they are "dear at any price." These Dutch plants often look fine, healthy plants, but in many cases the wood is pithy and unripened, which means failure. I would advise those who intend planting Roses this spring to go to any of those reputable firms who exhibit at the R.H.S. meetings and National Rose Society shows. Any of these firms will guarantee their trees English grown. Before buying Roses offered on "English Briar," make sure they are English *grown.* A. A.

Rose Etoile de Hollande

The above is the proper title of this Rose. The correspondence has been interesting. I personally rather specialise in red Roses, and should put this first as a bedding red. I have shown it in exhibition boxes also. Messrs. Wood and Ingram's description is quite accurate. S. W. BURGESS.

Red Roses, Tonbridge, Kent.

Hand-picking caterpillars

I grow, probably, 1,000 to 1,500 Cabbages, Broccoli, and other Brassicas each year. Hand-picking would be a hopeless task. I have used McDougall's and Cooper's Katakilla for several years, and two syringings have invariably exterminated the pest. I could use the Cabbages two days after spraying, if desired, without any evil effect.

Pembrokeshire. J. C. YORKE.

The alleged poisonous properties of Primula obconica

It is a moot question whether the poisonous properties of Primula obconica have become weakened by the long time during which it has been in cultivation, but it is undoubted that there are still people who are affected by touching it. My attention was drawn to the subject many years ago, and in the interval which has elapsed since then I have taken every opportunity of asking growers of this valuable Primula whether they or others known to them had ever suffered from its irritating properties. From the first I formed the opinion that the number of people affected by this plant is very limited, and that the vast majority can handle it with perfect impunity. Personally, I have tried in every possible way to give it an opportunity of showing its poisonous properties on myself, but I have never experienced the slightest discomfort, even when applied to very sensitive parts of the body. I consider the proportion of affected people is exceedingly small, but I have known many folks, gardeners and others, who cannot come in contact with the plant without acute suffering. I have specially in mind at the present time one good gardener of long experience who suffered greatly if his hand or bare arm came in contact with P. obconica in passing along the paths of the house on which it was grown, and I have also met people who assured me that even entering a house containing plants of this Primula was sufficient to induce acute discomfort! This I am not prepared to accept as a fact, feeling sure it is only due to imagination on seeing P. obconica and remembering former unpleasant experiences. The bulk of people can, I am of opinion, handle P. obconica without fear of any unpleasant consequences, and I think "W. McG." has done good service by his note in your issue of February 27th (p. 128). S. A.

The Winter Heliotrope

In reply to the note by "M. E. G." on Petasites fragrans, issue February 13th, p. 96, I am glad to see that your correspondent sounds a note of warning regarding its rapid increase. As your contributor says, "it spreads with amazing rapidity," therefore great care is required to be taken in planting it originally. It should never be planted where it can do injury to good plants, which it is sure to do in time if planted near them. An odd corner, as suggested by "M. E. G.," is the best place for it, and I would even hesitate to plant it at the foot of good shrubs. But it is not to be despised or utterly neglected, as its fragrance, combined with its early flowering, will give it value in the estimation of many. Its colour is certainly of a dull lilac, but, used as stated by your contributor in a bowl with Ivy or other greenery, it is welcome in a room on account of its fragrance, which has given it the name of the Winter Heliotrope. By the way, I had recently brought me for identification the allied species, P. albus, a plant which, though not a native, is established in England and Scotland. It is quite rare in this district and is not to be met with in gardens, which shows the good judgment of gardeners, as, apart from its sharing the spreading habit of P. fragrans, it is without scent and is of a dull yellowish-white. Even the fact early flowering should not redeem it exclusion from gardens. S. ARN

Hellebores as cut flowers

In reply to "M. K.," the Lent Hell should have their stems slit up, and wi last well in water. I have this authority of Miss Jekyll in "Hom Garden," (see chapter on "Cut Flow How beautiful these late Hellebores a have only just begun to collect them dusky plum-coloured ones are specially I hope to have many bowls of them wl plants are established. Ju

[We have found it best to split the st Lenten Roses, but not to split then down to the end. If the stalks are spl down then the ends roll back, which desirable.—ED.]

—— I have had the same experienc Hellebores as "M. K.," but I have splitting the stalks has answered in them fresh. B.

—— In answer to "M. K.'s" let page 129, issue February 27th) asking keep Hellebore flowers fresh in water, find that if the stalks of the flowers a well up for about 3 inches or 4 inch before putting into water they will kee fresh for a week to a fortnight.

E. CLIF

Frampton-on-Severn, Gloucestershir

—— I experienced your correspo difficulty about cut Hellebores, and t thing that I found prevented flagging entirely submerging them in water hours or more when first cut. By do they would then hold up long enough in church vases through Sunday. merge I put the flowers in a flat bowl floated, so I had to put a light flat over them. FRANCES CRESS

Fownhope, Herefordshire.

—— Answer to "M. K.'s" inqu Hellebores orientalis not durable in I found mine drooping after being i water, then in a few hours I gave t water again, and they revived wonc Daily I gave them hot water, cutt ends off their stalks occasionally, wh became as erect as when growing. some Hellebores now in the house th been cut for three weeks. Have with them for they are worth it.

E. Nc

Dolcorsllwyn Hall, Cemmaes, Montgomeryshire.

Raspberry Lloyd George

With regard to Raspberry Lloyd this is very free-fruiting and no d greatest cropper of any variety, and opinion, the least flavour of any. Th flavoured varieties are Abundance, Renown, Pyne's Royal, and Prolific. F.R

Wimbledon.

Flavour in Gooseberries

Regarding Gooseberries, Mr. B quite right. Gretna Green is th flavoured Gooseberry and one of t croppers—at least, in my little colle 62 varieties—but it is rather on the s and a yellow. All the others menti your correspondent are good, but he out one of the finest of Gooseberries table and good flavour, and that is C

Wimbledon. F.R

Gardeners and their hour

With reference to the reply to handed gardener (page 124) concer

mary hours of work, almost uncon-sly I contrasted these hours with those 1 were customary when I served my ap-iceship, and for long after. Then we o turn out, promptly, at 6 a.m. and we ed at 6 p.m. Three-quarters of an hour allowed for breakfast, an hour for dinner. was no stopping at midday or at ock on Saturday; we worked on till the hour. Moreover, the man in charge of res had an additional hour, from 10 till ch night, save when he was off duty—a month for a week—when the others duty in rotation. Sunday work was not for, as is now the case, nor was over-when the Grapes were thinned or when ng-out was being done. Holidays were own, an occasional afternoon off to visit ver show being the limit. But then, of e, we thought more about our work and about our hours, and there were not the ness and the cigarette-smoking, which seem to be part and parcel of the equip-of the modern generation.

A Scottish Gardener.

Wellington Apple

[To the Editor of "Gardening Illustrated."]

ope you will be willing to receive from ne or two Wellington Apples to sample. I send them on August 2nd, and I hope Wright will be willing to send you, on ame date, samples of what he considers ter Apple at that time of year. [We be only too pleased to express an opinion ie samples.—Ed.] If Mr. Wright will in Weather's "Practical Guide to ening" he will see that it says Dume-Seedling, "much better known as ngton."

Thackeray Turner.

Flavour in Apples

Scottish Gardener" seems to have a good on of Allington Pippin. It is good, but lavour is not so good as Cox's Orange n. Now, if he wants what I consider y own little way the two finest eating keeping Apples they are undoubtedly lls and Laxton's Superb. These two s are both self-fertile and good croppers, ially Joybells. They are better-looking Cox's, and both keep well and firm.

e Apples referred to by Mr. Kerry, of St. Edmunds, are opening up a very l discussion, as, of course, the system places for storing Apples make a con-ble difference in appearance and quality, n Apple that can be kept for 21 months nderfully good and should be taken care d developed.

garding Mr. Middleton's list of cooking s for beginners, I agree with the rity of his varieties, but what about Lord y? I know it is a big, ugly-looking , but it is a sure cropper every year, and ink, without doubt, one of the finest ng Apples we have, and when it is kept the whole surface is yellow it is fine for g for anyone that likes an Apple a little Another point about Lord Derby is it is of the finest and freest distributors of 1 to other varieties. Annie Elizabeth is of the heaviest Apples for its size, and good at that. Although it grows as as Lord Derby, it weighs half as heavy 1. Mr. Wright mentions Newton der keeping for 13 months, which was good.

th regard to Adam's Pearmain, I cer-should not place it next to Cox's. ington is, no doubt, one of the best-ng cooking Apples (also known as the emeat Apple), but it is certainly not a rt fruit. I quite agree with Mr. Wright, is very singular regarding its wants in in kinds of soils. It is no good here. It was raised by a man of the name of Dumeller, but pronounced Dumelow, a farmer of Leicestershire, at a small village called Shakerstone, about six miles from Ashby-de-la-Zouch, but it was introduced to London by Mr. R. Williams, of Turnham Green, in 1820, so, of course, it must be considerably over 100 years old.

Wimbledon. F.R.H.S.

Apples in bush form

In reference to Mr. McGuffog's criticism of Mr. Blair's article on the above, I quite agree as to the advantages of bush Apples over the standard varieties, but according to the "East Malling" research station there are nine varieties of Paradise stocks, so to a great extent we are dependent on the nurserymen as to what they give us. But if one has a good look at the roots as received from the nurserymen before planting them one can generally tell the nature of them, and within a little what they are going to be. Some will be found with plenty of fibrous roots, and others, in addition, some good tap roots. When I find any of this latter type I always cut these tap roots off up to where there are fibrous roots emanating.

But there are some varieties which will not grow on the Paradise stock; at least, they will not make much wood, and produce very little fruit. Such a one is Lane's Prince Albert. So I think the writer of this article must have got hold of this variety on Crab stock, as I happen to have one tree on each stock, and the difference is readily noticeable to anyone. All the other trees he mentions I have on Paradise stock. I quite agree they do wonderfully well. I also agree with him in the faults he unfortunately finds with Cox's Orange Pippin. Now, I cannot agree with him as regards the flavour of Margil and Allington Pippin, as certainly down south the flavour of these two are undoubtedly inferior to Cox's Orange Pippin. There are some better-flavoured ones in St. Everard and Ellison's Orange, but, to my mind, the two finest Apples we can grow for dessert on the point of self-fertility, good croppers, etc., are Joybells and Laxton's Superb. I do not think there are two better Apples than these, as their flavour is equal to Cox's Orange at its best, and as regards their cropping advantages and appearance they are miles ahead. I have all these varieties, so I am quite confident as to their qualities.

As regards the article by "A. G." as to liming the fruit garden, he has put in print what I have advocated for some years. In the course of my lectures I have always advocated lime. In fact, I have frequently told men that there ought to be a board with these letters on every group of allotments: "Use more lime." He is quite right in referring to the tissues of the trees, also the fruit, especially Apples, comes much clearer and cleaner. There is not a single variety of fruit that we can grow in England that is not benefited by using lime.

I put 1 cwt. of "Limbux" on my garden last year and another one this year; now I shall miss two years.

Raspberries, Loganberries, and Newberries simply revel in it and produce fine crops.

Wimbledon. F.R.H.S.

The cultivation of Onions

Having a good demand for large, firm Onions, and not having sufficient time or room to spare for plants when raised in heat, I have to depend on another method, which I find is far easier. The bulbs come a good size, about 1 lb. each on an average; they are very solid and will keep a long time.

I use a 3-light brick frame, into which all surplus leaves go at the beginning of January. Towards the end of January they are firmed and 6 inches of soil placed on them, this also being firmed and lightly raked afterwards.

Ailsa Craig is the variety used. I do not sow broadcast, but in little drills made by pressing a cane into the soil surface. These are made at a distance of 2 inches all along the frame; the seed is then sown thinly in these and afterwards covered with a little fine soil which is then patted firm.

The seedlings will soon show through, and they must be aired very carefully for a time.

Towards the end of March they will require thinning. I leave them 2 inches apart after this operation, which should be followed by a watering with a fine rose and the lights kept closed for a day or so.

The lights may be removed altogether during April, and the plants will be well hardened and ready for planting out at the end of the month. They come very strong; much stronger than those from boxes. I get about 800 plants, without thinnings, from this frame; it beats sowing them outside in many ways without a doubt. R. P.

Worcester.

Dahlias from seed

In your issue of February 27th, page 129, appears a letter from a "Galloway Gardener" deprecating the practice of raising Dahlias from seed, which he considers not worth the trouble, and so much waste of time. I am afraid your correspondent must have seen the results of a very bad strain if the beds of seedlings he saw on more than one occasion were "unmitigated and unredeeming rubbish."

In my first acquaintance with Dahlias there were three sections exhibited—Show, Fancy, and Pompons—and it was not until the introduction of the variety Juarezi into this country that the Cactus section was ever thought of. It met with a cool reception at first from the strict old florists, and any singles or others raised from seed that did not conform to their ideas were condemned to the rubbish-heap.

Now what a change in the present time, with so many sections to suit all tastes, exhibitors and decorators. I have experience now with some of the best types for decorating from Cheal's, Barr's, etc., but many show a weakness in the stem that renders them ineffective in a vase. The singles, the Star, the Collarettes, and larger Pæony-flowered sections give such a variety of colour that is not found in any other flower in the autumn. Then, what is more interesting in the whole experience of gardening than watching the unfolding of flowers in a bed of seedlings of any type of florists' flowers? I can assure a "Galloway Gardener" my seed that I saved and sowed produced flowers which were far from unmitigated rubbish, and were the admiration of all that saw them. There was not one but was too good for the rubbish-heap, and many of the larger singles produced flowers on long, stout stems that were a great improvement on the older type. I cannot see that the practice of raising Dahlias from seed can possibly hurt the trade, but popularise the flower, so that for a "few pence" one could add named varieties to their collection.

C. Orchard.

Bembridge, Isle of Wight.

Jasminum Beesianum (Bees' Red Jessamine)

The above Jasmine was introduced from China by Bees, Ltd. It is hardy and a very strong grower; the blooms are cherry-red. It was misprinted last week in article "Yellow Jessamine." R. P.

Worcester.

Some Flowers of Tibet

IV.

(Continued from page 50.)

By F. Kingdon Ward

Capt. F. Kingdon Ward, who is writing this series of articles while travelling, left London on February 18th, for Burma, whence he will commence his ninth plant-hunting expedition in Asia. He proposes to explore a practically unknown part of Tibet, and at one period of his travels expects to be entirely out of touch with civilisation for a period of three or four months.

In previous articles I have dealt chiefly with shrubs, though the genus Primula claimed separate notice, and the Alpine Poppies (Meconopsis) will be dealt with separately later. I must now say something of the herbaceous alpine flora in general, bearing in mind that this is chiefly confined to the dry winter region north of the Tsangpo; on the wet winter snowbound ranges to the south there is so much woody vegetation that there is hardly any room for alpine flowers.

Primulas and Poppies abound on the Rhododendron moorland north of the Tsangpo; at least two-thirds of our species came from that cold temperate climate and should be hardy with us. But there were plenty of other things—species of Cyananthus, Iris, Incarvillea, Morina, Nomocharis, Lilium, Gentiana, Lloydia, Erytrichium, Codonopsis, Salvia, Onosma, Saxifraga, Anemone, Pedicularis, Androsace, Polygonum, Thalictrum, Delphinium, Saussurea, Aconitum, also ground Orchids and more besides. Herbaceous alpines are found chiefly on cliffs and screes, where there is more rock than vegetation, and in meadows, where there is more water than rock. The meadow plants are usually hardier in this country, but many rock plants, if not derived from a sub-arctic climate, do quite well also.

To the meadows belong the "Sikkimensis" Primulas and many species of Pedicularis, quite useless in spite of their bold and glowing colours. An Iris threw violet shadows over the pale golden Cowslip sea; it is of the beardless "Sibirica" type with white veins on the falls.

Another meadow flower of note is Cyananthus lobatus, which has an alpine form as well. There is a variety in cultivation, a poor, weak-looking thing from China, I believe, but the Tibetan plant is magnificent, with large flowers of a clear sheer violet, and many of them. It sprawled and flopped all round the fenced fields, flowering in autumn and setting ripe seed within six weeks. The alpine form, however, grows erect, and does not exceed a height of 6 inches or 8 inches.

The way to grow this plant to the best effect is clearly to let it run amok over a pile of stones in the rock garden. The long, weak stems will soon bend down and the whole form an untidy carpet, but in bloom a very beautiful one. It cannot stand a rich, heavy soil, and must not be waterlogged on any account.

We gathered seed also of another, and new, species of Cyananthus, with bright cobalt-blue flowers and leaves covered with long silken hairs. This plant came from the precipitous granitic cliffs, thoroughly drenched in August, thoroughly sun-baked in November, and grew in a thin, hungry, gritty soil whose only advantage seemed to be its perfect drainage.

The Meadow Rues are dainty, fluffy things with pretty Maidenhair Fern-like foliage and usually rather ineffective flowers. Thalictrum dipterocarpum, however, is an exception. We came across one species which recalled T. dipterocarpum, but it had larger mauve flowers and smaller leaflets. It hovered on the border of the meadow, preferring to conceal itself within the boscage till it flowered in July. Then you would suddenly notice a mauve cloud away up above your head, for the Rue had grown up almost unseen in the thicket to a height of 10 feet or 12 feet, and then shaken out a vast cloud of mauve stars, exquisitely graceful, like a bursting rocket. I was more impressed by this simple good-natured giant herb than by many far more pretentious plants.

Two other familiar plants which, nevertheless, gave me great pleasure, were the massive bushes of Rosa sericea covered with p yellow—old ivory best describes it—flow June, and the foaming cascades of Cle montana in full spate at the same time before the rains came and spoilt everythi

There are species of Delphinium Aconitum to suit all soils and situa Some grow in the meadow, others in forest; others again on the wind-swept s or bleak and soggy moorland. The alpine Aconites, with large papery pale flowers, are, perhaps, the most curious Then in the forest, flowering in late sun is a twining species with very glossy flowers. In the meadow they are us tall, erect herbs, of no particular distinc

It was much the same with the Larks which are usually violet in the dark places, but brilliant blue i light, dry places.

Very pretty are the numerous Anemones, particularly those "Narcissiflora" type, with bunches of white silken flowers petals (or more accurately s often violet on the outside. charming as they are, they are hopeless under cultivation, so I say no more about them. Spec Codonopsis were few. C. convolacea, a twiner with large, pale flowers, grew everywhere in th region, its thin thread-like stems ing round the bushes of Rosa se Cotoneaster, Sophora, Berberi other shrub. On the open moo grew an erect species with ha bell-flowers, blue without, shot reddish-purple in prominent vei side. Another twiner with p fruits I did not see in flower. fœtid odour is against these flowers, however. Codonopsis the only other genus of Cam laceæ I noticed was Adenoph coarse, small-flowered meadow The Adenophoras are generally dainty, but the flowers make a showing; they are pale blue or Several Lloydias took my though one hesitates to ment genus which is the despair of deners. A dwarf white one sh the alpine turf like snow drifts should probably be grown in which serves to keep its toes w It flowers in June. Another orange flowers prefers July, grows on the snowiest range gets no chance to flower till the has melted. It is difficult t quite why these small Lily fl do so badly with us; they do n pear to be exacting in their country.

There are some remark Gentians in Tibet, most of them alpine. G. sino-ornata, how comes down to lower levels, gro on dry turf banks in full sunshine at feet. In September it is a dazzling The species is widespread, and boasts s horticultural, if not botanical, varieties. variety I collected in Western China s years ago grows only in marshy ground at Edinburgh, where it is cultivated rock garden, it flowers a month earlier the common variety, which sticks to drained turf slopes and lawns.

Another fine Tibetan Gentian of wh secured abundant seed is G. Waltonii. collected during the Tibet Mission of but has never, so far as I know, be cultivation. The habit is that o asclepiadea; that is to say, from the cen a crown of leaves spring one or mor flowering stems which bear aloft a spi

Limestone gorge in Tibet, with many trees, shrubs, and rock plants

Pony caravan on the march, Eastern Tibet

Sophora and Elæagnus, with Rose Sericea

lue upright urns. In full bloom these flop over in all directions, and as the s grow in close colonies a wonderful of blue is produced.

Waltonii grows at rather low altitudes— feet to 11,000 feet—on steep sunny amongst Oak and Thorn scrub. The a poor sort of gravelly sand, intensely drained, and in autumn scorched by sunshine. It flowers in September, or in the latter half of August, lasting into er, and by November—when the plants ften under snow for a day or two—the are ripe. Occasionally the flowers, instead of being sheer blue, run to purples, mauves, and other unpleasant shades, but this is not common. The seed has germinated moderately well, and the species ought to be quite hardy with us if it does not get waterlogged. The fibrous covering of the rootstock suggests that the plant would resent anything of the sort, but at the same time renders it fatally prone to such misadventures during a winter like this one.

An interesting alpine of the Rhododendron moorland is Nomocharis nana, a plant growing 6 inches or 8 inches high, bearing a single nodding flower of a reddish-purple colour. This is not a Nomocharis of the familiar type, which means to say, technically, that it does not belong to the section Eunomocharis, which includes the well-known N. pardanthina, though it is, perhaps, unduly provocative to speak of any Nomocharis as "familiar" or "well-known" in England, when growers would give half their kingdoms to be able to raise these lovely flowers. It is an airy way of speaking one gets after being accustomed to seeing whole meadows of Nomocharis.

But to return to this N. nana. It does not grow in meadows, or socially at all, but scattered over the alpine moorland, coming up through the carpet of dwarf Rhododendron here and there like its yellow-flowered Chinese cousin, N. lophophora, and flowering at the end of June. Though long known and evidently widely distributed in the Himalaya, having been recorded under a variety of names, from the north-west, from Nepal, Sikkim, and the Chumbi valley in Tibet, it never appears to have been in cultivation. Possibly it will not grow. That is the difficulty with N. lophophora, which I have collected several times. However, our Tibetan variety, from a point considerably further north and east of any hitherto recorded locality, may be made of sterner stuff.

It was rather odd that we did not meet with any Eunomocharis, as the conditions in the wet country seemed eminently suited to them. But the truth is, the section seems to be absent from the Himalaya proper, though the Oxypetala section has representatives wherever Nomocharis grows.

True, we found in fruit in the winter a plant which could be nothing but a Nomocharis; whether it was simply N. nana over again or something else there was not sufficient evidence to show. But though it bore only a solitary flower, or very occasionally a pair, it was much taller than N. nana, and would have to be regarded as var. gigantea! But, of course, it may equally well be something new—and exciting. The seed has germinated; we await the verdict with interest.

Codonopsis convolvulacea
A climber of Tibet with balloon-shaped buds and large sky blue flowers

Perpetual Carnations

As soon as the cuttings are well rooted they should be potted up singly in small pots in a compost of good loam, silver sand, and burnt earth, keeping them growing freely in a light airy house with an average temperature of 45 degs. to 50 degs.

HARDY PERENNIALS FOR BEAUTY AND UTILITY

A selection of useful subjects for March planting

What better object could a garden be used for than the cultivation of lovely flowers, especially when, in addition to brightening the beds outdoors, ample blooms are produced for indoor decoration?

IT is an excellent consideration when planting herbaceous borders to include subjects which combine beauty of bloom with practical usefulness. Such are plants which provide flowers for cutting purposes. Fortunately, there are plenty to choose from, and their use in no way detracts from the gayness of the border, as it will be found that perennials which supply blooms for cutting are among the most handsome of flowering subjects. My plea is for beauty and usefulness. Here, then, are the plants which have both these estimable qualities; make use of them and you will have an abundance of choice flowers for at least two seasons of the year. First on the list comes Achillea, with its lovely double white flowers. The variety known as "The Pearl" is a good sort and grows 18 inches.

AQUILEGIA (Columbines). — The newer hybrids of these are exceptionally pretty, bearing flowers with long spurs having a fanciful resemblance to dancing fairies. Shades of colour are plentiful, ranging from white to rich red, from lavender to deep blue, and pale lemon to deep orange and yellow. Height of growth is 1 foot to 18 inches.

COREOPSIS GRANDIFLORA.—In this we have one of the most floriferous of plants, truly described as a "cut-and-come-again" sort. The blooms are large, yellow, and particularly handsome. They are borne on extra long stout stems, making them valuable for cutting. Height 2½ feet.

DELPHINIUMS.—There are now quite an imposing list of named varieties, all of which have spikes of really lovely flowers in various shades of blue, purple, and white. The plants grow from 2 feet to 6 feet and make magnificent border subjects as well as supplying choice blooms.

DAHLIAS are well-known border plants, and they should be found a place because they flower during late autumn when other good blooms are becoming spent.

GAILLARDIA.—Another fine subject with brilliant flowers on long stems. Grandiflora is an old tried sort which still gives satisfaction, but there are also newer hybrids well worth a trial.

GALEGA.—An effective border plant with blue, white, and lilac Pea-shaped flowers. Three good sorts are Hartlandi (lilac), alba (white), and officinalis (blue). Height 2 feet.

GEUM.—Once described as "one of the grandest hardy perennials ever introduced," the family of Geums certainly has a claim to praise. The flowers are semi-double, extremely beautiful, and in gorgeous shades; they are also produced in great numbers. The best sorts are Mrs. Bradshaw (a general favourite, flowers are a rich Geranium-scarlet and 2½ inches to 3 inches across), Lady Stratheden (golden-orange flowers), Borisii (a newer introduction with 1 orange-red blooms).

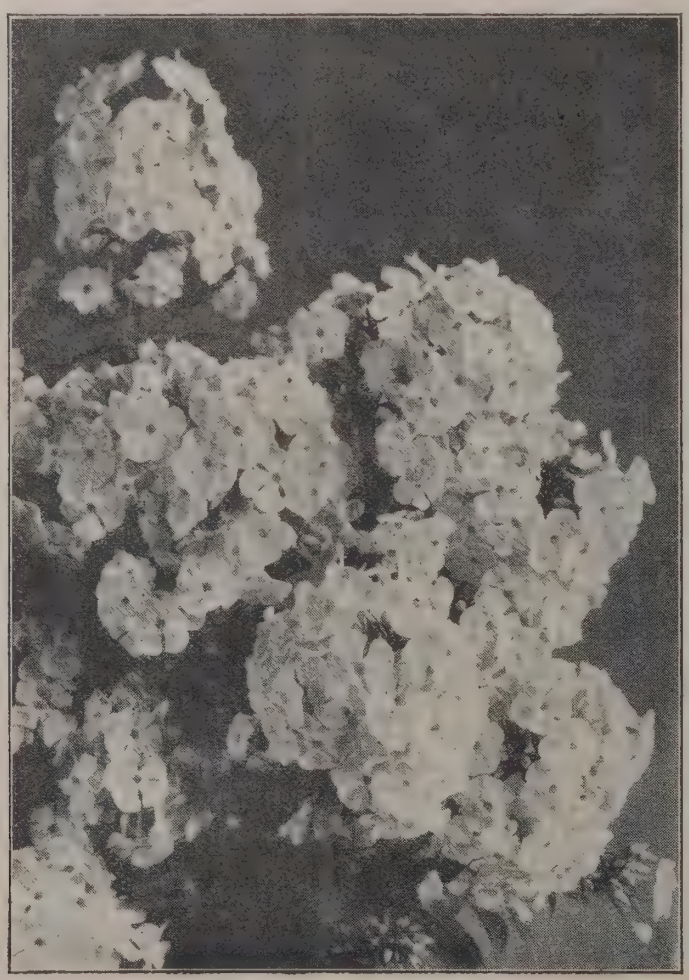
GYPSOPHILA.—If only for the deligh sprays of tiny white flowers produced by plant and used for mixing with other blo in bouquets it is well worth a place in border. The variety known as paniculata alba flore-plena, a double kind, is the be grow.

HELENIUM.—Another good yellow-flow perennial growing 2 feet high. Mixed hyb have blooms in various shades of yel orange, and crimson-bronze.

PHLOX.—The perennial varieties pro an abundance of charming flowers for ting, whilst in the summer border it is valuable. A fair-sized clump of roots send forth a mass of blooms from whic few cut for indoor use will never be mis Height 2 feet.

PYRETHRUM.—A few roots of these valu plants should be in every garden. flower in early summer and provide an al endless harvest of Marguerite-like bloo Both the single and double forms are s did, the former especially for cut flower w Height 2 feet.

INULA.—This is not as well known merits, for its handsome giant Margu kind of bloom always excites admiration



Phlox Eugene Danzanvilliers
Large trusses of lilac-blue flowers

Scabiosa caucasica
Quite hardy and useful for cutting

'n a West Surrey garden: The Iris garden and stone steps, with dry walling

; to my own garden. It grows 2 feet

IOSA CAUCASICA (Scabious).—Quite a ıas been experienced with the Scabious the past two or three years. Nursery-ave exhibited the best hybrid sorts at and the gardening public have not low to recognise a really good border with delightful flowers for cutting. It e hardy and grows 3 feet in height. concluding this article mention must le of the perennial Asters (Michaelmas , those fine autumn-flowering plants have become so much improved during years. There are both large and tiny ed sorts in various tints of lavender, white, and pink, most of which make ıl vase subjects. Space forbids en- the list, but the following also com- themselves to me as being useful, and under the heading of this article:— lus, Lupins, Roses, Carnations, tall of Campanulas, Nepeta, Perennial owers (Centaurea montana), Chrys- nums (border and C. maximum), on, Iris, Lavender, Liliums, Mont- Pæonies, and Rudbeckia. L. J. D.

Alstrœmerias

ng is a suitable time to plant Alstrœ-, known perhaps to the average gar- better by their familiar name of an Lilies. Not infrequently they are ped in" without much regard either to ture of the soil or their cultural require- and so one finds indifferent results. nerias delight in a sheltered and warm on, and it is equally important when ıg the roots to do so 6 inches below the e. In preparing the site it is desirable out the soil to a depth of a couple of lacing at the base drainage materials shape of broken bricks or pots, making ompost of loam, leaf-mould, and rotted ung. To those who have been accus- to plant hardy plants in the usual ı this may appear troublesome work, ıen it is remembered that Alstrœmerias anything like disturbance at the roots, ll go for many years without the neces- r it once properly planted, it is worth tra preparation. They are very prolific heir flowers once they have become shed, and are an ornament to a garden their period of blooming.

TOWNSMAN.

In a West Surrey garden

SUCCESSIVE flights of easy steps, with wide treads and shallow risers, form the easiest and pleasantest, and certainly the prettiest, way of getting up quite a steep incline. At the lowest level of the garden there is a semi-circular paved platform, with a well-built summerhouse facing the steps. At an equal point on each side of the steps the Bargate walling swings back in a segment of a circle to form little dipping tanks. The place is called the Iris garden. At each main landing the path sweeps round to right and left, forming concentric half circles. In May and June it is a place of Irises, to be followed by summer flowers, with Michaelmas Daisies to finish the flower year on the outer and upper level. The natural woodland of the hillside is the background of the whole.

The second picture shows part of the length of a path that leads eastward from the summerhouse. In the foreground is a goodly group of that useful striped Grass, Glyceria aquatica. The specific name suggests the need of a watery place, but it is quite contented anywhere in the flower border. It is a much better plant than the older Gardener's Garters, for it is a little bolder in form, and the variegation has a warm, yellowish tint that harmonises delightfully with the yellow foliage of Feverfew, and with flowers of any pure yellow colouring, such as Calceolaria amplexicaulis, yellow Snapdragons, and the Primrose African Marigold. G. J.

Greenhouse roofs: keeping them clean

With lengthening days, and seedlings coming up in pans and boxes in the greenhouse it is of the utmost importance that nothing should interrupt their progress, and that advantage should be taken of all available light. Often about this time of the year roofs of glasshouses are covered with particles of grime and soot, which rain does not entirely remove. It will help plants considerably if the glass is first washed down with soap and water (I use soap flakes dissolved in warm water) with a soft brush, afterwards running the hose pipe on the roof, or, in the absence of one, well syringing it with clear water. No one who has not put this simple plan to the test would credit what a difference it makes to a house and to the growth of the occupants generally, especially in the case of young seedlings.

W. F.

Dahlias and Gladioli

The bulk of the Dahlia tubers should now be placed in a brisk and steady heat in order that young shoots may be produced for cuttings. These, slipped off with a heel when they are 3 inches long and put in the propagating-case, will quickly form roots. Afterwards they will do well enough in 3-inch pots filled with good soil. Be careful with labelling, as nothing is more aggravating than to find unexpected colours in places where they are not desired at a later date. Gladioli, too, may be laid out in boxes upon good leaf-soil. It is inadvisable, I think, to subject them to heat. They come away quite satisfactorily in a cool greenhouse, they are quite large enough when planting out time arrives, and, as they are sturdy and healthy under this treatment, they are less likely to experience a check than others which were started in heat.

In a West Surrey garden: Glyceria in the flower border

Interesting Exhibits at the Royal Horticultural Society's Show

The beautiful flowers illustrated on these two pages were shown at Vincent Square on February 23rd

A DELIGHTFUL SPRING GARDEN

This fresh green lawn, freely planted with purple, striped, and white Crocuses, and backed with flowering Heaths and dwarf conifers, was arranged by Messrs. Jas. Carter and Co.

The Rev. Rollo Meyer's fine exhibit of Iris reticulata and I. Cantab, interspersed with Viburnum fragrans and enclosed in a hedge of Rosemary

Crocus Sieberi

ON sunny days a few flowers are seen of this pretty native of the mountains and Archipelago. which have been naturalised here for years seem to increase both in size and ber of flowers borne from a single root flowers are of a silk-like texture, and under artificial light. Their colour is lilac with a golden base, and orange st It is a choice and delicate flower and tractive one for naturalising. The versicolor varies in colour from wh purple, but always with a golden Others include the variety purpureus deeper-coloured flowers than the type.

The Cloth of Silver Crocus biflorus) in the meadow

Colonies of this little Crocus, wh found wild in many parts of Italy, ext eastwards to the Caucasus, are now ing through the meadow grass. The vary from white to pale lavender, th segments deeply feathered with yellow within, stigmata rich orange early-flowering species is most va either for naturalising or planting gen around the edges of beds, where it flowers are seen to advantage, in the ease, if springing through some low permanent edging plant, such as Thy Gypsophilas.

EARLY FLOWERS OF SPECIAL INTEREST

A spray of Forsythia intermedia densiflora, with s of deep primrose-yellow flowers, shown by s. Bakers, Wolverhampton. It is the best thia we have seen this year.

A Crocus of striking beauty, C. Sieberi versicolor , shown by Mr. E. A. Bowles, and received the honour of First Class Certificate. The outer nts are heavily feathered with chocolate-purple, except for a bar of white near the tips. The white interior of the flower is relieved by a shade of glowing golden-orange at the base.

3. The pure white Saxifraga dalmatica in pan, shown by Messrs. R. Tucker and Sons. The origin of this Saxifraga is unknown, but it is identical with S. scardica obtusa figured as such in the *Botanical Magazine*.

4. Rhododendron nobleanum album Gill's Variety, which gained an Award of Merit. It produces handsome trusses of large pure white flowers.

5. A little-known Grape Hyacinth — Muscari paradoxum — with pointed heads of dull purple-blue flowers. It is a good subject for growing in bowls. Shown by Mr. F. G. Wood, Ashtead, Surrey.

Raising Seedlings in Pots and Boxes

WHERE there are no facilities for raising seedlings early, in heat, nothing is to be gained by sowing the seeds too soon. The middle of March is a very good time for the general run of summer bedding plants. Except for the few hardy annuals which have to be sown where they are intended to bloom (and there are not many of these) it is preferable to sow in pots

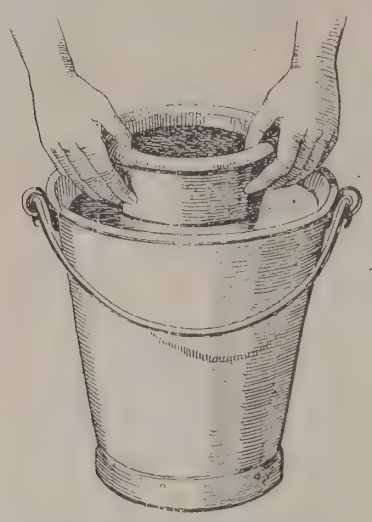


Fig. 1.—Immersing a pot prepared for seeds in a pail of water

or in boxes so that they might have the benefit of a shelter should bad weather come, as it sometimes will, in March and April. A cold house, a frame, or even a handlight will afford all the protection needed and do much to ensure a good germination.

A word first as to the soil. Should it be rich? No. Should it be poor? Again no. It should contain no fresh manures whatever, but it should have in moderation just a few elements of plant food, perhaps, left in it from manures not used up by some previous crop. It need not be new soil, but it must be fresh, sweet, and weathered, light and open in character, with sand added if necessary to make it so. Warmth, moisture, and darkness contribute to germination. As the seedling sends its head up through the soil it at the same time drives a tiny root down into it, and until that root has developed somewhat it can take in nothing but moisture. The probability is that if it came into contact with fresh manure it would rot, or if the root did not rot, then the seedling would probably go off just at its collar, and this is what we call "damping off." This is a disease brought about by bad conditions (usually something to do with moisture), in which a minute fungus communicates itself with great rapidity from plant to plant, especially among young seedlings. Hundreds and thousands of seedlings perish in that way every year, yet it is never heard of when soil and atmospheric conditions are favourable.

Drainage is made by filling the pot one-quarter full of broken crocks, a large one placed concave over the hole in the pot and the others distributed in almost regular order around and above. This is a detail of the highest importance and cannot be carried out too carefully. The pot is next filled almost up to the rim with soil; it is then first pressed down with the fingers, then levelled and pressed down to make a good surface. When the pot is so far ready the soil is soaked by saturation, and the best way to do this is by immersing it in a pail of water up to the rim and holding it till the water appears through the soil (Fig. 1). The wetting is so thorough that often there is no need to give further water until the seedlings are up. A box is chosen for Fig. 2 so as to show the same method of drainage, filling with soil and pressing down to a fine surface upon which the seeds show. Saturation of boxes has to be done with a fine rose pot, the water being made to fall gently and evenly. The seeds are covered with fine soil, shallower or deeper according to the size of the seeds; but, as a rule, flower seeds ought not to be covered more than a quarter of an inch, and the finer seeds only just covered. It is a good thing to cover the pot or the box with a sheet of glass, on which lay a sheet of brown paper. Seeds so covered come up in half the time it takes those not so covered. After the seeds have been sown a few days the pots and boxes must be examined every morning, and immediately growth is seen the brown paper and the glass must be removed, because henceforth light and air are health and strength to the seedlings.

The foregoing method of sowing may be applied to all tender annuals, and to others it is thought advisable to take such care of, Lobelias, Petunias, Phlox, Salpiglossis, Marigolds, Nicotiana, Kochias, and all such plants as those. It may happen that the sower has no facilities whatever for raising his seedlings in pots or boxes, and is driven to sowing in the open ground. When he does so he should dig the soil carefully and a good spit deep with manure in the lower strata. Every lump should be broken up and a good seed bed made. Any seeds sown *in situ* should be sown thinly; those which it is intended to transplant may be rather thicker, but never thick. It is well to again point out that certain things will not bear transplanting, among them being Poppies, Sweet Sultans, and Mignonette, so thin sowing is the rule with these, and also a thinning out of the plants as soon as they are large enough to handle. Other things will transplant, but show all their lives afterwards how much they resent it. Take, for example, that very charming sky-blue bedding plant, Asperula azurea setosa. It never does so well as when sown where it is wanted to bloom. This annual grows nearly a foot high, and it often happens that it has to be raised elsewhere and

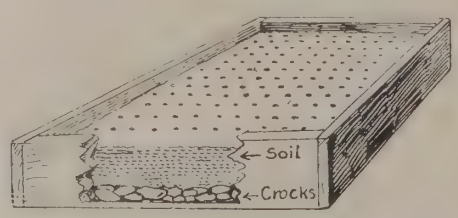


Fig. 2.—Section showing box prepared and seed sown

be transplanted to the flower beds later, but it is much more satisfactory when undisturbed. We might say the same of the ever-brilliant Eschscholtzias and Nemophilas.

Most things profit by transplanting—Asters and Stocks, annual Chrysanthemums, the annual Mallows or Malope grandiflora (a good back row plant reaching 2 feet, useful and showy in its various colours). The Coreopsis (or shall we call it Calliopsis to distinguish it from its perennial forms?) are best transplanted, and there are some very pretty free-flowering varieties, though none are equal to the glorious Coreopsis grandiflora which is sown in the open in May for the next year's flowering, and is, in fact, a perennial.

TREES AND SHRU

Early flowering Rhododendron East Sussex

THE mild conditions of the past few have favoured these brilliant flowers. The masses of R. pr having escaped even slight frosts, are than I have ever seen them before, the l being absolutely laden with rosy-p flowers, and this in spite of the tenacious soil in which they are growin

I have a mass also planted in light, soil, which is equally effective, and, planted in the foreground of a few goo bushes of Forsythia spectabilis, the la maze of yellow bloom, the result is exc Other valuable kinds which I have not their brilliancy during the past few da clude the Himalayan R. barbatum, a m ficent shrub with gorgeous trusses of blood-red flowers, immensely effective hours of sunshine. There is also the d R. fulgens, from Nepal and Sikkim, w distinct leaves and waxy, rich red fl The trusses are not so large as most s but the colour is intense, and reminds the striking and effective R. Thomsoni comes later.

R. lutescens, from China, is freely with pretty pale yellow flowers, and, if conspicuous as the foregoing, is inter on account of its colour and early-flo habit.

R. hæmatocheilum, a native also of is a rather more open shrub, the flow which are borne in trusses 4 inches across, the fully-open blooms being pleasing lilac shade. Others are on th of bursting into bloom. E.

Daphne Mezereum

I feel quite envious when I meet wi charming and fragrant bush of ou woods growing like a weed and blo with the greatest profusion in garden by. Bushes 6 feet in height and 3 diameter and nine to 10 in a grou arrested my attention during the wee effect of such being perfectly lovely. the cold, retentive soil of this garden t favourite of cottage gardens absolut fuses to live, both the type and its flowered form having been planted ously in former years, but always wi same result, the plants gradually dwi away. I have seen this same shrub 9 feet high on a cottage wall in Norfol E

Mutisia decurrens

Mutisia decurrens, known under th of the Peruvian Marigold, is a ha climbing plant seldom met with. It i difficult plant to grow provided a sh situation on a well-drained soil of nature can be given it.

The best method of growing thi climber is to allow it to ramble at will t some less valuable shrub against a w which it will cling by means of its te produced at the point of its leaves.

A native of Chili, it should be g southern or south-western aspect for ence; yet I have seen it growing rema well on a wall facing east, mingling i orange-red flowers with those of the flowered Solanum jasminoides from to October.

In preparing a position for planting, ture of sandy loam and leaf-soil, w addition of plenty of small stones, will and an annual top-dressing after the p established, with a few stones laid on t face round the roots. As slugs see

of it means should be taken to protect base of the plant, otherwise any young ths or suckers will disappear as they e through the ground. Although not olutely hardy it will withstand our average er, and is worthy of a place and attention ardens where good climbers are appreciaSpring or early summer is a good time ant, after the risks of hard weather are past, so that the plants get established before the next season. R. FINDLAY.

Wisley.

Cytisus præcox

One of the charms of this beautiful flowering shrub is its compactness of growth. It never seems to get leggy, like so many of the allied Cytisus, but even when it has grown into a large bush it remains shapely and compact. It is valuable for its earliness of flowering, and a large bush in full bloom is a beautiful sight, though the scent is a trifle disagreeable. There is a white form as well as the typical pale sulphur one. It is easy to grow in light soil in a sunny position, and cuttings taken with a heel in the autumn root quite easily.

REMINDERS FOR THE WEEK

outhern and Midland

itoes

l is now time to plant a few rows on a ered border to form a succession to those dy planted in frames and pots. It is able to plant the sets 6 inches deep at season. Old Potatoes in store should be ined and sorted frequently. Seed of the varieties should be obtained and placed light position to sprout.

ter Brassicas

sowing may now be made in the open of sels Sprouts, Cauliflower, Savoys, and mn and winter Broccoli. A well-tilled should be made and the seed sown in 1 foot apart and 1 inch deep. Prick off that are ready in boxes.

y Peas

soon as the plants in the rows already are through the ground they must be cted against the ravages of slugs by fret dustings of soot and lime. If birds are olesome the plants must be netted or ds of cotton placed along the rows. A of early Marrowfats, such as Gradus or ld's Record, may now be sown. These oth reliable Peas.

natoes

nother sowing of seed may now be made, the young plants must be kept growing lily as near the glass as possible. This applies to those already pricked off into l pots. Great care is necessary in water-Tomatoes in their early stages of growth, overdone many will damp off.

maisons

ants should now be in a condition for final potting. Pots 6 inches in diameter serve for young plants, while those of a r size will be necessary for two-year-old s. Like other Carnations they need to rmly potted. Good loam is a necessity a 5-inch pot of bone-meal to each bushel il is beneficial.

l fruit

ny crops of Peaches, Nectarines, ots, and Plums are ruined each year by so to protect the blossoms it is advisable ce mats, tiffany, or old nets doubled over rees when frost is about. The coverings ld be placed on some supports that are d a foot or so from the trees. These ings should be removed by day.

mbers

here it is intended to grow these in es on hotbeds during the summer the may now be sown in small pots and inated in a warm house or on a hotbed. oved Telegraph is a very reliable variety ow.

ons

ese in the early house or pit should now naking headway, and should not be ed to suffer a check in any way. They ld be well syringed twice a day when the her is bright, and attention paid to tying-s required. Seed sown now will make plants for setting out in frames the ning of May.

Vines

Continue to tie down and pinch the shoots as often as is necessary. Air must be given cautiously, as if cold draughts are allowed to penetrate amongst the young and tender growth great damage will be done. Keep a steady and moist temperature.

Border Carnations

Where the beds have been prepared and the plants well hardened off do not hesitate to plant them out on the first favourable opportunity. Instead of planting in single lines at 9 inches apart try planting in pairs 6 inches apart and 15 inches between the pairs, one stake will then support two plants. Make the bed firm and protect against slugs and other pests.

Violas

Old plants that have stood the winter may now be divided up and replanted. If on the old site some well-decayed manure, leaf-mould, and a liberal supply of wood-ashes or burnt refuse will be found very beneficial to the plants. For forming borders around Rose beds nothing is more suitable than these free-blooming plants. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Scotland

Plant houses

Azaleas and Camellias, grown coolly and now coming into flower, will appreciate occasional supplies of weak soot-water. Of the former, Fielder's White and Deutsche Perle will now flower with but little heat. Azaleas, of course, like peat and will not thrive where there is lime in the soil, or even in the water. Seed-pods must be removed as soon as they form. If it becomes necessary to repot, a small shift only ought to be given, and the best time at which to do so is after the young growths have made some progress. Regal Pelargoniums will now be filling the soil with roots, and an occasional dose of liquid-manure will be of service. Fuchsias of specimen size can now be pruned in and put to work. These thrive best in a light yet rich soil, and they succeed under a partial shade. Cuttings of the young wood will now root quickly. Cut-back Zonal Pelargoniums can be either repotted or top-dressed—the latter is, at times, the better way in which to deal with two-year-old plants. Schizanthus and Clarkias must be kept cool. In the stove the time for repotting many things has arrived. In former years much peat was used, but experiment (and experience) has shown that loam is equally good for very many plants, and by using this material smaller pots will suffice. Of course, the fine-rooted plants must have peat, but the stronger-rooted stove plants will thrive in good fibrous loam.

Early vineries

At this stage constant vigilance is required in early vineries. When Hamburghs and Sweetwaters are in bloom the thermometer at night should be in the neighbourhood of 65 degs., with a rise of 10 degs. during the day. Ventilate carefully and avoid draughts. The house may be closed in the afternoon when the heat runs about 80 degs., but it is necessary to damp down in a thorough manner. Thinning can be commenced as soon as the operator can distinguish the berries which are taking a decided lead.

Late Peach house

In this house there is but little necessity for fire-heat—even without it the buds now come away very rapidly. While the blossoms ought to set freely without further aid than a mid-day tap on the trellises, it is, nevertheless, a wise plan, if time can be spared, to run over them once or twice with the rabbit's tail. A good root watering, after the setting is completed, will aid the tiny fruits to come away quickly. The syringe, too, should be kept at work from the time the petals fall.

Flowering shrubs on walls

There are many very fine flowering shrubs which are usually associated with wall culture. Chimonanthus fragrans is by no means a brilliant shrub in respect of highly-coloured blooms, but these are deliciously perfumed and are useful for mixing with other flowers in the house. The plant is not easily increased by cuttings, but it may be propagated from layers with success. Pyrus (Cydonia) japonica, too, is very fine when grown as a wall plant, but rigid training and nailing in are not desirable in the case of this showy flowering shrub. Buddleias are popular, but they are, to my mind, rather too rampant in some neighbourhoods, and, of course, the claims of the Clematis family cannot be overlooked.

Bedding plants

Boxes of bedding "Geraniums" should now be examined, and if the roots are moving freely the plants must be given more space. This is usually done now by potting them individually into 3-inch pots, but I yet approve of the old practice of "mossing" them and putting them into boxes. When handled in the latter way the plants are more easily watered, and they lift when planting time comes with excellent balls. The bedding Calceolarias may go from the cutting bed into a prepared bed in cold frames. The bed should contain a large proportion of leaf-mould. Those who raised Antirrhinums from autumn-sown seeds, and who wintered the seedlings in a cool house, must now remove the boxes to a cold frame. Growth is quick at this season and Antirrhinums soon get leggy if not grown coolly. If plants of favourite Lobelias, Ageratums, Heliotropes, or the like, are increased by cuttings from stock kept over winter these may quickly be rooted in the propagating case; but the cuttings must not be allowed to remain after roots are formed.

Seed sowing

The sowing of different kinds of seeds is almost a daily task at this time. Reminders may be given in the case of Carnations, Celosias, Balsams, Pansies, Salpiglossis, Lobelia, Coleus, Geums, Antirrhinums, Pentstemons, Cosmos, Sweet Peas, Statices, and the Intermediate Stocks among flowers, and of Cabbages, Cauliflowers, Sprouts, Lettuce, Leeks, Cucumber, and Melon all under glass, and Carrots and Turnips in frames. W. MCGUFFOG.

Mabie Gardens, Kirkcudbrightshire.

FRUIT GARDEN

Mulching newly planted fruit trees

SO much depends upon the start that a young fruit-tree makes the first year of planting that every care should be taken to ensure free growth. In damp, sunless summers newly-planted trees get enough, and oftentimes more than enough, of moisture at the roots, but seasons are uncertain, and sometimes we get a hot, dry summer. Trees planted in the autumn, and which before winter set in have got good hold of the soil, are not so likely to suffer, but where planting was deferred until spring some means should be taken to protect the roots. With all the care that may be bestowed upon them in the way of watering, progress will never be so good and the trees will never exhibit that thrifty vigour as when the soil around the roots is preserved in a more or less uniformly moist state. By the middle of March a good coat of litter, some 4 inches thick, should be applied, for the drying winds of early spring are apt to unduly parch the soil before watering is thought of. Watering, indeed, in the case of newly-planted trees must be considered as a necessary evil, to be avoided if possible, for if the roots can be kept cool and moist without drenching them with cold water so much the better for the trees, the health of which in a great measure depends upon the soil in which they are planted remaining at a more or less even temperature.

With a good mulch of long manure, or some such non-conducting material, there will be but little need to water until the summer arrives, and then an occasional soaking if the weather should prove exceptionally dry will ensure to the roots the necessary amount of moisture, any deficiency of which during the first year of growth will exercise a most prejudicial effect upon the future welfare of the tree. In Normandy and in other parts of the Continent, where all that relates to the Apple is regarded as of the highest interest, mulching is considered one of the most important operations connected with the planting of fruit-trees. Few planters there would consider that they had carried out the work in a thorough and workmanlike manner did they omit covering the soil over the roots with a thick layer of non-conducting material. Mulching not only acts beneficially in preserving the tree against the effects of the sun's scorching rays, but it lessens labour to a considerable extent, and where the trees are set upon slightly raised mounds it must be regarded as an absolute necessity. Drought is by no means the only enemy that fresh-planted trees have to contend with, as hard frost and continued easterly winds, drying out the soil and arresting the flow of sap, exercise an equally inimical effect upon their health. In many cases where new plantations have failed to do well the cause might be traced to the effects of a hard winter. When a severe winter is succeeded by a harsh, dry, early spring, newly-planted trees are apt to get their vitality so lowered that no amount of care afterwards will restore the lost vital energy.

The Fig in pots

There is no plan so simple and so successful as that of growing the Fig in pots when it is cultivated under glass. The plants are so completely under control, and their culture and general management are so simple, that the merest novice in gardening may succeed with them. It is a number of years now since I adopted the pot system with early and free-bearing varieties like the Brown Turkey (for there are some kinds, like the Castle Kennedy Fig, which are not adapted for pot culture), and the crops have always been excellent, sometimes three crops in a season being produced; in fact, three crops may be had as easily as two—it is only a matter of starting the plants a little earlier and carrying them on a little later. Those who think of attempting the pot system should look out for their plants in autumn. It does not matter much whether they are big or little, as young plants bear equally as well as old ones in pots, and they require less pot room at first and can be grown closer together, so that the allotted space may be filled at once, and a large quantity of fruit gathered the first season. When I began first it was with a nondescript collection of plants, chiefly Brown Turkey, gathered from various sources, some of which had been in their pots for 10 years or more, and some not as many months. In autumn, just before the leaves fell off, they were all repotted. The young plants received a larger shift and the old ones had their matted balls of roots sliced down and were restored to the same sized pots again, using a good, strong fibrous loam, well chopped up and mixed with a considerable quantity of old lime-rubbish, which is most suitable for Figs. The object of

POTTING THE PLANTS IN AUTUMN before the leaves fall is to give the roots a start before the winter sets in, and thus partially establish the plants. If the potting is delayed beyond this period the chances are that the first crop of fruit will drop the following season, and as pot Figs require to be potted every season, or every second season at the farthest, this is a matter of some importance. To have ripe Figs early in May and in June the plants must be started by the middle of February. The second crop is generally a sure one; but the first is always precarious, and a little more attention is therefore required to secure it. Very much depends upon the temperature in the early stages of forcing. A night temperature of 50 degs., with a rise of 15 degs. or 20 degs. with sun-heat, is high enough at first. If the plants are hurried the wood-buds will advance quickly, but at the expense of the fruit. When the embryo fruit-buds at the joints of last year's wood advance regularly with the foliage, it is a sign that the temperature, moisture, and other conditions are favourable. Of course, if the wood has not been well matured the previous autumn there is little chance at all of a good first crop. As soon as the young shoots have made three or four leaves they should be stopped. This will hasten the first crop, and cause a second and more abundant one to appear on the young wood, and they (the shoots) should again be stopped beyond the next three joints, to induce a successional or third crop, if it is desired; but the last growth should finish with a terminal bud, therefore the pinching should not be carried on till too late in the autumn. I need hardly say that the Fig, when grown in pots, can scarcely be over-watered, and it will stand, with advantage, frequent and strong doses of liquid manure when the fruit is swelling. C. P.

Pear Countess of Paris

This is an excellent late Pear of medium size, colour yellowish-brown, and possesses a delicious flavour. The standard trees of this Pear were loaded with fruit last year. The fruits which have properly matured have been of outstanding quality and greatly enjoyed. The trees require very little pruning.

Morello Cherries

For planting against a north wall there is no fruit that can be more profitably grown, and where these already exist they should be loosened from the walls and cleansed with some winter wash, at the same time removing the weakest shoots that are not wanted for clothing the given space, afterwards tying the remainder back, fastening the bass to wire and looping around the shoots lo Cherries, like all stone fruit, require li the soil. It is well to firm this in around the roots. Old lime-rubble is p able.

Strawberries in pots

To maintain a steady supply of S berries from the middle of March unti earliest varieties ripen in the open rec many plants. They must be well grov be profitable, and batches introduced into at intervals of a fortnight will, as a rule, good returns. For latest work in pots old varieties in British Queen and S Napier are yet as good as any of the r sorts, and they have the advantage over of the latter that their fruits travel well they have to be sent by post.

VEGETABLES

Growing Tomatoes in "secon hand" soil

THE time is not far distant when ov of greenhouses with heat will be sidering the question of Tomato gro in 1926, and making arrangements for ing the first lot of seed. Incidentally on to give thought to the provision of soil the young plants are ready for potting If the best results are desired soil whic been used once for Tomatoes should b out of count. I have met with those have tried "second hand" soil, who wards were much disappointed. There course, the temptation after once-used so been turned over to try it a second time it should not be used for Tomatoes. always an advantage to make a start loam which has lain a few months, w though full of fibre, it is not difficult to p pieces. In any circumstances the one has best crops in view cannot, on the sec economy, afford to run a risk by startin season with the same soil he used last, w to a large extent is worn out and only fit dug into the borders or used for potting exacting plant than the Tomato.

LEAHUR

Stachys tuberifera

This plant, usually known as the "Ch Artichoke," is not of any great int value. Nevertheless a few lines provid ample supply of the small tubers which a "change" at a time when green veget may be scarce, and when other roots beg pall. Care must, however, be taken to it within bounds, for it is a persistent ram and, if unchecked, it speedily degene into a perfect pest. S. tuberifera is indiff to soil or exposure and will flourish ramp in any odd corner.

A SCOTTISH GARDEN

Cucumbers in frames

Those who must supply early Cucum and who have only frames with whic work, may now make a beginning. course, hotbeds are indispensable, but w there is plenty of leaves and a little s litter no misgivings need be felt. W more leaves than manure must, perforc used, the bed may be made up as soon a materials get warm, for the leaves absor rankness of the manure. The bed ma 2 feet wider all round than the frame, when the heat is, by the test stick, stea 80 degs. or 85 degs., mounds of good firmly trodden can be placed in position is perfectly safe to sow three seeds in mound, ultimately reducing the seedling a single plant after it becomes visible w is the strongest.

Gladiolus Notes

The time of planting

ANY notes have appeared in recent ssues on the selections of these in-reasingly popular flowers. All who planting Gladioli this spring should a special note, if they have not already o, of the two varieties Le Maréchal nd Wilbrink.

e are two or three distinct varieties after the victorious Field-Marshal. ariety to which we refer is called Le al Foch; it is vigorous and strong-g, with bright shell-pink flowers. The , which are freely borne, are of a par-y lovely shade that show up well under l light.

irink is an older variety, but in every n excellent companion. It is a fine pink with a cream blotch shading to Both varieties grow about 3½ feet in bearing magnificent large flowers. It em a little early to speak of planting i, but it should be borne in mind that, le, planting may commence at the end uary or in early March. The time of g is, to some extent, dependent on and locality, and may be continued to l of May. By extending the planting a succession of bloom may be ob-from early August to mid-October, or ter.

r varieties worthy of special mention besfeuer or Love Fire (coral-scarlet), see illustration), Master Wietse (dark magenta), Mrs. Frank Pendleton, blush rose), Chris (dark velvety crimson), Prince of Wales (magnificent salmon), Rev. Ewbank (heliotrope), and White Giant (a lovely pure white of exquisite form and worthy of a better name).

We draw the attention of readers to the improved Butterfly Gladioli sent out by Messrs. Carters, of Raynes Park. By careful hybridisation and selection a most unique strain of hybrid Gladioli containing an almost endless variety of colours has been produced. The new blue shades are in pleasing proportions, as are the more delicate cream and rose ground varieties.

Mr. W. J. Unwin, of Histon, Cambs, has made great strides in the cultivation and exhibition of Gladioli, including the large-flowering and Primulinus sections, and he is deserving of special mention. He was awarded six gold medals for Gladioli in 1925, and at Southport he secured the large gold medal for Gladioli in one of the strongest classes we have ever seen for these flowers.

H. C.

The large-flowered Gladiolus Peace
Flowers white with faint violet lines; strong grower, forming excellent, well-filled spikes

Pronunciation of Gladiolus

I regret to read the extract on this subject from the "Flower Grower" page 128), for the writer thereof is guilty of a false quantity, which Lord Palmerston once declared to be a fault as grievous in a man as a *faux pas* in one of the other sex. "Gladiolus" means "a little sword," a diminutive of "gladium," and was the name used by Pliny in describing a bulbous plant that flowered with the Hyacinths (Part I., cap. xi. and xxi.). The reference is to the sword-shaped leaves. By all rule of prosody, Gladiolus must be pronounced as a word of four short syllables, the stress being on the first syllable. HERBERT MAXWELL.

Monreith.

Gladiolus Woodcote, raised by Major George Churcher, one of our chief amateur specialists
his hybrid is red flowered, and retains all the charm of the original G. primulinus form

Gladiolus Primulinus

THIS is the name of a wonderful race of Gladioli that can now be obtained in all the lovely colours imaginable except blue and deep crimson. They originated from a species found growing wild near the Victoria Falls. Somewhat resembling giant Montbretias, they are of a branching nature, thus lending themselves more suitable for decoration than the larger and stiff-growing kinds. As cut flowers they are admirable, the blooms, which are mostly waxy, are carried on long, wiry stems. When planted in groups they are ideal for garden decoration. The soil should be in good condition without the addition of fresh manure. Wakeley's Hop Manure I find splendid for all the Gladioli, as this supplies the plants with all their requirements and can be forked into the beds previous to planting. Gladioli enjoy soil that is of a fairly retentive nature, although if on the heavy side that is apt to remain wet it is advisable to place beneath each corm a small handful of coarse sand. Planted in groups of a dozen of one colour is to be recommended, as in that way one can obtain the full beauty of each variety. If the soil is light and of a sandy nature the corms may be set 6 inches deep, and if heavy 4 inches is deep enough.

GOOD VARIETIES.—There are now to be had many beautiful varieties, and the following I have found to be the best that I have been acquainted with:—Maiden's Blush, a beautiful soft rose; Scarletta, a bright scarlet, most striking either by itself or mixed with yellow

for table decoration; Orange Brilliant, well named, as it is of a very telling orange colour and one of the brightest; J. P. Keen, this is one of the largest-flowering kinds with wide, expanding flowers of a deep cherry-red; Physhe, soft orange; Niobe, deep orange, shaded scarlet, a beautiful variety; Thecla, pale yellow with carmine blotch; Snowdrift, the nearest to pure white; Souvenir, bright yellow; Vanessa, salmon-pink slightly shaded with lilac, very pretty; Atalanta, orange-salmon with yellow blotch; General De Wet, apricot, shaded rose; Hespera, salmon, faintly striped red; King of the Yellows, the best in its colour, which is very bright; Lactita, yellow, tinted pink.

W. E. WRIGHT.

Stockton House Gardens, Near Rugby.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

Tulip seedlings

When ought seedling Tulips to bloom? I have hundreds of seedlings of the wild Tulip about two years old. Can I move them now?

B.

[You must wait until the leaves have ripened off before disturbing these. Some of them may flower in their fourth year, but it often takes from five to six years for them to reach maturity.]

Raising the Flame Nasturtium from seed

Last year I bought two packets of the Flame Nasturtium (Tropæolum speciosum), but I could not get a single seed to germinate. In Scotland it is among the most beautiful creepers I have seen. Could I buy it in roots in Scotland or elsewhere? Would they bear transport? Are they expensive; also what would be the right season of the year to plant them?

ULYSSES.

[This is a slow business, and you had far better buy a few plants. These are offered by Mr. H. White, of Sunningdale Nurseries, Windlesham, Surrey, in 3-inch pots, and this is by far the most satisfactory method of purchasing them. The present is the best time for planting, and I believe the price is about a shilling each. Do not plant in full sunshine as the roots love the shade.]

Dividing Hepaticas

Will you kindly tell me the best time to lift and divide Hepaticas? Mine seem to be dwindling.

B.

[The best time for this is immediately the plants finish blooming—generally about the third week in April. The soil should be of a free, open nature, and contain a good percentage of decayed leaf-soil. A cool and partially-shaded position is advisable for these choice plants.]

Mignonette

What is the best variety to grow for pot culture? When shall I sow Mignonette seed to come into bloom about the middle of August?

COTTAGER.

[The best Mignonette is Machet, although any of the large-flowered dwarf varieties are suitable. Seeds should be sown during March and April. Thin the seedlings early. The finest flowers are obtained from plants that are allowed plenty of space to develop.]

Sowing Balsam

When shall I sow Balsam seed to come into bloom about the middle of August?

COTTAGER.

[Seeds of Balsams should be sown about the middle of March. Never let the seedlings become starved or the flowers will be poor in quality.]

TREES AND SHRUBS

Planting a Golden Privet hedge

Will you be so good as to inform me how far apart young plants of Golden Privet should be planted for the purpose of forming a hedge?

L. O'LOUGHLIN.

[Much will depend upon the size of the plants at your disposal, but for plants up to 2 feet in height 22 inches from centre to centre is very satisfactory, varying the distance somewhat should the plants be larger and at the same time bushy. If an immediate hedge is desirable plants 3 feet to 4 feet should be employed, allowing the balls of roots to just touch each other.]

Rhododendrons from cuttings

I shall be grateful if you will tell me how to secure cuttings from Rhododendrons, when best time to take same, and in what compost, and whether bottom heat is necessary? I presume layering branches from old bushes is safest, but I have several good varieties which are too strong and erect to do this with, and, being on a lawn, it is not convenient to layer them.

F. F.

[Layering is by far the more reliable method of increasing these shrubs where it is possible to get the branches to the earth, cuttings of many of the large-leaved kinds being extremely difficult to strike; those with small leaves fairly easy. If the latter method is adopted cuttings should be taken in August with a heel of old wood attached. Choose shoots of the current year, dibble them in pots of sandy soil, and place in gentle heat, shading from bright sunshine until root action commences. It is important that the propagating-cases should be kept close.]

VEGETABLES

Vegetables for exhibition

(C. Y. K.).—The best Pea for exhibition, in all probability, is The V.C., but well-grown Duke of Albany, if a good stock is obtained, is one of the best Peas in cultivation. From 12 weeks to 14 weeks is required to reach maturity. A good Broad Bean is Exhibition Longpod, also Giant. Make two or more sowings a nightly intervals. There are several va of Tomatoes suitable for your purpos seeds of A1 or Satisfaction should be s once. Two excellent Cucumbers are day and King George. Seeds should be during the next few weeks, when your houses will be quite hot enough if go is made of sun-heat.

Dressing for Asparagus

Will you kindly advise me as to th thing to use for my Asparagus beds time of the year? It is quite impos obtain good farmyard manure about and I must use a substitute.

[Either Clay's Fertilizer or an ap artificial Asparagus manure offered b horticultural sundriesmen would suf purpose. It should be applied at the 1 oz. to each square yard and lightly in. The best time to feed this im vegetable is immediately cutting cea June, when liquid-manure should be applied in order to build up strong, crowns for the following year. The dr from stables, cowsheds, etc., is very s when diluted to the colour of pale ale you are unable to obtain this fill a sm with artificial manure and place in a of water until dissolved. You must ever, avoid applying this too strong.]

MISCELLANEOUS

Turning lime wash dark grey

Would you kindly let me know t your valuable paper what would mak wash dark grey in colour when put on

AMA

[Add the following until the right s colour is obtained:—Ordinary umber, ochre, and black powder, all of which secured from an oil vendor who stocks We suggest, however, that cemen would meet your requirements, which in the same way as limewash.]

Rate of wages for jobbing garde

(Dutch Hoe).—The rate of wages p for a jobbing gardener is governed by paid to ordinary labourers in a particu trict. As a rule, it is slightly higher t agricultural labourers and 1d. or 2d per hour than other labourers if no lost owing to wet weather. We course, referring to plain cottage ga as mentioned, and where skilled la needed the wages should be on a high than that of the casual labourer; at l or 2d. more per hour. We should be recommend any reduction in a man's owing to the infirmity you mention, p he gives satisfaction in other directio

Gardeners' hours

Referring to your answer to "Scra last week's issue, will you tell me h gardener leaves at 5 o'clock every da 1 o'clock on Saturdays, and does n on Sundays, the stove plants are t tended to in winter and the flowers a watered in a hot summer?

G. L. C.

[We agree the stove plants will some attention on Sundays, and no g worth his salt will neglect them even allowed Saturday afternoons and S Very few stove plants are grown to-d even in a hot summer outside plants require watering on Sundays unless grown in pots, or perhaps excepting dry summer like 1921. There are week-ends during the year when little or practically nothing to do ev

lants. Where two or more gardeners ployed they would take the week-end nd fires in rotation, and it is to the ers' advantage to pay a little extra h work. A single-handed gardener, ie, has little glass to attend to.]

: from acetylene gas

A. C." will find in addition to the tion of the refuse of acetylene gas to l of the garden that it also makes an nt whitewash, using it instead of y lime. It is also a useful deterrent pecking out the buds of fruit bushes. plied it in the form of whitewash to irrants, Gooseberry bushes, Plum and n trees, and found it very satisfactory purpose. I may add that after a few applications we had no caterpillars Gooseberry bushes. It requires a or two's exposure to the air before We used a Marshall and Philipps ishing and spraying machine, but an y syringe would answer quite well if e was passed through a fine sieve pre- using it.

also beneficial to pasture, as is ed by the partiality of cattle to those where it has been applied.

"L'ALLEGRO."

ES OF PLANTS AND FRUIT

W., Somerset.—Daphne indica varie- This plant has stood out in the open s in the Cambridge Botanic Gardens. attain a height of about 5 feet and is than is generally supposed.

4. S., Cornwall.—1, Pittosporum ; 2, Daphne Laureola (the Spurge

?., Sunderland.—Daphne Mezereum, of Europe and Siberia; apparently ough rarely so in Britain. One of the attractive of spring-flowering shrubs. ge 152.

C. Garner.—Probably a local seedling.

of Aquilegias at Wisley

Royal Horticultural Society will carry rial of Aquilegias in their gardens at during the next two seasons. A of seed of each variety to be tried reach the Director, R.H.S. Gardens, Ripley, Surrey, on or before March 926. The necessary entry forms may on application to him.

g and District Gardeners' Meeting

isual fortnightly meeting was held in ey Hall on Monday evening last, and as an excellent attendance presided Mr. F. J. Green. In a competition spathes of Arum Lilies there was an ngly keen competition, many splendid ns being staged. The first prize was by Mr. A. W. Gower, The Gardens, Grange; the second by Mr. J. Wynne, rdens, Hammonds, Checkendon; and d by Mr. G. Carter, The Gardens, Hill House, Mapledurham. In the petitive section Mr. F. Townsend, rdens, Hillside, Reading, staged a f magnificent plants of Primula mala- and was awarded a First-class Certifi- Cultural Skill and the congratulations nembers. Mr. A. W. Gower also re- a First-class Certificate for excellent f Cineraria.

ecture for the evening was "Peren- d Biennials from Seed," and the lec- as Mr. F. Townsend, who, in his in- ry remarks said that the subject was one, and to which more attention e paid in these days, when plants are in such large numbers for herbaceous large beds for rock and wall gardens, and never were they more popular than at the present time. Many uses can be found for seedling perennials, such as the replanting of ill-faring patches in borders, filling pockets in the rockery, supplying colour to the kitchen garden, and for naturalisation by the waterside or in the woodland garden. After dealing fully with the important subject of seed sowing, Mr. Townsend passed on to describe briefly many of the best perennials and biennials which can be raised from seed, giving most practical advice on each particular kind.

Benn Brothers' Other Journals

The Cabinet Maker.—Business Spring Cleaning; Notes from the Home Journals; Full Report of the Ideal Home Exhibition; Furnishing Problems Past and Present (Geffrye Museum Lecture).

The Chemical Age.—Chemical Reorganisation; British Association of Chemists' Annual Dinner; Monthly Metallurgical Section; Conference at Birmingham.

The Electrician.—Electricity Supply Data; "Organic Insulating Materials," by A. C. Hopper; Electricity at the Ideal Home Exhibition; More About Assisted Wiring.

The Fruit Grower.—Annual Empire Trade Number; Sir Lawrence Weaver and the Exchequer Grant; The Fruit Ports of Great Britain (Illustrated); River Thames and Fruit Traffic.

The Gas World. — Grading Coke for Domestic Use; Preparing Tar for Roads; Neutral Sulphate of Ammonia.

The Hardware Trade Journal.—Hardware for the Ideal Home; Motor Transport: The Selection of Vehicles; Three Months' Metal Fluctuations; Developing the Assistants' Education Scheme.

Report on condition of Horticultural Crops in early March

Broccoli (Spring Hearting).—An average crop of good quality in Cornwall; rather poor in Kent, Middlesex, and Bedford, and much below average in the North.

Broccoli (Sprouting).—Conditions point to an average crop, though somewhat late.

Cabbage (autumn-planted).—Good progress has recently been made.

Cucumbers (under glass).—Crop looks healthy, but suffering from dull weather.

French Beans (forced).—Plants doing well generally.

Leeks.—A good clean average crop.

Lettuce (frame).—Crop promises well in Cheshire, Middlesex, and the South-West.

Mint (forced).—A good crop now being marketed.

Radishes (forced).—A good average crop.

Rhubarb (forced).—Very good early crops now being gathered; later crowns promise well.

Rhubarb (natural).—Crop in very good condition and making excellent progress.

Tomatoes (under glass).—Plants have suffered from lack of sun, but are now making satisfactory growth and prospects are good.

Anemones.—Crop is now flowering more freely in Cornwall; in Scilly, fulgens are in good condition, but St. Brigid and De Cean have suffered from continuous rain.

Arum Lilies.—Plants have suffered from rain in Scilly; elsewhere conditions average.

Carnations, Perpetual (under glass).—Plants making satisfactory growth.

Daffodils and Narcissi (indoor).—Flowering freely, good quality flowers, crop average.

Daffodils and Narcissi (outdoor).—Good crops in most districts; in Scilly flowers are abundant.

Hyacinths (forced) and Tulips (forced).—Average crops generally.

Violets.—Conditions have improved in the South-West and flowers are abundant in Cornwall; plants healthy and clean in Middlesex and Sussex.

Wallflowers.—Promise a fair crop in Middlesex and almost average in Cornwall; elsewhere prospects not so good.

TRADE NOTE

New "Sprinko" cleaner

We have had the opportunity of testing an excellent new hand cleaner, "Sprinko," which is shortly to be offered to the public by Lever Brothers. This preparation proved splendid for removing the most obstinate dirt from the hands, and should be a boon to gardeners, as it leaves the skin soft and smooth. In order, however, that our readers may test it we suggest they write to "Sprinko," Box P.O. 52, Lever House, Blackfriars, E.C. 4, when the proprietors will gladly send a free sample.

LATE NOTES

Canna iridiflora Ehmanni

There are few handsomer Cannas for the garden than this. Its flowers are somewhat smaller than those of the new race of Cannas lately introduced, and their colour is not so striking as the glaring scarlets and brilliant yellows of some of the novelties. The colour of its blossoms, a bright cherry-lake, is, however, charming, and rarely met with in the open. Plants strongly grown in deep, rich soil often attain a height of over 5 feet, the flowers, which are drooping, being borne from 6 inches to 1 foot 6 inches above the highest leaf. The Musa-like leaves are, for a Canna, very large, sometimes reaching a length of close on 3 feet. Its numerous bloom-scapes are very beautiful arranged in tall vases in the house. The drooping habit of the leaves is also a point in its favour. In the west of England this Canna will live through the winter unprotected in the open ground, especially in light soil. In heavy soil it is better to lift and bring the plants on under glass before planting out. Liberal doses of liquid manure will be appreciated by the plant when in robust health. In dry weather it will be advisable to turn the hose on to the roots for a quarter of an hour at a time. In proximity to water the plant usually exhibits the greatest luxuriance.

Synthyris reniformis

This is a charming evergreen plant growing in dense rounded tufts, having finely-cut leaves and bearing in early spring numerous leafy flower-stems, each bearing a quantity of blue-coloured flowers. The flower-stem is covered from the base to the top with small leaves, which set off its handsome flowers to advantage. It is best grown on the low part of the rock garden, in shady nooks in good, deep loamy soil, which is kept moistened during the dry season. Propagation is best effected by division in August. Clumps should be well established and large enough to break up. The divided plants, if planted in rich soil, will make strong flowering clumps the subsequent spring. Established plants will be improved by a top-dressing of soil.

H. STEVENS.

Rhododendron racemosum

This sturdy evergreen shrub rarely exceeds 2 feet in height. It has closely packed leaves and bears in March loose clusters of pinky-white blossoms studded profusely well over the plant. It may be grown well on fully-exposed spots on the rock garden in sandy peat, which is kept moistened during the hot season.

H. STEVENS.

LATE REPLIES

Planting waste ground

(1) Are Ulex europæus flore-pleno and Ulex nanus suitable for planting up ¼ acre of waste ground? (2) What kind of Larch or Fir tree do you recommend as a wind-belt for the same piece of ground? (3) What quantity of each would be required? (4) Where can both be obtained and at about what cost? (5) Is there any other kind of Gorse more suitable? The waste ground is unsuitable for allotments at the entrance of the village, and the foreground of a magnificent view, exposed to a full S.W. wind up the Severn and to the full sunshine.

W. I.

[(1) Yes. (2) The Austrian Pine (Pinus Laricio var. nigricans) and the Maritime Pine (Pinus pinaster). Either of these would suit your purpose, but close planting is necessary in order that the trees, even when small, may shelter each other. (3) Planted at 4 feet apart, which is really desirable in such a position, about 650 plants will be required, and we suggest the quantities as follows:—(4) 350 Pine from 18 inches to 2 feet high, £7; 200 Double Gorse at 1s. each (in pots), £10; 100 Ulex nanus at 1s., £5; from Messrs. W. Slocock, Goldsworth Nursery, Woking, Surrey, and Messrs. James Smith, Scotland Nursery, Tansley, Matlock, Derbyshire. (5) The Double Gorse is rather expensive, as it can only be propagated from cuttings and layers. The mother plant, Ulex europæus, is, of course, an exceedingly handsome plant, almost rivalling its double form in beauty at times. This is much cheaper, and seed is obtainable both of this and Ulex nanus, and if scattered over the surface of the ground will form a thicket of growth in a few years, no preparation of the soil being necessary. Other plants which thrive in such positions include:—Antriplex Halimus, grey-leaved Euonymus japonicus, Olearia Haastii, Aucuba japonica, Berberis stenophylla, the common Sycamore, the white Willow (Salix alba), Populus alba, the White Beam (Pyrus aria), the Mountain Ash (P. aucuparia), the Sea Buckthorn, Hippophæ rhamnoides, Cornus sanguinea, and the Sweet Briar (Rosa rubiginosa).]

Apple Cox's Orange

Could you tell me, under "Answers to Queries," what disease it is that has attacked my young Cox's Orange Pippin trees? I enclose prunings on which it appears.

E. M. S.

[Your Cox's Orange Pippin Apple-tree is affected with Apple scab (Venturia inæqualis). At the bases of the shoots you have sent to us the two-year-old wood appears to be in perfect health, and from this we assume that the disease has only appeared last year, and is, therefore, present on the shoots formed last season only. If this is so we should advise you to at once cut back all the affected shoots to a wood bud on the two-year-old wood. If this is carefully done you should be able to remove the majority of the affected wood. This work should be done at once and the prunings burned. Do not throw the prunings down under the trees and leave them. The fungus disease Apple scab attacks most varieties of Apples more or less. In spring the disease starts on the leaves, and spores produced from the leaves later on affect both fruit and wood. Cox's Orange Pippin is a variety on which the disease develops very much on the wood. To keep your wood clean this season we should advise you to spray with lime sulphur. Obtain a good brand of 1·3 sp. gr. and use it according to the maker's directions. It would be safest for you to spray your trees (1) immediately before flowering. Do the work at the period when the trusses of flowers begin to show up nicely, but before they begin to show the colour of the petals. (2) The second spraying should be given when the petals have all fallen. (3) Again three weeks later. The second spraying is the most important, but in your case, with young trees, it would be worth while to carry out all three sprayings in the effort to keep the trees healthy. Spraying should be carried out on a still day and the lime sulphur should be put on the tree through a fine nozzle. The tree should be wetted all over with a fine mist, and spraying should cease before the leaves begin to drip. Do not forget to wet both sides of the leaves. Make sure that you have not an old Apple-tree covered with scab in your garden which is causing the trouble on your young trees.]

Rose Gruss an Teplitz pruning

I shall be pleased if you will kindly inform me the correct way to prune Rose H.T. Gruss an Teplitz. This Rose has made quite a lot of very strong wood this time. The bushes are rather old, and it seems to do very well around here.

V. A. Cooke.

[This Rose must not be pruned severely as it usually grows so strong as to be capable of producing large quantities of flowers, and the old saying that "the stronger the growth the lighter you prune" applies here. First of all remove all the old and weakest wood, leaving sufficient strong young growths to form a shapely bush capable of admitting sun and air to all parts. These may be shortened back to within 3 feet of the base, or may be left even longer, according to the size of the bushes desired. Strong side shoots should be cut back to about eight eyes.]

Pelargoniums unhealthy

I enclose a plant each of King of Denmark and Paul Crampel Pelargoniums, and would be glad if you can let me know what is the growth on the stems and how can it be treated. I also enclose a discoloured leaf. Perhaps the growth on the stem has affected the leaf.

Tipperary.

[We have carefully examined your plants and the growths on the stem are, we think, due to insect punctures. The injuries were caused some time ago and are now healed up, hence the little scabs. In the case of the plant of King of Denmark the plant appears to be in perfect health. On the Paul Crampel Phytophthora cryptogea was present. If any more of your plants are affected in the same way they should be removed and burned, and the rest of the plants watered with Cheshunt Compound. Please read "Pelargoniums damping off," on page 109, to be found in our issue for February 13th. There is no connection between your discoloured leaf and the spots on the stems of the plants sent.]

Pruning Apples

I have recently added fruit culture to my garden hobbies, and as a reader of your valuable paper would be glad to know the reason of the swellings on the shoots of Apple submitted. Types, Newton Wonder and Bramley's Seedling. Trees are five years to six years old and bore sound fruit last year, and, to me, seem vigorous and clean-stemmed. It is only here and there that these peculiarly thickened stems appear, and section cutting reveals no rust.

F. G. Blockley.

[The swellings on the Apple shoots you send are normal and nothing to worry about. They are formed under at least two circumstances: (1) When the bud at the top of a one-year-old shoot happens to be a fruit-bud instead of a wood-bud. (2) If, when pruning one-year-old shoots, the shoots are cut back to a fruit-bud these swellings appear later. If you had noticed your trees earlier you wou found that each one of your swellin bearing fruit. Ten years ago very fe ties developed these swellings. A Pippin appears always to do so, no what stock it is worked on. growing Apples like Bramley's Seedl Newton Wonder do so when worke dwarfing stock. We are of the opin the swellings are only detrimental general well-being of a tree when allowed to form on the leaders of a should be your aim, especially in you to get a wood-bud at the top of all shoots, and we should advise you round your tree. If any of the swell present on the leaders you should p growths back to a good wood-bu selection of a good wood-bud behin these growths is not always an easy because quite a number of buds be growth are, as a rule, fruit-buds. T back to one of these would only be r the process another year. When th ings are on laterals the pruning me should adopt would be to leave then tree until good fruit-spurs are forme them, then they might be taken av gether. You will notice that in ma good fruit-buds are formed beyond t ing. Judgment must then decide they are to be left or not.]

Removing protective material

What is the best way and time to the protective material that has b delicate plants? For instance, it mild here now, but we may g sharp frosts in March. Is it best away the protection when mild and when likely to be frosty, or to leav say, April? The latter plan is the case of unexpected frosts, but, of keeps out air and sun from the plant

Ta

[This should not be removed unti of March in your district, for altho conditions prevail at the present may experience severe weather du early weeks of March. In the case shrubs part of the covering may be 10 days or so in advance of the re when damaged shoots should be cut any further pruning necessary carri the same time. In the case of plan have been protected with ashes, s similar material no harm will result removed about the same time. A sm fork or trowel should be used for th young shoots are easily broken, and in the case of Romneyas, Amicias, a smaller subjects shoots 8 inches in le have been made, these rarely suffe extent after the date given above.]

CATALOGUES RECEIV

A. Shanks and Son, Ltd., Arbr Cannon Street, London.—Mowing r

J. Cheal and Sons, Crawley.— Dahlias.

Glen Road Iris Gardens, Wellesle Massachusetts.—Irises.

Barr and Sons, King Street, Co den.—List of hardy perennials.

John E. Knight and Son, Wolver —Lawns, greens, and tennis courts.

Maxwell and Beale, Broadstone, Plants for alpine and rock gardens.

J. W. Forsyth, Putteridge, Cyclamens.

Ransomes, Sims, and Jefferies, Lt mowers, 1926.

Cooper, Pegler, and Co., Ltd., 2 Christopher Street, Finsbury Square —Spray outfit.

Dickson, Brown, and Tait, Man Garden seeds, 1926.

GARDENING ILLUSTRATED

. 2453—Vol. XLVIII. MARCH 13, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

ines, Veitch ... 160
morial Medal for ...
als in the rock ...
den ... 165
icula, show, ...
ing treatment of ... 164
ea and Heaths, ...
der for ... 171
busa Metake ... 171
age-root fly ... 169
ASTRUS AR- ...
CULATUS ... 166
atis montana ...
erba not flower- ... 171
Chicory as a salad ... 159
Club-root, or finger-and-toe ... 169
Creosote for greenhouse ... 172
Crocus aureus ... 161
Daphne odora rubra in the open ... 161
Flower seeds ... 165
Flowers, hints on arranging ... 171
Fruit, thinning ... 170
Garden, a blue? ... 167
Gardeners and their hours ... 160
GARDENS AT OLYMPIA ... 165
Gardens in Wigtownshire, picturesque ... 166
Gladiolus, the pronunciation of ... 160
Gooseberry caterpillar 172
Gooseberry mildew, American ... 172
Grapes then and now 170
Heath, cutting down 171
Hedychium coronarium ... 164
HELLEBORES, LENT, AS CUT FLOWERS ... 162
Heliotrope, Winter, Petasites fragrans 161
Hepaticas, dividing ... 161
Irises, twenty-five best ... 167
MILTONIA, A NEW 169
NARCISSUS CHEERFULNESS ... 167
Olearia Haastii: Time of flowering ... 160
Photinias ... 166
Planting ... 166
PLANTS FOR HEAVY SOILS, SOME ... 159
Plants for a north bank ... 171
Plums, dessert, late ... 170
Potatoes ... 169
PRIMULA EUREKA 164
Primula obconica, the alleged poisonous properties of ... 161
Primulas, Star ... 164
Rhododendron moupinense ... 166
Rhododendron parvifolium ... 166
ROSES, LENTEN, AT MUNSTEAD WOOD ... 163
Seed germination ... 161
Seeds in hotbed, sowing ... 171
Seed sowing ... 171
Soil pests ... 172
Sprinko hand cleaner 172
Sweet Peas for window boxes ... 172
Sweet Peas in tubs ... 172
Sweet Peas, old ... 168
Tomatoes in "second-hand" soil, growing ... 161
Tomato seedlings, raising ... 169
Vines, mealy-bug on ... 161

Some Plants for Heavy Soils

By F. A. Hampton

The disadvantages of a heavy clay soil are so well known that it is quite unnecessary, and rather unfeeling, to describe them. But a heavy soil has some, even many, advantages; among them that of responding more generously to lime and labour and leaf-mould than do those specious, sandy soils which swallow up whole cartloads of manure and still remain poor.

WHEN we have reduced the stiff and stony soil, which was like nougat in the winter and almond hardbake in the mer, to a reasonable condition of tilth are liable to be discouraged when we find many desirable plants seem to require "light and friable soil" which is beyond provision. Yet there are many good ts which actually prefer a heavy soil. English Iris enjoys a damp, heavy soil nuch as the Spanish Iris dislikes it, and e who succeed with one of them usually with the other. Unfortunately, the pure colours of the English Iris tend to break, into elegant flames and featherings like Tulip, but into vague blotches and untly marblings, so that it is unwise to buy bulbs in the mixtures (wonderfully cheap gh they be) in which they are often sold. e bulbous Irises of the reticulata group reticulata, I. Danfordiæ, and I. ioides), which are notoriously uncertain e open air, often do well and prove quite nanent in heavy soil under a deciduous b (on the sunny side of it), where they dried up in the summer. The same conns suit those two very beautiful and disished Tulips, T. Kaufmanniana and T. iana.

e Flag Irises are almost certainly ted naturally to a heavy soil, and some, Amas, do not flower freely in any other, they do not appreciate its inevitable oness in this country; yet if we raise beds, give them plenty of lime and full sure to the sun, they will give us of their especially after a hot summer.

ore definitely at home with us in a heavy are the Hellebores, not only the Christ- Roses, but the easier and more varied ids of H. orientalis and H. colchicus h are sometimes called Lenten Roses. strange that they are not grown more , for they provide abundance of cut ers from late winter to spring in every e from blackish-purple to pink and e, plain or spotted as you prefer. Catas describe a pure sulphur-yellow, but I yet to meet it in the flower. Farrer ed highly the steel-blue H. torquatus, t seems to be unprocurable. Blue Bird, autiful hybrid with bluish-purple sepals, n like a ripe Plum, is, I believe, one offspring. H. corsicus is another very species, with stiff, handsome leaves carried through the winter and great heads of sea-green flowers in spring.

Pæonies are not grown in this country with the fervour accorded to them in America, but are almost neglected. Yet they offer a wide range of beauty, from the noble simplicity of the species (why are P. Whittmanniana and P. Mlokosievitschii so seldom seen?) to the scented opulence of the garden hybrids of P. albiflora. Their liking for a rich and rather heavy soil is well known.

My Lady Tulip (Tulipa Clusiana)

This dainty species, although notoriously uncertain in the open air, has proved permanent in heavy soil under a deciduous shrub where it is dried up in the summer

Both the Hellebores and the Pæonies are slow to become established, but the Hellebores certainly seem to resent division more than disturbance, for seedlings grow rapidly and flower early, but seeds must be sown immediately they are ripe.

Daphne Mezereum is a capricious plant, flourishing in one place and failing in another apparently similar, and often dying suddenly when seeming to be in full health, so that it is not easy to find out the conditions it prefers, but it is worth noting that there are many fine old bushes 15 years or 20 years old in the cottage gardens of this neighbourhood where the soil is a heavy clay loam over chalk.

Berberis Bealii, which is beginning to be appreciated for its handsome leaves and early, sweet-scented flowers, also does very well here.

All the varieties of Primrose, Polyanthus, and Cowslip like a heavy soil, and give us, nowadays, an immense variety of form and colour. Nearly all are very familiar, but the copper Cowslips, which look and do so well in a damp, grassy corner, are not seen very often, nor is that fine dark crimson Primrose, Miss Massey. Some of us like those old-fashioned oddities, the Jack-in-the-green and the Hose-in-hose Polyanthus.

The old double Primroses are not very easy (except, apparently, in Ireland), and their difficulty increases with their depth of colour, so that the most beautiful of all, the velvet-crimson Mme. Pompadour, is the least easily satisfied. But the double white and the double lilac grow vigorously and flower freely here in a rich, almost sticky loam.

And then, of course, there are Roses. But this is not a comprehensive list of plants for a heavy soil—only an indication of one or two plants that have been found to appreciate it.

NOTES OF THE WEEK

Chicory as a salad

THE majority of people know Chicory as an adulterant of Coffee, but few know the part it plays in the salad-bowl, to which it adds a pleasing flavour. Chicory is

so easily grown and so useful that it should receive more attention from amateurs who desire to grow salads. This plant is sown in late spring in the open ground, thinned out to about a foot apart to grow through the summer, and well watered in dry weather. With the change to a colder season the leaves decay and nearly all drop off. The roots are then lifted, and a few at a time placed in boxes of rich sandy soil, leaving crown well above the surface. After a good watering these boxes are stored in a perfectly dark place, and in a few weeks, according to the heat, some nicely blanched leaves will be fit to gather. More roots, kept in a cool place until wanted for bringing along in heat, may be similarly treated.

Veitch Memorial Medal for Alpines

As announced some weeks ago, the Council of the Royal Horticultural Society offers a Gold Veitch Memorial Medal for the best exhibit of alpines in pots staged by an amateur at the show which will be held at Vincent Square on March 23rd and 24th. Intending exhibitors are reminded that application for space should reach the Secretary, R.H.S., Vincent Square, S.W. 1, not later than by the first post on Wednesday, March 17th.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The pronunciation of Gladiolus

IN your issue of February 27th the "Glad Philosopher," quoting from "The Flower Grower," stands for "Gladi-O-lus" as being the correct pronunciation of the name of a well-known flower, and he concludes his remarks with the suggestion "let us arrange our Gladi-O-li in a vase"—not in a "VOZ." In commenting upon this I should like to point out *en passant* that dictionaries of repute sanction a twofold pronunciation of the word "vase." One makes it rhyme with "raise" and the other with "ma's" (the possessive case of ma). The one pronunciation which has no authority is that referred to by the "Glad Philosopher" as "VOZ," and which, I think, might be more clearly described as "vause."

But with "Gladiolus" we come to something which has an interest of its own for readers of GARDENING ILLUSTRATED, and its pronunciation as given by the "Glad Philosopher" needs a correction which it is hoped may come to the notice of the officials of the various Gladiolus Societies as mentioned by him, and serve to put an end to the faulty pronunciation of that word which prevails at the present time. The majority of people devoted to horticulture know it is a word derived from the Latin language, in which, as being a diminutive form of "gladius," it means a little sword. The rough English translation of "Sword-lily" misses the diminutive, but otherwise expresses the meaning correctly. When we keep to the Latin name and wish to use it in the plural, the Latin form of the plural of such a noun, "Gladioli" is always used. Such being the case it is obvious that the correct pronunciation of the word is the Latin one, and this happens to be not "Gladi-O-lus," but "Glad-I-olus," the stress being placed on the "I" and not on the "O." The mere scanning of the following doggerel may possibly point out to some of your readers the right and wrong of the whole matter referred to by the "Glad Philosopher":—

A taste that's artistic reveals many ways
Of putting Gladioli into a vase;
If judgment be lacking, then fall back
on ma's.
Who works transformations with blooms
and a vase.
But Latin rejects "Gladioli" because
It's as wrong as in English to speak of a
"vause."

DAWLISH.

—— I am glad to see in your number of the 6th inst. Sir Herbert Maxwell's protest against the "logical and sensible" pronunciation of the word Gladiolus advocated by the "Glad Philosopher," and, as he alleges, by the various Gladiolus societies. It would, in my opinion, be a miniature national catastrophe were any one of our gardening societies to put its imprimatur upon a barbarous and ignorant mispronunciation of the name of any plant, and I trust that Sir Herbert will use his powerful influence in the gardening world to prevent such a misfortune. The word "gladium," appearing in your columns, should, I take it, be "gladius," the Latin for "sword."

S. WOULFE FLANAGAN.

—— Sir Herbert Maxwell's note about the pronunciation of Gladiolus is interesting, though, I fear, the writer of the note will shiver when he sees "gladi*um*." I confess that I occasionally bow down in the house of Rimmon and pronounce the word Gladi-oh-lus, but only when someone else has just pronounced it so. Nevertheless, one must regard this pronunciation as not only wrong in respect of quantity and accent, but as ugly in itself and un-English, or to English ears ugly *because* it is un-English. The English tendency in accent is to throw the stress "back to the front" as far as is comfortably possible. There are some who pronounce the word Glad-eye-olus, but "i" is an uncomfortable letter to stress, and I have no doubt Pliny pronounced the word as your correspondent advises—that is, Glad-yo-lus, using the "Glad" as the jumping-off syllable and pronouncing the "i" as a semi-consonant. All the same, in spite of what scholars may protest, nothing is more imperious than usage—not even rhyme. Give it time, and usage will sanctify the worst sins of pronunciation, and so it is quite possible that in course of time Gladiolus may be Gladiohlus beyond the possibility of cavil. I wonder now how Sir Herbert Maxwell pronounces Erica, and Veronica, and Andronicus? For myself I try to say Er-ei-ka, and I sometimes succeed, but never without feeling myself a prig. As for Veron-ei-ka, I have not the moral courage for that. Andronicus, which for my part I pronounce Andron-ei-cus, does not much matter, being only the title of a Shakespearean play and not the name of a beautiful flower, though it may be noted in the by-going that Shakespeare pronounces the name both ways, right and wrong. W.

Olearia Haastii: Time of flowering

With reference to Mr. P. Clapham's note on page 112 of GARDENING ILLUSTRATED, issue dated February 20th, regarding the date on which the above plant blooms in other parts of the country, all I can say on the matter is that the buds were actually opening on the date stated in the gardens here. Another shrub, Pittosporum Tobira, was actually in bloom in January, although, according to books in my possession, the flowering season is given as "summer." The only exp tion I can offer is that shrubs in this d bloom earlier than elsewhere.

CAPTAIN E. A. SAUNDERS, F.R.H
Head gardener to Captain and Mrs
W. F. Tremayne.

Carclew, Perran-ar-Worthal,
Cornwall.

Gardeners and their hours

"Scottish Gardener" reminds us o unhappy past when a head gardener a fact, every gardener was treated domestic servant. Those days are gone gardening, in common with other thing progressed. Is not gardening a profes Why, then, not treat it as such. I dis entirely with your correspondent's stat that "of course, we thought more abou work and less about hours." Gardenin been raised by its merits from the occu of the labourer to a fine art. It is, in f profession, and should be regarded as In every garden one is bound to find who are slack, and it is up to those in c to weed them out that the profession not be hindered by such. But to regard regret the days when such hours we force, as your correspondent quotes, not savour of progress, and progress w tainly must, no matter in what line of ness we may be. There are still in exi many employers who expect a man to not only the hours given in "S Gardener's" letter, but in excess th These are the people to avoid, for it is ously a question of getting as much a possibly can out of the man who is f enough to accept their job. Where so work exists as to require such hours it to the employer to add to the garden and so extend the field of employment.

BRUCE HEWITT, F.R.H

—— The correspondence of "Scottis dener," in your issue of March 6th, pag is most interesting to me, and will no be the cause of quite a lot of other spondence on the same subject. I am back nearly 30 years, which, I should would be about the time, perhaps, "Scottish Gardener" served his appr ship. I was then serving under a S gardener, whose name at that time household word in horticulture. The were from 6 a.m. to 6 p.m. (Saturda cluded) and duty alternate weeks. My were 12s. per week.

Having since had the usual experien a journeyman and then foreman I wa tunate enough to become a head gar The hours then and now are vastly diff the methods used are more so.

A few of the methods employed w interesting, but not very instructive present generation. The lawns were with the scythe (the mowing machin being considered the equal of the fashioned way); the grass when mow of course, to be brushed up. The wh the vegetable garden was trenched 3 fee at least once a year as there was nothi farmyard manure used, and an unl supply at that. A small river flowed p garden the water of which was conside be much better than when pumped th a hose, the watering of a Tomato about 40 feet by 10 feet taking four several hours to accomplish. There w course, a stove and an intermediate (both being fashionable in those days taining, amongst other plants, Crotons high with thousands of leaves to be sp several times in a year. The tempe of the stove was never on any account a to fall below 60 degs. These beautiful were taken once a year to the show, the 364 days they were watered, syringed t

, and the stages and floors damped several e times.

ompare these methods with the methods loyed in an up-to-date garden to-day:—tor mowers, which do their work most iently, and, what is of most importance, hout giving one the backache. Fertilisers ch do not require to be buried 3 feet deep, can be applied at the time the plants most ire them. Water-taps placed at convenidistances so that a hose can be screwed and plants be given a thorough watering not a sprinkling.

he stove plants are replaced by Carnas, Roses, and other beautiful plants that er, and require much less labour in ging and damping down.

AN ENGLISH GARDENER.

he alleged poisonous properties of Primula obconica

lthough up to the present I have, person, had no ill-effects from the handling, in stages of growth, of this Primula, I canendorse "W. McG.'s" opinion as to the lern type being harmless, as quite a numof cases have recently come under my ce of people who suffer acutely if they come in contact with this plant. A local tleman not very long ago was sitting talkto a friend in his conservatory and idly dled a plant of the most modern type. t day his hand and one of his eyes was badly inflamed, and to every appear an attack of eczema had set in. It diseared in a day or two, but was both painand disagreeable while it lasted. An old lener of my acquaintance handled this t for over 50 years and never had any ible from it, but a year or two ago, after ay's potting, his hands, arms, and face e out in a rash, and ever since he has n compelled to wear gloves whenever he to handle this plant. A late assistant of own, if he even comes against the plant passing, invariably has hands and arms red with a painful red rash.

lady in Surrey was, on several occasions ly, so badly affected on touching this t that she had to call the doctor. This tleman considered that it was the pollen caused the trouble, but in the other s I have noted it was certainly the ge that was to blame. These are merely w of the more recent cases of poisoning this Primula that have come under my ce, and although, so far, I have been rely immune, I will not be surprised to, e day, have a touch of the trouble.

C. B.

— Mr. McGuffog and "S. A." have le me think that I am one of a very few have the experience of the irritation sed to the hands and arms when handling beautiful winter-flowering plant. In one len where eight of us were employed I the only one who suffered, although in time I have seen many gardeners, maids, ladies who dare not touch the plants. ways prevent the irritation by smearing hands and arms with soft-soap when dling the plants, washing this off with m water when finished. This I can adall readers who are apt to get this irrita to do and they then need have no fear. far as I am concerned I have found none his irritation in the new Primula Eureka, ch resembles P. obconica in every way.

W. E. WRIGHT.

Winter Heliotrope Petasites fragrans

ith reference to "M. E. G.'s" note on sites fragrans, in your issue of February , page 96, let me warn your readers inst introducing this infernal weed into part of their garden, for if it once gets , as it has here, it refuses to be eradicated. This place was a weed paradise when I took it three years ago, and I have managed to get all of them under except this Winter Heliotrope. Whoever planted it in my shrubbery let it go unchecked, and now it reigns supreme and is invading paths and lawn like a destroying host. Nothing short of digging up the roots has any check on it, but each tiniest bit left in, roots and carries on again. Innumerable roots have established themselves among the roots of every tree in the shrubbery, and unless I cut down all the trees and shrubs there is no possibility of eradicating this pest. *Verbum sap.*

W. P. PECHEY.

The Croft, Brent Knoll, Somerset.

Mealy-bug on Vines

Although the subject is, beyond all doubt, a serious one, yet I have been mildly amused while reading the correspondence upon the subject. All kinds of remedies, from tar to cold water, and including prussic acid, have been suggested, and each school of thought has its adherents. One thing, to me, appears to stand out in relief. The vineries, of which mention has been made, must have been not vineries at all, but propagating-cases for bug. When matters come to such a pass that the bunches are unfit for use and have to be destroyed why, in the great name of common sense, persist, year after year, in attempting to exterminate the pest? Would it not be better to root out the filthy canes, to clear away 6 inches of the surface soil, and, after having burned a pound or two of sulphur in the house and repainted wood and iron work, to prepare fresh stations (which could be added to as occasion required), and to replant clean young canes? Why any gardener persists in retaining bug-ridden Vines year after year I fail entirely to understand. They are no credit to him even although, originally, it was through no fault of his that bug secured a footing. Nor can the owner of the vinery have any satisfaction therein, and when Grapes are either unpresentable or uneatable of what use are they? Why burn expensive fuel in order to make things comfortable for mealy-bug? A novice might almost be pardoned if, on reading the correspondence, he came to the conclusion that bug was a sort of pet insect merely retained for the purposes of experiment as to the value of home-made or of chemical specifics. We, in Scotland, have an old saying: "Better a finger off than aye waggin'"; and, for my part, had I a vinery in the state of which some of your correspondents have written it would, most assuredly, receive short shrift from me. I am perfectly prepared to be rated for "destructive criticism." I merely ask the audience if there is not truth in what I now say.

A SCOTTISH GARDENER.

Crocus aureus

Seeing in your paper several short articles on various species of this beautiful genus I thought the following note dealing with the above might prove of interest to some of your readers. This species is a native, I believe, of Serbia, Asia Minor, etc., of a rich golden-yellow colour, especially when fully open in bright sunlight. As a pot plant, apart from its rich colouring, it blooms with the greatest freedom, as the following will testify. Four bulbs were potted up at the beginning of October in a 5-inch pot in good loam, with the addition of some well-rotted Beech leaf-mould and sand, placed in a cold frame until the first blooms appeared at the end of January, and then moved to a light, airy shelf in my hall, where the temperature was fairly constant. From that date, viz., end of January, till the end of February the four bulbs produced between them no less than 43 blooms. Although the individual bloom does not last long, one is more than compensated by the freedom with which the flowers are produced.

W. L. S. L.

Cornwall.

Seed germination

The following may be of interest to Captain E. A. Saunders and add to his list concerning the vitality of seeds. When I took charge of the gardens at Balmae the late Countess of Selkirk gave me some Melon seeds, saying that it was the only Melon for which she cared. The variety was a green-fleshed one of a very exceptionally fine flavour, and had been originally raised in the gardens of Sir Philip Egerton, her father, at Oulton Park, Tarporley. There was a considerable quantity of seed, but, of course, from year to year I saved fresh stock. Last year (1925) I found by accident in my desk a quantity of Melon seed labelled "Oulton Nugget, seed saved 1897." I sowed a dozen seeds. Every one germinated, grew, and bore well. Seeds of Celosia plumosa (home-saved) have germinated freely with me after lying for 11 years. By the way, I await an announcement from Captain Saunders that someone has sent him particulars about our old friend the "Mummy" Pea taken direct from the hand of Tutankhamen!

Mabie. W. McG.

Dividing Hepaticas

An excellent method to adopt in dividing Hepaticas is to wash the roots before dividing, and then, after division, to dip them in water and afterwards, while wet, in dry sand. This will adhere to the roots and give them a better chance of establishment. This plan was advocated by the late Mr. John Wood, of Kirkstall, than whom no better hardy plantsman lived in his day, and is one which I have followed since I learned of it.

S. ARNOTT.

Daphne odora rubra in the open

In your GARDENING ILLUSTRATED of February 13th there is an illustration of Daphne odora rubra, which you say requires greenhouse treatment. It may interest some of your readers to know that it grows in my garden out of doors on a south wall. I have several plants which are now a mass of bloom. I believe very few people realise that it thrives out of doors.

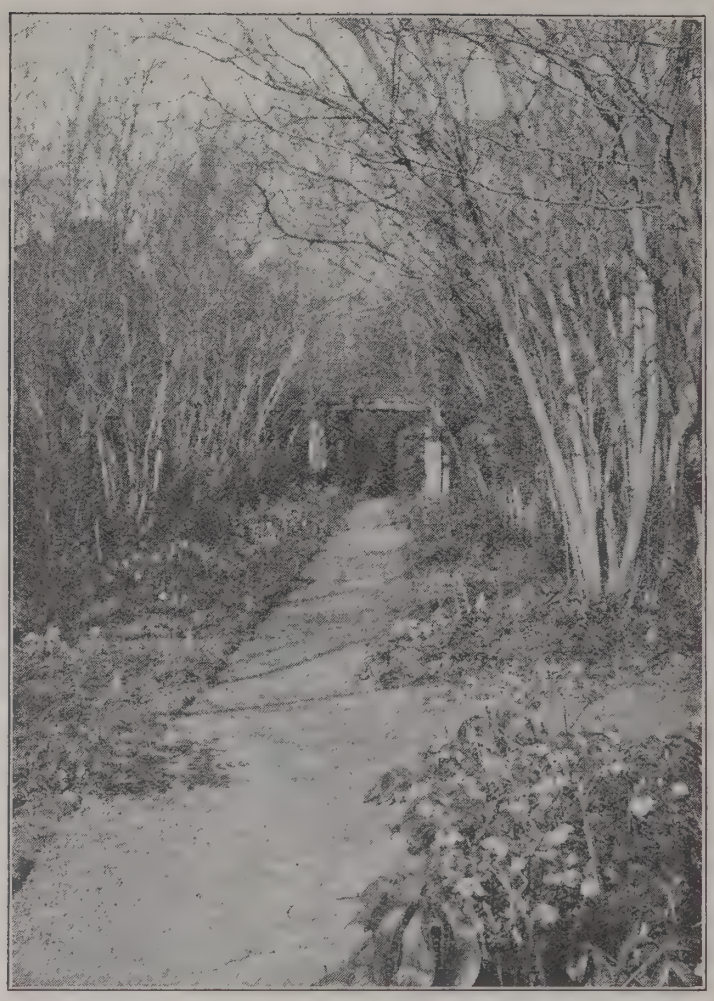
MRS. MURIEL G. EGERTON.

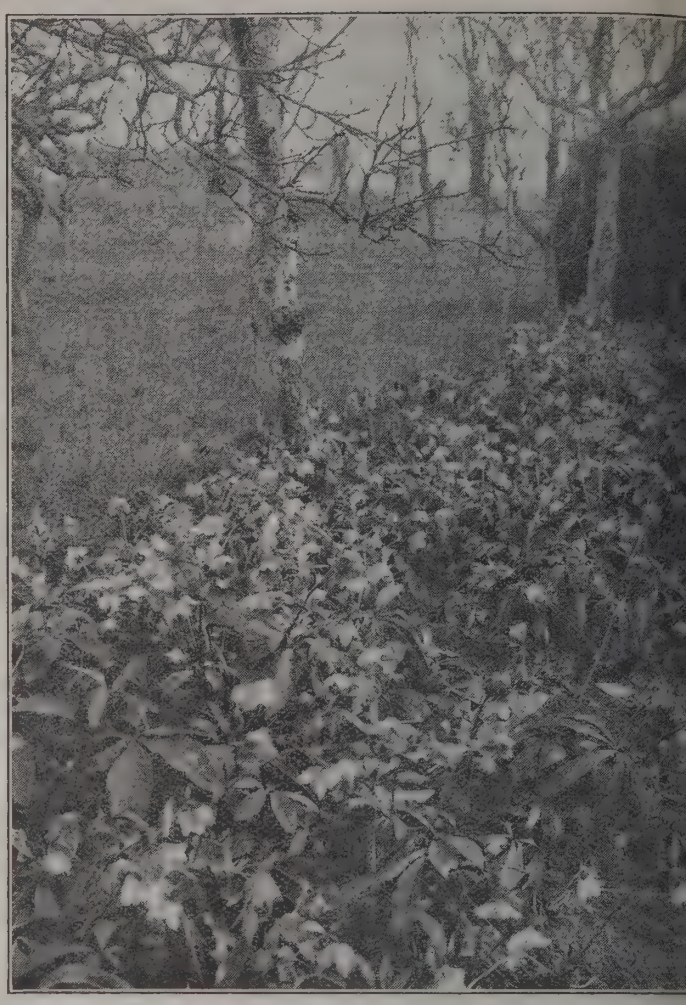
Mountfield Court, Robertsbridge, East Sussex.

Growing Tomatoes in "second-hand" soil

On page 154, March 6th, "Leahurst" gives a timely and valuable warning to amateurs on growing Tomatoes in second-hand soil. This, without a doubt, is the cause of many crops being a failure, more so in soil that has grown plants that were affected with the sleeping disease. A change of soil must be given in every case, and if loam is not available the second spit of soil obtained from a good kitchen garden is as good as any in which to grow the plants. Too much humus in the soil is another mistake, and as little manure as possible should be used in the early stages of growth. If the plants are growing in pots or boxes an inch or so placed over the drainage is an advantage, but once the fruits have commenced to set and grow freely they may be fed with various manures. Watering, again, is an important factor in Tomato growing. Do not keep on giving a drop, but give the plants a thorough soaking and leave until the soil becomes practically dry, which may be a week or more in the plants' young stages, then repeat the dose.

W. E. WRIGHT.





Lent Hellebores in the Nut Walk and under Apple trees

Lent Hellebores as Cut Flowers

LENT HELLEBORES stand very well as cut flowers if they are properly prepared. They should be cut the day before they are to be set up, the ends of the stalks slit up 3 inches or 4 inches, and then be put deep in a pail of water so that the actual flowers only are out of water. This deep bath of some hours and the slitting of the stem enable them to absorb their fill of water, and they will last a good 10 days in a room. It must be remembered that even when so stiffened it is the natural way of the flower to hang the head, but this can be partly overcome by clever arrangement with some stiff foliage—best of all Berberis Aquilifolium. If this is chosen of a dusky reddish-bronze colouring it not only makes a good support, but an admirable harmony of colour with the reddish Hellebores. The slitting of the stems is sometimes objected to because the two ends diverge widely, making it difficult to place blooms separately in the usual way, but this is easily got over by gathering up the whole bunch with the accompanying foliage in the hand and putting it in in one action, when a very little further adjustment will put it right. It is commonly observed by those who have to do with cut bloom that if flowers—say Roses—are cut one by one and held in the left hand till enough are gathered that it is best to put them straight into water without disturbance as they can never be so well arranged again.

The Lent Hellebores should be more generally grown, for, unlike the Christmas Roses (H. niger and varieties), they seem to succeed in most soils, and there is no other plant that will give such a quantity of flower from the second week of February for a month onward. They are garden varieties derived from several species, natives of Eastern Europe and the Levant; mixed descendants of Helleborus olympicus, H. orientalis, H. colchicus, and H. abchasicus. The dusky purplish-red of some kinds and the white of others make quite a lively show in these early weeks, when the plants are massed in quantity and when there are as yet but few outdoor flowers.

They were largely cultivated by the late Mr. Archer Hind at Coombefishacre, in Devonshire. The hundreds of plants in my garden are the result of a gift of many years ago from the late Mr. Peter Barr, when on the occasion of a visit to the firm's former nursery at Tooting he gave me some seedlings from a quantity that had been sent him by Mr. Archer Hind.

It may not be generally known that what one takes for petals in the Hellebores are not petals at all, but coloured sepals. It is the same in Anemone coronaria, and it may be of use to remind those who receive boxes of cut blooms of these from the south of France that they should be treated in the same way as has been advised for the Lent Hellebores as to the deep bath overnight and the slit stems. G. J.

—— As the writer of the note referred to by "M. K." (February 27th, p. 129) may I repeat that, in my experience, H. orientalis has always lasted well in a cut state, and the blooms have never drooped or wilted in the manner described by your correspondent. At the time the note was written, and for y previously, I had to supply large quant of cut bloom, which was sent either by or by rail to London. The pink form o orientalis was much in request in its sea and (as my employer frequently told m not only travelled well, but lasted for ov week in good condition. The plants grown in rather heavy soil and in comp tive shade. The blooms were cut the n before packing and stood in the potting- in water overnight, wrapped in tissue pa and dispatched in box by post or hampe rail as occasion required. Surplus bloo often took to my own house, where the tained their freshness for quite a long in an unheated room. Is it possible "M. K." may keep rather a high temp ture? This might account for the wiltin the flowers. It would be interesting to l of the experience of others. Can it be tha endurance of the blooms to which I hav ferred is exceptional, and, if so, what is reason? KIR

—— Perhaps I may be allowed to end the method adopted by Frances Cress (see p. 144) of immersing the cut flowe Hellebores in water for at least 12 hours. is many years since this was recomme to me by Mr. Mallender, who had rais number of very fine varieties and who me a box full of cut blooms to see. came by parcel post from Hodsock, w Mr. Mallender then was, and were, natur a bit wilted on arrival. They were at immersed entirely in bowls of cold water allowed to remain for fully 12 hours. removal they had quite revived and wer fresh-looking as if they had been newly What is more, these flowers, when pu

water in the ordinary way afterwards, remained fresh for about a week in a cool room. I have always adopted this method since. S. ARNOTT.

—— Hellebores will keep for weeks if, every day, a small piece is cut off the end of the stems and they are put in fresh water, but it must be done about the same time each day, as, if left for two or three hours over the 24, they begin to droop, but after attention will recover again, as a rule, in a day or two. Hellebores do better if done each day regularly. We have some indoors at present which are looking quite fresh, although they have been in some weeks, and the buds are also opening. Hoping this will be of some use to your reader, "M. K."

(MISS) SARAH C. O'DOGHERTY.
Lower Town, Landrake,
St. Germans, Cornwall.

—— With reference to the inquiry as to treatment of flowers of Helleborus orientalis when cut, the stalks should be split up crossways for about an inch and the flowers put up to their necks in a jug, or laid in a basin of water, for two hours or more. I usually cut in the afternoon and leave in a jug overnight. They will then last in water from 10 days to a fortnight and buds will come out.

Lenten Roses at Munstead Wood

The illustrations on these two pages show how beautifully the Hellebores are now flowering under fruit trees and in the Nut Walk in Miss Jekyll's garden at Munstead Wood, Godalming, Surrey

I now grow only a pure white form with unspotted sepals, which was given to me as H. olympicus albus. It is charming growing on a shady western bank associated with fine forms of Polystichum angulare.

H. M. W. BRIDGMAN.
Petlands, Haywards Heath.

Canarina campanulata

Rarely seen is this extremely graceful plant, which, being a native of the Canary Islands, requires cool greenhouse treatment. I saw a fine plant recently in full bloom, the large nodding yellow-brown flowers each appearing from the tips of tender-looking shoots after the manner of a large Campanula. The plant was about 5 feet in height and of singular elegance and charm. The roots and young shoots are said to be edible, but I have no experience of this. Another unusual plant growing in the same house was Anopteris glandulosa, with polished fleshy green leaves and handsome waxy-white flowers, the latter reminding one of those of some of the less-known and large-flowered Styraxes. It is a native of Tasmania.

E. M.

INDOOR PLANTS

Primula Eureka

THIS new Primula is a real acquisition to our greenhouse plants that bloom through the dull days of the year, and those who grow Primulas are advised to give it a trial. In growth it resembles P. obconica, but is quite a distinct form, more compact in habit and stouter in stem, while the individual blooms are as large as two-shilling pieces, and formed on large trusses. It is a free bloomer and remains long in beauty. There are two varieties, one a beautiful salmon-pink and the other a rich rosy-carmine shaded cerise, with a clear yellow eye; a splendid combination of colours for table decoration.

The new Primula Eureka

Seed should be sown in February or March for early winter work. Like most Primulas, it is rather erratic in germination and abhors heat at any time. A cool house is the most suitable for raising the seedlings, and when large enough for pricking off they should be grown quite hardy in a frame or cold greenhouse. Fine soil of a gritty nature is the best to sow the seeds in, and these should only be just covered, watering the pans and shading with glass and newspaper. It is important to see that the soil does not become dry at any time. When the seedlings appear the glass and paper should be removed and the pans stood on a shelf near the glass, shading when the sun's rays are strong. When watering the seedlings, to prevent them damping off, the receptacles should be immersed until the soil is moistened. Prick the seedlings off before they become overcrowded into shallow boxes of soil, and when 2 inches high pot up singly into small 60-size pots. Growth will be freely made from now onwards, so when the pots are getting full of roots the plants should be potted into those of 5-inch size. With attention to feeding when they commence blooming they may be allowed to flower in these. The best compost I find for this class of Primula is good fibrous loam three parts, one of sweet leaf-mould, a 5-inch potful each of bone-meal, crushed old mortar-rubble, and wood-ashes, with enough coarse sand to keep the whole porous. Ample drainage and firm potting are essential. A cold frame containing several inches of ashes, facing north, is the best place to grow the plants during the summer, giving ample air, and pinching off all flower-buds until the end of September, when they should be removed to the greenhouse.

W. E. WRIGHT.

Stockton House Gardens, Near Rugby.

Hedychium coronarium

This white-flowered Hedychium is the most fragrant member of the family, running the Gardenia or Tuberose very close in the richness of its perfume. It is one of the easiest stove plants to grow, requiring only plenty of room and copious waterings whilst in full growth. It has terminal heads of snow-white, curiously-formed flowers with a pale green spot on the upper divisions. I am rather surprised it is not more frequently met with in the stove, for its perfume is delightful. If the blooms are gathered just as they open they last much longer in than when left on the plant. Thoug flowers are of short duration there is a succession of bloom lasting for a consid time with well-grown plants. F.

Spring treatment of the Sho Auricula

Work month by month

The following practical observations base.i upon the instructions issued by National Auricula and Primula Soc.

MARCH.—In this month more water be given, but the soil must not be allo become sodden. On some varieti bloom will now begin to show, and if t kept from becoming frozen so muc better. But the Auricula dislikes hea no more should be given than will jus out the frost. A steady continuous he give a satisfactory bloom, but too muc will draw the plants and the blooms to both will become weak.

APRIL.—This is the month that deter whether the previous 11 months' wor been sound or faulty. With the adv this month stray blooms will begin to a and by the third week the plants sho well in bloom. Careful attention mu paid to watering, for it will be fatal bloom should any plant become too dr they come into bloom the early mornin is beneficial, but in the middle of the when the sun is bright, they should b tected. When the plants are well in the sun must never reach them or the will soon spoil. Abundance of air m given and the plants kept as cool as po Many of the blooming stems will requir port, and the pips will want arrang some cases to show the truss off to th advantage. The plants must be kep from green fly or the enemy will m rapidly.

MAY.—As the plants go out of bloo potting must be commenced.

There are but few secrets worth know the cultivation of the Auricula. The four in number. (1) A sweet, whol compost must be used. (2) The cleanliness must be maintained. (stimulants should be employed, no ar manures, or even liquid-manures; a alike injurious to the Auricula. (4) C attention should be paid to watering. plants must never get dust-dry, nor sodden; both are great evils. The medium is what is required.

These are the points to be borne in The Auricula should on no accou coddled. It requires a simple, common treatment, given in a common-sense and then success will be assured.

Star Primulas

Star Primulas last longer than any owing to their long slender spikes, are for cutting. Anyone who contemplate ing seeds of Primulas in February or should give this class a trial. There been many improvements in them duri last decade or so, and to-day we have c choice assortment of colours. Seed i sown in shallow pans or boxes in warm light loam and leaf-mould. Not in any should the plants be kept too moist or to but the happy medium be aimed at. out when the seedlings are well into second leaf, give a light place near the repot as required, and give them a cold for their summer quarters. That, in is the sum total of the requiremen Primulas, and the Star forms are an the beautiful of the race. WOODBASTW

Gardens at Olympia

INGS may be attempted in garden sign at Olympia which cannot, or dare t, be attempted at Chelsea, for in- where, if one does not conform to standards he is beyond the pale. At ia, on the contrary, there is exercised y scarcely distinguishable from licence. is a tendency to let the imagination run " idealise " for the sake of sensation, r that visitors shall be carried away ng treatment and blazes of colour, and gine that everything in the garden is One designer has left so much to the ation that it has been considered not while to do the planting of a pro- section of his miniature woodland. es merely the rough lay-out of a gar- veloping his idea here and there, as a does the sketch of his new picture. sume that this is to be a sort of work- ibit which the artist will improve day during the show.

gardens are worth a visit if only to see nd achievement of J. Carter and Co. esents a sylvan glade dipping from an dinary height considering it has been p from the flat. A triple waterfall s through steep undulating woodland lls into a forked stream that winds among drifts of Daffodils, Primulas, and pigmy Azaleas. Standing out umerous dwarf evergreen shrubs and are tall specimen Pine-trees. Clever of rock produces a good effect of tive and gives the impression of a fine o be seen from the top of the knoll. eally is a " garden of enchantment," obably the best yet erected on the Ideal site. Elsewhere the firm exhibit a nstructive kitchen garden in which all mmon vegetables and herbs are planted a neat plot, including a seed frame surround of espalier Cherries.

lay-out goes to show that a well- l vegetable garden will harmonise in roximity to the flower garden or house. is model, bordered by fruit-trees, can a garden as it should appear in early

various vegetables can be seen in their proportions, with crops for succession, clude :—Peas (the famous new dwarf Giant Stride), Potatoes for succession, Beans, Cabbage, Parsnips, Onions, Turnips, Leeks, Carrots, Beet, etc. Salad plants, comprising Lettuce, Endive, Corn Salad, Chicory, and others. Herbs and Sweet Corn, sought after by visitors from the States. There are also a Strawberry plot, Asparagus bed, and Rhubarb. Various ways of protecting seeds and an easy method of staking Peas by wire guards are seen, also the best devices for growing early vegetables by means of frames and cloches.

G. G. Whitelegg contributes a distinguished rock garden and J. Cheal and Sons make a grand display of flowering shrubs in borders as well as a formal garden.

Allwood's Carnation terrace garden is well conceived and very popular.

Wallace's and Orpington Nurseries are also represented by woodland, rock, and water gardens. The skill of many well-known nurserymen is shown by the numerous specimens of garden craft that surround the exhibits in " The Village of Open Doors " and in other sections.

Duncan Tucker's have provided a comprehensive display of accessories, including a ¾-span greenhouse (recommended for a wall site), heating apparatus, span and other frames, a shelter with a Ruberoid roof (giving a very natural effect of tiling), seats, Teak furniture, and tubs.

Throughout the exhibition are to be found all kinds of accessories of special interest to the gardener and flower lover. This, the tenth show of its kind, has many novel features and will prove to be more popular than ever. It remains open until March 27th. A. J. G.

The Westmorland stream glade, by Messrs. J. Carter and Co., at Olympia

The model vegetable garden for a villa residence
Ideal Home Exhibition, Olympia

Annuals in the rock garden

Although not strictly orthodox, I am always inclined to admit a few annuals to the rock garden. Many of them become self-sown when happily placed, so they may really be regarded as of perennial duration. I give my choice to Erigeron, Sweet Alyssum, Mesembryanthemum, Ionopsidium acaule, Saponarias, Anagallis grandiflora (what a lovely gem this is!), Leptosiphon, and Abronia umbellata. Last year I saw some self-sown dwarf Nasturtiums in a rock garden, and if these are kept within bounds the rock garden will be all the richer for them in the late autumn. A. G.

Flower seeds

Those who use hardy annuals extensively are advised to sow the seeds at the earliest possible date. In the case of minute seeds—Godetias and Poppies, for instance—it is wise to mix them with double their bulk of fine dry sand. The secret of growing hardy annuals successfully may be summed up as follows :—early sowing and early and severe thinning. Half-hardy annuals may be sown in heat according to requirements. Those, however, who must prick off the seedlings into cold frames when they are ready will lose nothing by delaying their sowings for a further fortnight.

TREES AND SHRUBS

Celastrus articulatus

THIS vigorous climber is a native of N.E. Asia, and is not so well known in gardens as it ought to be. It is a valuable climber for old tree stumps, or rambling at will through a naturally-grown hedge. When once it is established it requires little or no pruning; sufficient only to keep it in bounds. The best support is a dead deciduous tree or something of that nature, to allow its stems to twine round, when the plant will become self-supporting.

The main beauty of this plant is from November onwards, when its branches are covered with hundreds of brightly-coloured fruits, in small clusters of twos and threes. The fruits are of a bright red colour contained in three valved capsules, which, when the fruit ripens, open and turn back, showing a beautiful golden-yellow inner surface, against which is set the brilliant scarlet fruit. This climber delights in a rich loamy soil and is easily propagated by seeds or layers. Any pruning required should be done during late winter or early spring. I have before me a vase with sprays of this cut during November. Associated with it are dried grasses and sprays of Physalis Franchetti, and a very effective winter decoration they make. Even though the berries get a little shrivelled they retain the red and gold effect. R. FINDLAY.

Wisley.

Photinias

These are not so well known as they deserve to be. According to "The English Flower Garden" they are rarely seen except along the south coast, though quite hardy enough for sheltered places inland.

P. SERRULATA (Chinese Hawthorn), also known as Cratægus glabra, attains a height of from 15 feet to 20 feet or more, and is an excellent evergreen for walls (any aspect). Its large and handsome rich green serrated leaves with the lustrous red of the new growths in spring are very attractive. The flowers are white, like those of Hawthorn, and appear from April to July. In favoured districts it can be grown as a tree in the open, making dense masses as broad as high. As a wall plant it is said to be hardy generally. It was introduced from China and Japan in 1804. Here we grow it as a tree in the open, with no special attention beyond staking against high winds.

P. DAVIDSONÆ is an evergreen tree introduced from China in 1900. The leaves are dark glossy green, each from 2 inches to 6 inches long. Fruit roundish, orange-red in colour.

P. ARBUTIFOLIA (Californian May Bush) attains a height of from 10 feet to 20 feet, the white flowers appearing in July. This plant, as its name implies, hails from California.

P. VARIABILIS (also known as P. villosa) comes from China and Japan. It loses its leaves in winter, but retains its bright scarlet berries long after the leaves have fallen. The leaves themselves turn a fine crimson before dropping in the late autumn. It is well worth growing for its autumn colour.

All the Photinias should have a light, well-drained soil, shelter, and sunshine. Soil recommended, two parts sandy loam with one part leaf-mould.

(CAPTAIN) E. A. SAUNDERS.

The Gardens, Carclew,
Perran-ar-Worthal, Cornwall.

Rhododendron moupinense

On February 1st I came across a small group of this Tibetan Rhododendron in full bloom. This was growing in a partially-shaded position beneath large overhanging trees, and, being so full of bloom, caught the eye immediately.

It is rather a thin-growing shrub, as seen, but another example planted in a sunnier position presented a more stocky appearance, and the flowers in the latter instance conveyed the impression of possessing greater substance and attraction.

This Rhododendron, which is said to grow in the forks of trees in its own country, is quite an acquisition to English gardens, its large white flowers and deep-coloured stamens being very desirable. Planters, however, should not overlook the importance of shelter, for although it appears to be perfectly hardy, the lovely flowers coming so early in the year could not be expected to weather undamaged the storms of February in exposed situations. E. M.

Celastris articulatus
The fruits retain their red and gold effect all through winter

Rhododendron parvifolium

This also is now in bloom. The bushes, each about 2 feet in height and clothed with small brownish leaves and deep rose-purple flowers, afford charming patches of colour, the latter appearing in small clusters at the tips of the growths.

This Siberian Rhododendron would appear to be very desirable for the cooler slopes of the large rock garden. Its very early blooming must, nevertheless, call for discretion in the way of shelter. E. M.

Picturesque gardens in Wig shire

There are at least three regions i land's southernmost county whic worthy of frequent visits, whether botanical or a horticultural point o These are Monreith, Logan, and fa Castle Kennedy. Monreith may scribed as a great centre of alpine a baceous flowers, which, growing i instances as if in their native "ha are in perfect correspondence wit sylvan and artistic environment. G flowering trees are well grown at M conspicuous among these being the Syringas, Olearia Haastii (equally c at Lochinch), and Cotoneaster frigid its myriads of radiant berries. The of Oriental Lilies receives attent Lilium regale, a glorious native of China, which is grown to perfecti magnificent giganteum, originally i from the lower slopes of the Himalay the hardly less imperial auratum phyllum. About two years ago Sir Maxwell published a very compre volume on "Flowers," with coloure of great beauty, to which I frequentl for the sake of culture and inspiratio

No gardens in southern Scotlan which I am acquainted, are more su attractive than those which environ House, in this Peninsular Par Kirkmaiden. The collection of th Rhododendrons (in whose cultivati McDouall is an expert), of Primul Oriental Lilies is very extensive and crowds of enthusiastic visitors to during the summer and autumn mon the radiant seasons of May and Ju are thousands of Primulas of the m quisite colours, adorning the spaci proach to the great Mansion House, grassy fringes and enclosures of the Then, also, the flower garden is a many-coloured fragrant Rosarium, charming Water Lily pond in the c this Paradisus terrestris.

Castle Kennedy, which may be reg a great centre of landscape garden an Arancaria avenue of supreme fas leading in the direction of Lochinch from the beautiful miniature oval which the latter is surrounded by a able blaze of Azaleas and Rhododen June and July. Snowing upwards calm, mirror-like surface in that be period are myriads of Arum flow Marliac Water Lilies (Nymphea Ma which came from Lyons many years have never seen these glorious flora tions anywhere in England or Sco greater perfection. As a striking r the exertions of Mr. Findlay (now intendent of the Horticultural Gar Wisley) the collection of Lilium gig at Castle Kennedy is probably the in Great Britain. The wild garden Countess of Stair, where Oriental L grown with marvellous effectivene shady wood adjacent to the charmin garden of the Castle, is also a re distinctive effort and abiding fas Art itself becomes Nature under such conditions as these.

DAVID R. WILLIA

Planting

The work of planting new trees or those already in garden or ground now to be taken in hand and broug conclusion. Such trees ought, after been planted, to be staked, and if is at all dry they ought to be watere More trees are annually spoiled after by neglecting the precaution of stak watering than from any other cause.

FLOWER GARDEN

Narcissus Cheerfulness

; is a Poetaz variety with double ers, a sport from the well-known ety Elvira. The neat flowers are of size and borne in clusters. The is creamy-white suffused with the centre. It received an Award on February 23rd when shown by V. Barr, of Wimborne.

A blue garden?

is there that does not love a blue The herbaceous border, with its and Delphiniums, is not possible on -baked Riviera, where so many gardeners are to be found, but there is a will there is a way," and rden of blue shrubs and bulbs has lved. The backbone, so to say, of hing is found in the perennial and ering Lithospermum rosmarini- and the dwarf trailing Rosemary. wer from November to mid-April be used as in England one uses rnea or the trailing Aubrietias. In the ground is covered, so that there eed of digging or grass-sowing in Blue Periwinkles, that are all the r a bit of clipping in late autumn, e used with blue Anemones from r the Apennines to add to the blue n shady places the blue Hepatica flowers profusely in spring, but ornamental foliage all through the On rough banks the blue Borage be despised, and where the soil is ist the wild Hyacinths add much to g colouring. There are many blue with small flowers that can be into the scheme, and there is an blue-flowering dwarf shrub called hera rotundifolia that is delightful shade and rather moist corners. It utiful that it deserves a little care at hen think of the multitude of Irises re are, from I. stylosa and I. to the pure sky-blue of I. pumila eliest form. And to vary the shades plant groups of Tazetta Narcissus, e care of themselves when once and revel in the shelter to their hile Phyllica ericoides and the per- wering Candytuft can be used to e mass of blue. Almost all these hrubs are much improved by a clipping in spring to keep them ut that is the only care they require ce established. This sort of semi- rden is a delightful groundwork gger shrubs can be planted if re- nd saves much labour and expense regions. E. H. WOODALL.

Narcissus Cheerfulness, which gained an Award of Merit when shown by Mr. J. W. Barr

Flowers cream coloured and yellow

Twenty-five Best Irises

s a list of 25 best Irises which I for my garden visitors.

—Fairy: Strong grower, tall, fra- nd beautiful as a cut flower. I t be without this Iris. I use them gh the garden for contrast with other Mrs. A. M. Brand: The next best s in my garden. It is fragrant and g period of bloom. Wyomissing: A pale pink which grows into thick ery quickly; not large flowers, but in masses.

LED PINK.—Her Majesty: A darker n Wyomissing. Growth vigorous. "rose colour" in mass. Georgia: fective "pink" in mass effect.

TO RED.—Seminole: One of the richest-coloured varieties. Free-blooming, strong grower.

YELLOW.—Flavescens: The most vigorous of the yellows and fills a distinct need in the garden. A delicate shade of soft yellow and combines well with all other Irises. Makes beautiful and effective clumps. Shekinah: A stronger shade of yellow than I. flavescens and a very good grower.

YELLOW AND BLUE. — Loreley: Strong grower and forms good clumps quickly. A pleasing colour in mass.

WHITE AND PURPLE.—Rhein Nixe: Very much admired by all who see it in a large clump. A strong grower.

LAVENDER AND BUFF.—Quaker Lady: Very rapid increaser and strong healthy grower. Profuse bloomer.

BLUE TO VIOLET.—Celeste: Beautiful for the pale blue effect in mass and a good grower. Oriflamme: Strong grower and handsome bloomer. Ballerine: Large fragrant flowers; tall and blooms early. Healthy grower. Princess Beatrice: A wonderful Iris in growth of foliage and flowers. One everyone must have. Juniata: One of the tallest. Large fragrant flowers; deeper than in Princess Beatrice.

PURPLE TONES.—Monsignor: A vigorous grower and a wonderful mass of colour when seen in clump. Autocrat: A favourite with me on account of its vigorous growth and large masses of bloom. Nine Wells: A tall late-blooming variety of beautiful colour.

PURPLE.—Parc de Neuilly: A fine late purple, giving a handsome garden effect. Produces many seed pods.

REDDISH-PURPLE WITH BRONZE TONES.—Lent A. Williamson: Increases very rapidly, large rhizomes and flowers. One of the best. Does not always bloom first year. Prospero: Another wonderful Iris, much like Lent A. Williamson, but taller. Good healthy grower. Alcazar: A strong grower with flowers much like Lent A. Williamson.

DARK PURPLE.—Perfection: "A smaller Dominion," but much more rapid grower and makes a good garden effect.

BUFF LILAC TO DEEP RED.—Reverie: Has distinction not only of colour and vigour, but perfection of form and substance. Everyone that sees it wants to own it.

I have most of the varieties mentioned in the other lists which you have published, but many of them are only Irises for the collector and not what I should want picked for me if

I could only have 25 and wanted "good bloomers and good growers" regardless of price and rating. I have often wished that I could have had such a list when I first started to grow Irises.—MRS. WALTER E. TOBIE (Me.) in *Horticulture*.

Old Sweet Peas

Looking through an old notebook (1902) I find a list of Sweet Peas which were at that time considered to be in the top flight. I give the names of a few of them, and, no doubt, these names will recall memories to those who, like myself, have watched the rise of the Sweet Pea from comparative insignificance to its present popularity. Whites were represented by Blanche Burpee and Sadie Burpee. Lovely and Prima Donna were favourite pinks. Hon. F. Bouverie was coral-pink, while Lady Mary Currie was a good rosy-orange. Miss Willmott, if I remember rightly, was then a novelty, and in colour was salmon-red. Salopian was distinct crimson, shaded orange-scarlet as nearly as I can describe it. Mars, of course, speaks for itself, being of a dark fiery-crimson colour. Prince of Wales and Lord Kenyon were deep rose-pink and we considered to be very large. Lady Hamilton and Countess of Radnor w best lavenders of their period. D Westminster was a maroon, so was Knight. Queen Victoria and Hon Kenyon represented the "yellow" Prince Edward of York had carmin dards and rosy wings, while Mrs. Chamberlain and America were t striped varieties—pink stripes on a ground.

W. *Mabie.*

REMINDERS FOR THE WEEK

Southern and Midland

Broad Beans

Where the seeds were sown in boxes and the plants have been hardened off they may now be planted out in rows 2 feet apart and 6 inches between the plants. A further and larger sowing should now be made in the open and the soil stirred amongst those that are already through the ground.

Seakale

To supplement the roots that have been forced for a winter supply, large pots may be placed over some of the sorts that remain in the bed. The stalks from these plants will have far better flavour than those forced inside. Thongs may be now planted and the bed prepared for seed. Seakale will succeed well on a north border.

Globe Artichokes

Now is a suitable time to increase the stock of these plants by division, replanting in deeply-trenched and well-manured soil. Seeds may also be sown at this date in gentle heat, growing the plants as near the glass as possible, gradually hardening them off for planting out in May.

Onions

Seedlings in boxes should now have ample air and not be allowed to grow lanky, as they never make good bulbs. Plant Onion sets where desirable, and where seed has not already been sown attend to this at once. The winter Onions should be made firm in the ground, as worms are troublesome to newly-set-out plants.

Gladioli

Do not omit to get the corms of these planted 4 inches deep in heavy, and 6 inches in light soil, at a distance of 9 inches apart, as soon as possible. The Primulinus varieties are excellent for decoration and should be included. In wet gardens it is wise to place sand beneath the corms.

Herbaceous borders

The plants are now shooting freely and a thin dressing of manure may be forked lightly in amongst the plants. If this was not done in autumn, protect from slugs with soot and lime, and any further division or planting should be done at once.

Hedges

Privet and other evergreen hedges may now be clipped hard back, and those that are not thriving may have a dressing of manure forked in around the roots. Lonicera nitida is an excellent new evergreen shrub for hedges, and with others may still be planted.

Newly planted fruit trees

In gardens where the soil is apt to become dried up during the summer it is advisable to give an early mulch of manure, leaves, or lawn mowings. Each tree should be examined, and if loose in the soil should be made firm. Those that require pruning should be attended to.

Raspberries

By now all newly-planted canes should have been cut back as previously advised. November Abundance is a splendid autumn-fruiting variety, and with others may yet be planted, but it must not be forgotten that they must be cut back to within 3 inches of the ground and given a heavy top-dressing of stable manure if success is to be obtained.

Cucumbers

There is no better time than the present for sowing seeds where Cucumbers are to be grown in pits, frames, or cold greenhouses. A temperature of 60 degs. to 65 degs. is necessary to germinate the seeds. These should be placed edgeways in small pots of light soil, which if fairly moist should not be watered until the plants are through, as Cucumber seeds very soon rot.

Strawberries

Some of the early sorts by now have been gathered, and if the plants are gradually hardened off and planted out on a sunny border in May a second crop can be taken from them during autumn. Those forming fruit should now be kept supplied with abundance of water and the fruit thinned to half-a-dozen when once they have set. Feeding should be discontinued at this stage and a sharp look out kept for mildew, which is generally due to bad ventilation. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Scotland

Kitchen garden

The soil now dries rapidly, and advantage should be taken of suitable weather in order that a breadth of early Potatoes may be put in. Everyone has his favourite variety—that which experience has proved to be most suitable is always to be preferred to untried novelties, at least, for the bulk of the planting. Sowings of the various Brassicas may be put in, choosing a well-exposed situation. The Onion bed must be thoroughly worked, and, while I do not believe in treading or rolling, it may be necessary to consolidate the soil where the staple is light. Transplant autumn-sown varieties. Although a percentage may bolt, yet a bed of autumn-sown plants comes into use early in the season. Broad Beans and Peas may be sown. If mice or pheasants be troublesome in respect of the latter red-lead is an unfailing remedy. Sow Parsley and a pinch of Lettuce seed. Potatoes, Radishes, Carrots, Turnips, and Lettuces previously sown or planted in frames must be exposed on all suitable days, but they must, at the same time, be carefully protected against frosts or cutting winds.

Sweet Peas

Those who desire to have screens of mixed Sweet Peas can now safely sow them. Although the blooms from plants so may not be so large in size or so ro stem as those of others raised in boxes, yet, if well done to and sown pared trenches, they will be luxurian duced, and are most useful where quantities of Sweet Pea blossoms are A screen or hedge of the older gra type generally evokes interest, for ma recruits to the ranks of Sweet P thusiasts have never seen others th modern "Spencer" type.

Cyclamens

If there be one plant more than which succeeds under perfectly coo ment that plant is the Cyclamen. Th not imply that it ought to be exp frost, but if it be grown under ab cool conditions the foliage is a rev while the flowers are full of substance lings from boxes may now be pot singly and placed near the glass in from which frost is merely excluded. who have a good strain are advised their own seeds. This is easily d seeds ripen without any trouble, an ought to be sown as soon as they a

Caladiums

Those who grow these attractive should now box up the dry roots a them. A mixture of leaf-mould and a suitable medium for the boxes, an growth is fairly well advanced the pla be potted off singly. Caladiums mus overpotted or the colouring suffers inch and 6-inch pots are quite large indeed, C. argyrites is best when con pots 3 inches or 4 inches in d Caladiums revel in a high, moist t ture.

Orchard house

The trees in the unheated orchar will now be breaking into bloom, an be necessary to do a considerable an fertilising. This is especially desirabl case of Pears, which, under glass, a setters unless carefully fertilised. and Plums at this date, as a rule, freely with no more attention than the stems round about midday. A consisting of a few inches of man conserve moisture and lessen the watering where the trees are planted

Rhubarb

Although open to correction I cons the present time is the most suitable division and replanting of Rhubar roots are now fairly active, and ther danger of crowns rotting or refusing than there is when division is don the winter or in the early weeks of t If it can at all be avoided, no pickin to be permitted during the first seas replanting, in order that the crowns come established and vigorous.

W. McG

Mabie Gardens, Kirkcudbrightshire

ORCHIDS

A new Miltonia

EE years ago the Royal Horticul-l Society granted a First-class Certi-e and a silver-gilt flora medal for Miltonia Lord Lambourne, shown by Charlesworth and Co. The origin ybrid was not given, but it was an aking plant, there being nothing like lour, form, or beauty. The variety mbourne is now followed by another of wonderful size and superb beauty. ebruary 23rd last the fine Miltonia d herewith was brought before the Committee and received the high of a First-class Certificate. This , which was shown by Mr. Robert , Stamperland, Glasgow, is named Lycæna Stamperland Variety.

parentage of the newcomer is Princess Margaret x Miltonia Lord rne. It is a rare and beautiful of untold value, having enormous dy-coloured flowers. The sepals are he inside two-thirds of the flower ep velvet-crimson, the petals broad the same rich crimson colour. The is broad and round, the base having diating lines of crimson. H. C.

Miltonia Lycæna Stamperland Variety
Considered by many experts to be the finest hybrid Orchid yet raised
First Class Certificate, February 23rd

VEGETABLES

aising Tomato seedlings

UBLE is often experienced by nato growers in raising the young its. The seedlings may do quite well ey are potted off, and then for some hey damp off.

e troubled in this way would do well out the following directions:—

on as the young plants are large to handle pot them into 60 size pots. s must be washed clean, this being portant, and a few pieces of crock put ottom. Put a little good leaf-mould crocks.

oil should be of a light composition, part each of loam, leaf, and sand. be brought to the same temperature house where the plants are before Pot moderately firm, and if the soil do not hurry to water them. The best placed on a slate slab or sheet preference to wood.

emperature of the house should be newhere about 55 degs. Give a little t midday when possible.

sing the soil is practised a good deal growers, but if the drainage is good, en in watering, and all wood, etc., of the soil it should not be necessary.

L. P. READ.

Potatoes

'otato-growing on the decline?" asks pondent. I should say, emphatically, far as this district is concerned, but n the increase. As previously noted DENING ILLUSTRATED, cottagers and t holders seem to have realised that t advisable to grow too many of of the root vegetables, that is, only ut enough for home consumption, be-rplus stock is not saleable at a profit. e remark applies to green vegetables, h much smaller quantities are now Potatoes are grown in big breadths, erience has taught the necessity of and growing the sorts most suitable different types of soil. For the last three years Arran Comrade, Arran r first early), Ally, Great Scot, and Perfection have been the favourites in neighbouring allotments and gardens. Until another vegetable is found, alike available for home consumption all through the year and the surplus stock of which can usually be readily sold, it is doubtful if the Potato will decline in favour. Of course, the price obtained for surplus stock varies in different seasons, but in 1924 and 1925 it has realised four shillings per bushel, a very fair return on rent and labour, for crops have been good and disease in the sorts above noted practically *nil*. I have suggested planting considerably larger breadths of Arran Rose this season, for it does its work very quickly and should command extra good prices in the neighbouring town. It is far more satisfactory on our soil than some of the better-known early varieties, as, for instance, Sharpe's Express and Duke of York.

Hardwick. E. BURRELL.

Club-Root, or Finger-and-Toe

Very few pests of the vegetable crops are more troublesome and annoying to the kitchen gardener than this wretched disease of the Brassica family. Many an amateur, in his despair, has abandoned the culture of winter greens, owing to club root, which is often regarded as incurable.

But club root can be kept in check, if not entirely eradicated, provided the remedy is properly applied. The remedy is the old-fashioned and oft-tried one of lime. How many readers will, I wonder, smile sceptically at this statement, and recall that heavy dressing of lime given last year or the year before which brought no appreciable result? What, then, is the secret of success?

Club root, or Plasmodiophora brassicæ to give it its full title, is a slime fungus which is found in the soil in spring and summer in jelly-like masses, and whenever it comes into contact with the roots of Brassica plants it effects an easy entry and sets up the crippled and swollen appearance of the roots, which gives rise to its popular name.

But club root can only thrive in an acid medium, so what we have to do is to convert the soil from an acid to an alkaline condition and the disease will die a natural death.

This process of conversion, however, is not quite so simple as it might appear. Lime will do it, but it takes time. The action of lime in the soil is peculiar and complicated, and the bacterial action set up by it proceeds on fixed principles and cannot be stampeded. The acid of the soil is liberated gradually and not in sudden volume, and a heavy application of lime is of no benefit, as only a limited amount can be made use of at a time. The excess is waste and may do more harm than good.

So in treating the soil for club root we must proceed slowly and persevere until the corner is turned and the soil becomes definitely alkaline. Two cwts. of quicklime to 10 square rods, applied during the winter, are sufficient for ordinary soils, and this should be repeated each year until the disease has disappeared. Little difference will be observed the first year, but the third or fourth application will usually see the last of club root.

During treatment there is no need to fallow the soil, and it appears to make no difference whether Brassica crops are grown on it or not; but care should be taken not to add further supplies of acid, and superphosphate, sulphate of ammonia, or heavy dressings of humus should be avoided. C. H. M.

Cabbage-Root Fly

This troublesome pest, the white grubs of which attack the roots of Cabbage plants and often cause serious losses, can be destroyed by watering the soil with a solution of 1 gallon crude carbolic acid to 30 gallons of water. This solution may be applied before planting, or even while the plants are growing, so long as care is taken to avoid splashing the leaves. It has no injurious effect on the soil, and rarely, if ever, does any harm to the young roots of growing plants.

C. H. M.

Grapes Then and Now

THE Grape grower of 70 years ago had much more to contend with than have those of the present day. There were no late varieties at that time if we except West's St. Peter, which some gardeners managed to keep through February, but it was at the expense of the Vines, for bottling was unknown till Mr. William Robinson introduced it from France.

Delay in pruning would, of course, cause the Vines to bleed, so that their life was shorter. It is true some of the fruit was cut and had the stem stuck into Beetroot or Potatoes, but I am not sure this plan was very successful, although we now know that it does not take much water to keep the berries and berry stems some months without shrivelling provided the water is prevented from evaporating into the atmosphere, as it does when the neck of a bottle is left unstopped. There is no transpiration through the skin of the berry, as is generally imagined.

But there is a continual circulation of water through the berries, and if a large quantity is at hand it will abstract much of the flavour from the fruit. Still, there must be enough for the stem to remain permanently immersed, or the water will become rancid in a few hours. We have heard of people being taken ill after eating bottled Grapes, and this may happen if the water is allowed to evaporate below the stems after it has extracted some of the juices. We know that water very soon becomes offensive if it contains dead vegetable matter, but the Vine stem should not be allowed to die, and then so long as it remains in the water, and the berry stems do not shrivel, that water will not become putrid. No charcoal or anything else is required.

If it should happen that the water sinks so low as not to reach the stem the bottle should be thoroughly cleansed before refilling; then there will be no danger of the berries absorbing the poisoned mixture. After having its freshly-cut stem placed in water a good-sized bunch, with its berry stems perfect, may absorb 1 oz. during the first 48 hours, and after that 2 ozs. of water in an air-tight vessel will keep it supplied for two or three months. This has been amply proved by the use of glass vessels of 2 ozs. capacity stoppered with rubber.

The Vine stem to which the bunch is attached will generally need cutting afresh about the third day after insertion; after that its pores are not liable again to become choked supposing the wood is fairly ripened.

It matters not which end of the stem is placed in the water; it will be quite happy bottom upwards, but no leaves should be left on the stems or they will quickly cause the water to evaporate.

When there has been trouble with red-spider or mildew it is a great advantage to be able to clear a house of early Grapes by the middle of August, while the sun is still powerful, for if the Vines are then thoroughly drenched with water containing 4 ozs. soft soap to the gallon, with as much sulphur as can be applied through the nozzle of a powerful syringe, and the house closed for three or four days, so as to keep the shade temperature as long as possible up to 80 degs. or 90 degs., there will be a thorough clearance of these pests. Contrary to the general belief, sulphur is useless unless treated sufficiently to produce sulphurous acid.

But to return to the middle of the last century. I have said there were no late varieties of Grapes, and I may add there was not the abundance of fruit of various kinds, excepting Oranges, arriving from abroad as is now the case, therefore those who could afford it had some of their Vines forced, so as to have ripe fruit as early as possible, and I do not remember any inside borders of that time. Hot-beds were made over the roots in winter in order to persuade them to keep time with the top growth. There were many disadvantages in this. For one thing air could not reach the roots, and the text books tell us that roots will starve without oxygen.

The manure would be taken off in summer and then the border was like so much liver, and never became pulverised. It is a mystery how the Vines managed to keep up a lingering existence as long as they did. With sharp forcing the fruit would be earlier every season till the Grapes, such as they were, would ripen in January, and the final result would be two so-called crops in one year. Then all would be over with the Vines.

When heating by means of pipes became more common some growers made inside borders with hot-water pipes under them, but I never saw any great success with this plan. Even such a clever grower as Mr. Meredith, of Garston, did not succeed. Still, I think it ought to have succeeded, for I have seen a fair amount of success with pot Vines grown over the pipes. I imagine the growers failed with the planted-out Vines by giving them too much heat. Certainly hard-wooded plants do not want a temperature at the roots equal to what the leaves will luxuriate in, say, 70 degs. to 90 degs.

It would have been an advantage in such a season as we have just passed through, when everything in the garden was a month behind its usual time, if we had some means to gently warm the border in the early stages of growth, so as to enable root action to commence earlier than it did. Most of your readers know by this time that the roots of well-managed Vines do not commence to extend till some of the leaves are more than half expanded, and consequently up to this time they can take up very little, if anything, besides water. It is of great importance to have them in full working order as early as possible, or there will not be sufficient nourishment to form stout flower-stems and abundant pollen.

Many growers unwittingly delay root action by giving nitrogenous manures at the time of starting the Vines, thus actually poisoning the soil so that the young roots will not readily enter it, and then wonder why the flowers are weakly and do not set. No quick-acting nitrogenous matter, such as nitrates, should be given till one or two of the primary leaves show a bluish tint. This, in well-managed Vines, will show in the two first-formed leaves, which are not wrinkled like those subsequently formed, and will give the signal that root extension and root feeding have commenced. Then it is allowable, even desirable, to give a little stimulating nitrogen. Any other requisite, such as potash, phosphates, or lime, may be applied in late autumn or winter, and they will come into full action when the missing link, in the shape of nitrogen, is added.

Although I caution readers not to apply nitrogen at the time of starting, I have, when I could get it, given very strong liquid manure from cows or horses in the late autumn and early winter where the borders were poor, but never later than January, with beneficial results.

I have mentioned the subject of warming the border. One winter during the last decade of the past century we had severe weather, the frost being so sharp that some pipes which supply water to the suburbs of this city were frozen as late as April. To save fuel the pipes and boiler of a large were emptied and remained empty spring.

The Vines started into growth no later than usual, but after the leave partly expanded it was noticed that wl sun appeared they flagged badly. Th at first attributed to the wrong cause, examining the border as to its mois was found that the soil at a few inche the surface was still frozen, and there sign of root action. A plentiful supply water was given and the effect was ma

So we see it is quite possible to t chill out of a border without either p hot-bed, and once warmed and pr from outdoor fluctuations it does not g to its previous arctic condition. The an old practice of turning the Vine ste side after pruning, and I think this still be carried out with the amateurs' house where it is desirable to accom greenhouse plants during the winter course, arrangements must be made front of the building for this purpo that is not a difficult matter where th front ventilators.

The Vine stem and its buds are p hardy in this country while dormant, soon as growth commences, or rath before, it is necessary to protect th have known crops spoiled by neglecti when frost has occurred in May, wh Vines were in flower with their stems e on the outside border. WM. TA

Bath.

Thinning fruit

Fruit-trees in a good year frequen the fruit much too thickly to attain its size. Experienced growers know tha fruit-trees are allowed to bear too f whole year is needed for them to rec and obtain strength to bear another No doubt this is the cause of the falla fruit-trees can only bear a full crop i nate years. This is not so unless, of late spring frosts destroy the blosson a favourable season, to prevent exh by overbearing, the fruit must be thi such an extent as to leave no more t trees can reasonably carry. To thin the proper time is when it is set and be plainly seen which are likely to s a good size. Fruits such as A Peaches, dessert Pears, and Nec grown on walls will be the first to attention, afterwards the Apples, etc., in the open garden. I find the b for the purpose is a good pair of sciss the work can be carried out better an quickly with this than any other. overdone the thinning of a crop d lessen the actual weight of the sa those left swell to a much larger s are of much better quality. F

Late dessert Plums

It happens not infrequently that duri August and throughout September the glut of dessert Plums, but with the ar October and from then onward Plums have observed, appreciated in a grea gree. It may be of service, therefore, tion be made of a few really reliab varieties, all of which are of superior Foremost I place Coe's Golden D variety which will succeed where othe It is, however, of rather delicate const and must have a warm situation on th Its fruits are in perfection durin October and during November, althou one occasion, I had it in good order o Year's Day—a trifle shrivelled, I adm sound and sweet. Coe's Violet is a of Golden Drop in all save colour, and more freely than the latter and is a

s Plum. Reine Claude de Bavay—a course—is also a choice late variety. is a trifle ungainly, perhaps, but that atoned for by its cropping qualities. find that, in wet seasons, the fruits ject to cracking, but by laying spare ver the roots as ripening approached king was eliminated. Monarch, Messrs. Rivers a good many years a Plum which no one will regret True, it is not one of the very ut in Scotland it turns in about the third week in October. A free bearer, it is a robust grower and does well on a west wall. The fruits are roundish-oval, dark purple in colour, and Monarch is, altogether, a desirable sort. Golden Transparent and Late Transparent, both Gages, complete my selection. Both are well flavoured, good doers, and regular bearers, while if they are slightly earlier than Coe's Golden Drop they, nevertheless, come in usefully after the bulk of the September Plums is over. W. McG.

Mabie.

Hints on Arranging Flowers

HING is more interesting, whether in mansion or humble cottage, than arrangement of flowers. A few naturally arranged give a much more effect than a crowded arrangement same flowers. While a mass of may appear more elaborate to the lacks originality. For instance, I efer using seven flowers than eight, more apt to avoid symmetry and lance, which are hardly ever found e.

losing receptacles for floral arrange- is essential to study the colouring oms and furniture so that they blend oniously as possible.

depends upon the right sense of pro- and lines of the natural growth of and foliage. Every arrangement of should have some buds or half-open The reckless cutting of flowers or hich seems out of place must be Rather wait until most of the ire in the vase, and then take time in deciding which flower or leaf must be sacrificed. The beauty of your arrangement largely depends on this.

If the foliage hangs low always bear in mind to have the tips bend slightly upwards, as it is only the natural tendency to grow towards the sun. This can easily be accomplished by rubbing and slightly bending the tips with the thumbs and forefingers for a few seconds. By the same method, flowers such as the single Chrysanthemums will have a natural "droop" for a dinner-table decoration and give a very artistic effect.

Colour combinations greatly depend upon the surroundings. Frequently a bold splash of maroon or dark blue will give a delicate arrangement an individuality of its own.

For dinner table decoration I think the low centrepiece with openwork tablecloth showing the surface of the table allows much more freedom for original ideas and is more restful to the eyes than the formal silver vases with a stiff white tablecloth.—*Gardeners' Chronicle of America.*

Answers to Queries

ns—Queries and answers are inserted in ILLUSTRATED *free of charge if corre- follow these rules: All communications clearly written on one side of the paper l addressed to the* EDITOR *of* GARDENING ED, *8, Bouverie Street, London, E.C. 4. n business should be sent to the* PUB- *he name and address of the sender are in addition to any designation he may be used in the paper. When more than y is sent each should be on a separate aper, the name and address being added As* GARDENING ILLUSTRATED *has to be sent some days in advance of date, queries ways be replied to in the issue immedi- owing their receipt. We do not reply to y post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

TREES AND SHRUBS

down Heath

T.).—If the unopened buds of your e pink it is Erica lusitanica, and if d sweetly-scented it is E. arborea. cut it back with safety, but not an 4 inches of the base of the fur- growths. Often such Heaths are eaves for 2 feet from the soil, and I have cut such plants—up to 11 vn to the ground-line, only a small ge has again broken into growth. divide and transplant any of the ing Heaths from September until le of May.

a Metake

. T.).—Bambusa Metake may be ransplanted any time during the winter, and spring, up to the end of latter month being considered the table as the plants at that time are mencing their new growth, and thus quickly re-established. Should the f May prove hot and dry it will be advisable to syringe the plants at least once each day, preferably towards evening. You may safely divide them to almost any extent, working in a quantity of leaf-soil around their roots. All the Bamboos enjoy shelter from strong winds.

Clematis montana superba not flowering

I have had a plant of this established now for three years in the angle formed by a wall facing west and one facing north. It has had no flowers at all so far, but has grown rampantly, the wood growth probably being at the expense of the flowers. How can I remedy this? The natural soil is poor and sandy, but it has been enriched with top-dressings annually of good loam and manure, and a week ago I worked in a few handfuls of old lime. I am within half a mile of the sea. I suppose the salt air does not affect it? Certainly the other varieties of Clematis, Viticella, Jackmanni, etc., do excellently. W. L. I.

[By adding lime to the soil containing your Clematis you have acted wisely, as the Clematises are plants of calcareous regions, and although they often thrive and bloom freely in ordinary garden soils they succeed even better where lime is present. The non-flowering of your plant is probably due to over-luxuriant growth, although we have never before met a similar case with this mountain species. Avoid rich top-dressings in future, either of loam or manure, and there is little doubt that your plant will bloom in due course. Do no pruning whatever until it has bloomed, as the flowers are borne upon the current year's wood, to remove which is to cut away the flowers. Any thinning or pruning necessary should be done immediately the flowers are over. The salt air should not produce any ill-effects.]

Border for Azaleas and Heaths

I shall be much obliged if you will tell me whether you think a border planted with Azaleas or Heaths would do facing east with a Rose pergola at the back. The border would be about 6 feet wide. If not, what would you advise in low-growing shrubs?

DONEGAL.

[If your soil is free of lime there is no reason why both Azaleas and Heaths should not succeed in the border you mention, and would look well with the pergola in their rear. The soil should be trenched to a depth of 2 feet at least, and a little peat or well-decayed leaf-soil placed about the roots at the time of planting to encourage a quick start.]

FLOWER GARDEN

Plants for a north bank

(J. D. Morrice).—The great Siberian and Himalayan Rockfoils (Megasea) would succeed in the position you mention and form a permanent covering to the ground. These include Saxifraga cordifolia and its varieties, one of the finest being S. cordifolia var. purpurea, which flowers later than the type, S. crassifolia, S. purpurascens, S. lingulata, S. Milesi, S. hybrida splendens, S. Brilliant, S. Progress, and other hybrids. Other plants which might be used for permanent covering include Vinca (Periwinkle) major, V. minor, and the elegant V. acutiloba with delicate mauve flowers, and if the site is open to a fair amount of sunshine Erica mediterranea hybrida, E. carnea, E. ciliaris, E. vagans, and E. tetralix would prove suitable.

MISCELLANEOUS

Sowing seeds in hotbed

(E. T. S.).—If the hotbed has been properly made there is no reason why your suggestion could not be carried out. The advantages of boxes are threefold. They can be removed to a cool frame at any time, the hotbed may not sink to the same level all over, and after one lot of seedlings is through the soil the frame can be used for other seeds or Cucumbers.

Seed sowing

(W. P. P.).—We have read the enclosed article on seed-sowing, but it is not quite in accordance with our own views. However, to answer the question raised. (1) Pans are to be preferred to boxes for seed-sowing, because wood is rather inclined to encourage the growth of fungus and cause the damping off of seedlings. For the same reason leaf-soil (as advised in the article) or any decaying vegetation is undesirable in seed-pans. Pans or pots should be washed thoroughly clean before using, and several small ones should be used rather than one large one, as by this means damping off or any other trouble is localised. (2) The reason for using a piece of sacking is not very clear. The idea may be to conserve moisture, or to confine the young roots to the soil, but in practice it

would prevent free drainage, which is important, and the young roots would penetrate it and adhere to it, so that it would be difficult to remove them without injury. A layer of Sphagnum Moss would be better, but neither is really necessary. Seed-pans can be kept moist by holding them in a tank or pail and allowing the water to soak up from below (see Fig. 1, page 152). (3) The reason for plunging pans in sand or ashes is, doubtless, to prevent the rapid drying out of the soil, but if the bed on which the pans are placed is kept moist and the frame fairly close there will be little difficulty of this kind to contend with.

Soil pests

(H. W. D.).—You would find the remedy you mention, "Kilogrub," effective in clearing away beetles, leatherjackets, and other under-surface pests. Dig a little into the soil before planting, or dibble some round the roots of growing plants. It is harmless to plant life.

Creosote for greenhouses

(Anxious).—We should not advise creosote for greenhouses, except when a house is repaired or rebuilt. Then it is a good plan to paint the wood with creosote or Solignum on the sides only that come into direct contact with the brickwork. Any wood exposed is best treated with good quality white lead paint.

Gooseberry caterpillar

(Dulwich).—We suggest you use "Kamforite H." This only partly sterilises the soil and destroys the chrysalides, but not the finer bacteria, which are necessary to plant life. In addition to its insecticidal and fumigating qualities this remedy contains fertilising properties which will stimulate the bushes.

American Gooseberry mildew

Would you kindly let me know in GARDENING ILLUSTRATED what is the most effective spray for the protection of Gooseberry bushes from attack of American Gooseberry mildew, and when to apply it? SUBSCRIBER.

[Two spraying fluids are in common use for spraying Gooseberry bushes affected with American Gooseberry mildew. (1) Lime sulphur.—This fungicide should be bought from a good firm and used according to the maker's directions. Any of the firms advertising in our pages who deal in sundries would supply you. The required amount of water should be placed in a wooden vessel and the concentrated lime sulphur slowly added. The mixture should be well stirred and then applied at once. According to the Ministry of Agriculture the following varieties of Gooseberries are liable to be damaged by lime sulphur:—Berry's Early (Keepsake), Cousin's Seedling, Lancashire Lad, and Crown Bob. The above four varieties should be sprayed with lime sulphur at half summer strength, while a few varieties, chiefly the sulphur varieties, cannot be sprayed safely with lime sulphur at all. Golden Drop is given as an example of the latter class. (2) A.P.S. washes are often used instead of lime sulphur, especially for dessert varieties. Again, this wash should be bought in concentrated form and diluted according to the maker's direction. We have always found lime sulphur to give good results when it has been used with care, but you should be careful with the spray on certain varieties. A.P.S. washes we have not ourselves tried. The best time to spray is about the first week in April, repeating in three weeks, and again seven weeks later if necessary. You should remember that it will help you very much in the control of this disease to remove as much of the affected wood and burn it. You will have noticed that the disease is often present in fair quantity on the tips of the young growths. This diseased material should be removed before September if possible. Keeping your bushes well pruned, *i.e.*, the branches thinly disposed, is a great aid in the control of Gooseberry mildew. On the other hand, pruning bushes so that they are made to produce a lot of lateral and sucker growth usually encourages the disease.]

TRADE NOTE

Sprinko hand cleaner

We have had the opportunity of testing an excellent powdered toilet soap compound which is being brought out by the Vinolia Co., Ltd. This preparation proved splendid for removing the most obstinate dirt from the hands, and should be a boon to gardeners, as it leaves the skin soft and smooth. In order, however, that our readers may test it we suggest they write to "Sprinko," Box P.O. 52, Lever House, Blackfriars, E.C. 4, when the proprietors will gladly send a free sample.

Sweet Peas in tubs

IN some gardens it is impossible to grow Sweet Peas owing to the shallowness and stony nature of the soil. It is of little use to attempt to grow these plants well unless they can be given a deep and suitable rooting medium. One way in which this difficulty can be overcome is to grow them in tubs. The most suitable for the purpose are disused petroleum casks sawn in two. These should be burnt out before attempting to grow the plants in them. It is also advisable to give them a coat or two of paint, green being preferable. In the bottom of each, five holes should be bored 1½ inches in diameter. If the tubs can be stood on the side of the path or on the terrace, where they can command full sunshine, so much the better. If placed on the soil each should have a foundation of bricks beneath to prevent both worms and insects from entering the holes, also decay of the bottoms.

When the site has been chosen and the tubs placed in position attention must be paid to the soil in which to grow the plants. The most suitable compost is a good fibrous loam of a fairly greasy nature. Add to each bushel one 5-inch potful each of bone-meal, wood-ashes, and old soot. To keep this open and sweet some road sweepings or coarse sand may be added. If loam is scarce it may be mixed with ordinary vegetable garden soil, but no leaf-mould is desirable for Sweet Peas as this tends to lighten the soil, which is against their nature. If the loam contains wireworm or any other pests it should be treated with some soil fumigant and covered with sacks in a shed for several days. The tubs should be well drained. This should be done by placing 3 inches of broken pots, clinker, or other coarse material, taking care that a large concave piece covers each hole, as the soil must not become stagnant. Over this a further 3 inches of well-decayed cow manure or that from a spent Mushroom-bed should be placed. When the soil has been thoroughly well mixed by turning several times it will be ready for filling the tubs to within 2 inches of the top when made firm. This is important as the plants do not thrive in loose and open soil. If put in in layers of 6 inches and trodden all will be well. The 2 inches space left will leave ample room for watering and also for top-dressing the plants when in bloom. Seeds may be sown 3 inches from the side at a distance of 3 inches apart, removing every other plant before they become too large. A better way is to plant five to six plants in each during April. In either case the points sho pinched out to ensure a break. Wh plants are 4 inches in height they be supported with short twiggy finally staking with tapering Bamboo 6 feet to 8 feet in length, allowing each plant and encircling every foo fairly strong and soft twine. Strict at should be paid to watering, and wh first flower-buds are opening, the plan be assisted with weak soot-water and manure alternately. If the above de carried out abundance of good bloom obtained during the summer and a When the Sweet Peas are over, the tul be filled with bulbs, Wallflowers, o subjects for a spring display.

W. E. Wr

Stockton House Gardens, near Rug

Sweet Peas for window bo

No doubt many readers will be am read the above heading, but the Peas to are not the tall-growing varieties, very beautiful dwarf family known as These little gems, although not obtain so many colours as their tall namesak very suitable to take the place of th present Pelargonium, Calceolaria, P Lobelia, and others, and, provided t given a place in the sun with some g in which to grow, they will give of th and provide a pleasing feature unt cuts them down. The window-bo possible, should be 9 inches in width less than 6 inches in depth, and af bottom has been drained they should b with a compost of loam to which o of decayed manure has been added. dusting of bone-meal and soot and coarse sand, or, better still, crushed rubble, to keep the whole porous, m be added. The soil should be made fi allowed to settle before setting out the The best way is to sow the seeds i pots and germinate in the greenho frame and plant out when properly h off. Six inches to 9 inches apart is distance to plant, and they must allowed to become dry at any time. the best results the dead flowers sh removed frequently and the plants with stimulants when the boxes beco of roots.

Most of our leading seedsmen suppl dwarf Sweet Peas in mixed colours. Cupid, a little gem, will grow from 4 to 6 inches high and will form a bush across. When covered with its waved flowers, which are pink and wh often in fours, is a sight to behold. ness is another little gem of the same and dimensions as the former, but the are white, with a distinct edge of blue blue is apt to run in a rainy Rosebud is a pretty little new variet apricot-pink colour. These Sweet P also adaptable for growing in pots in greenhouse. W. E. Wr

Stockton House Gardens, near Rug

CATALOGUES RECEIVE

T. E. Harrison and Sons, Darr Nurseries, Ponteland, Newcastle-on- Gold medal Violas.

H. J. Jones, Lewisham.—List of anthemum novelties.

Fr. de Laet, Belgium.—List of Cact

W. Duncan Tucker, Ltd., Totten Small greenhouses and garden frames

Maxwell and Beale, Broadstone, D Catalogue of hardy Heathers.

Wm. Oliver Allen and Sons, Brick Porthleven, Cornwall.—Garden netti shading list.

D. M. Townsend, Sway, Lymin List of trees and shrubs, 1926.

SEEDSMEN BY APPOINTMENT

GARDEN & LAWN

VEGETABLES of Quality

It is well to remind our customers that over 12,000 individual test rows were grown to full maturity in our grounds at Raynes Park during the past season, to compare and examine the merits of each variety at every stage of growth. *See Carters Garden and Lawn Catalogue.*

SCOTCH SEED POTATOES

All the most reliable varieties from stocks specially selected and grown in the best Seed Potato Districts of Scotland.

Please send, Post Free, the Special Booklet
"LAWNS AND SPORTS GROUNDS"
M .....
.....
.....
GI .....

FLOWERS

ANTIRRHINUMS

The intermediate varieties (1 to 1½ ft.) in distinct colours, for bedding, will undoubtedly be the most popular bedding plants this season. *See Carters Garden and Lawn Catalogue.*

SWEET PEAS

Carters Large-Flowered Sweet Peas. The catalogue "Garden and Lawn" contains over 200 distinct named varieties of the latest and most approved sorts.

BEDDING DAHLIA

Carters Pigmy Dahlia. This is undoubtedly the finest dwarf bedding variety of recent introduction. Easily grown from seed, and flowers the first season.

GRASS SEEDS, &c.

All lawns should be reconditioned immediately if the turf and surface are to be in good condition for the coming season, consequently, preparations should be made in advance and all the required materials—Grass Seed, Fertiliser, Wormkiller, etc., assembled.

SERVICE & ADVICE

¶ Carters will answer any question in regard to the improvement or up-keep of your Turf.

¶ A special Booklet on Lawns and Sports Grounds sent post free on application.

Carters TESTED SEEDS

SEEDSMEN TO H.M. THE KING

RAYNES PARK, LONDON, S.W.20

apsack Sprayers at Half Price

Exceptional Opportunity

A good sprayer is absolutely essential in every garden. We can offer a few of our well-known Four Oaks "Knapsack Sprayers," 3½ Gallon Copper Containers for use on the back, **at half the usual prices.** They are machines which have been used at Shows, and are soiled or slightly dented, but for all practical purposes absolutely **as good** as new.

We guarantee them to be in perfect working order. We will send one machine carefully packed, carriage forward, for **45/-**, cash with order, but cash **must accompany** all orders.

o have a few Special Ladies' Pneumatic Sprayers, capacity, usual price 82/-, offered at **41/-**, an rayer for a Lady to use, and also a few ic Sprayers, "Shoulder" Pattern, 3 quarts, ce 68/-, offered for **34/-**, cash with order only. ul value which may never occur again.

Please mention this paper.

Four Oaks Spraying Machine Co., ks Works, Sutton Coldfield, BIRMINGHAM

Telegrams: "Sprayers, Four Oaks."
Catalogues free.

Weedy Lawns made Beautiful

Hand digging and cutting off all weeds is useless—they only grow again, and the surface is disturbed and destroyed. The roots must be killed to get rid of the weeds permanently.

Use "MINERVA" LAWN SAND

This not only rids lawns of all weeds, moss and clover, but it stimulates the healthy growth of finest grasses in their stead and makes the surface like velvet by using 3-4 ounces to the square yard. Many enthusiastic testimonials have been received proving that "Minerva" Lawn Sand really does all that is claimed for it. You, too, can rid your lawn of weeds with absolute certainty by using "MINERVA" LAWN SAND. 2/6 for 7 lbs.; 4/6 for 14 lbs.; 8/6 for 28 lbs.; 15/- for 56 lbs.; 24/- for 1 cwt. Carriage paid to any Railway Station in U.K.

RENED RAY & CO., OLD MILLS, HOUNSLOW

LATE NOTES

Purchase of seed Potatoes

The following is an official statement issued by the Ministry of Agriculture :—In purchasing seed Potatoes it should be remembered that buyers should be supplied by the sellers with a written statement of the name of the variety, the size, or dressing of the seed, and the country of origin. The number of the Government certificate relating to the original crop from which the seed came should also be given. That certificate number will be prefixed by the letters "T.S.," meaning "true stock," which will indicate that the Potatoes are of a true stock of the variety named, which will be one of those known to be immune to wart disease; or with the letters "C.L.," meaning "clean land," which means that the crop was grown on land free from wart disease. There are other letters sometimes prefixed to certificates, which mean that the Potatoes are unsuitable for growing in any land other than that infected with wart disease. These regulations are made for the protection of Potato crops from that disease, and any grower who is not furnished with a certificate on the purchase of seed Potatoes should at once inform the Ministry of Agriculture at No. 10, Whitehall Place, S.W.

Acacia lophantha

I do not know if the above plant has a synonym or whether I have always grown it under the wrong name, as it is not mentioned in Nicholson's Dictionary of Gardening, but I do know that the plant which I have grown for many years under the name of A. lophantha is one of the most graceful of all pot plants for the conservatory or house. I have not only raised this plant to supply my own needs for many years, but have always had a surplus to distribute among my friends, who have never failed to admire it. In the conservatory these plants may be allowed to grow to a height of 6 feet or 8 feet, but when grown as table plants they can be kept to any desired height by cutting them back periodically. When grown in this way they have the appearance of miniature trees, and their elegant Fern-like foliage always attracts special admiration. The seeds may be sown at any time in the spring in pots or pans in the unheated greenhouse or even in a sitting-room window. The seedlings are shifted on until they reach 5-inch pots, which are quite large enough for yearling plants. The following year they may be put into a larger pot. They are exceptionally good room plants as they will stand as much rough treatment as an Aspidistra. Any ordinary potting compost will grow them well, but, of course, it pays to make the soil tolerably rich. These plants should be more often grown for indoor decoration as they are not only graceful, but, what is equally important, they do so much better in dry rooms than the Ferns which are so often compelled to linger therein. They are economical, too. A sixpenny packet will give you a dozen or more plants. I ought to mention one thing, and that is the germination of the seeds is generally most irregular, and some seedlings will appear a month or so after the first ones have made their first leaf. For this reason the seedling-pan should not be discarded too hurriedly.

H. GREAVES.

Clematis Forresti

A climbing plant of very slender growth and tender leafage is the above during its early stages of growth, but once it has become established the whole plant assumes a more vigorous character, resembling in this respect the lovely Fern-leaved Clematis (C. calycina), a plant of which I saw quite recently laden with bursting blood-stained flowers. Clematis Forresti is now flowering with me for the first time, and in the colour of its flowers is quite unique in this graceful genus. The flowers, which it has been very fascinating to watch as they opened for the first time, are not large, actually 1½ inches across, the petals of a silky creamy-yellow colour. These, however, do not constitute the real attraction, which is to be found in the great cluster of rich, bright purple stamens, each nearly an inch in length with a similar spread. The finely-cut leaves give a pleasing setting to these unusually-coloured blooms, and, being in full leaf and bloom during the early part of February, when most other climbing plants are bare of leaves, it forms a welcome and interesting addition to our list of subjects which beautify the garden during winter. The plant here referred to is growing on a westerly wall and is exposed to very strong winds which do not appear to affect it in any way. Of its hardiness there does not appear to be the slightest doubt.

E. MARKHAM.

Libonia floribunda

At this season a batch of Libonia floribunda —once so much appreciated—is very effective in the greenhouse. Its tubular flowers of red and yellow are most freely produced, and contrast well with the dark-green leaves. L. floribunda presents a very distinguished appearance and readily attracts attention among spring-flowering plants. One of the old "hard-wooded" plants, it is amenable to ordinary greenhouse culture, and shoots of the young wood root readily in spring if kept airtight and given a trifle of bottom heat. Good pieces can be had in 6-inch pots, and treatment similar to that given to the Fuchsia suits L. floribunda.

A SCOTTISH GARDENER.

Benn Brothers' Other Journals

The Cabinet Maker.—The Inside of a Mattress (Kapok) XVI.; Soft Furnishings; Further Report of the Ideal Homes.

The Chemical Age.—"Recent Investigations on Fish Oils," by Prof. I. H. Heilbron; Monthly Dyestuffs Supplement.

The Electrician.—"Notes on Wireless Matters," by L. B. Turner; Radio and the South American Flight; The Upper Air (Report of Sir E. Rutherford's Lecture).

The Fruit Grower.—Western Commercial Spring Show (Illustrated); Trade Associations at the Festive Board; Latest Horticultural Research.

The Gas World.—A Study of Municipal Gasworks Accounts; Capital and Depreciation; Keeping Gas Appliances Up to Date.

The Hardware Trade Journal.—The New Merchandise Marks Bill; Drills and Their Work; Freezers and Refrigerators for 1926; Metallurgical Problems Before the Institute of Metals.

SHORT REPLY

G. E. B.—Your best plan will be to procure a copy of "Villa Gardening," which may be had from any second-hand bookstall.

LATE REPLY

Azaleas failing

(M. Branston Newman).—The cause is probably due to some cultural error, such as over-watering, or placing them in a rather high temperature at the beginning of the forcing period. On the other hand the growth of the plants may not have been properly ripened, and seeing that you are usually so successful with Azaleas it is quite possible the cause of failure lies in this direction.

Glasshouse fumigation

I was interested in the note by C. Bla page 3 of GARDENING ILLUSTRATED, Jar 2nd issue, *re* Coal Tar for Mealy Bug, I agree with him that this remedy wou dangerous. Coal tar, unless used very fully, is always dangerous to plant ti Some of our research workers are no commending that the use of tar for dre cuts made on trees be now discontinued that ordinary paint be used instead should think that cyanide in some form be the best remedy for mealy bug on V Of course, when using either sodiu potassium cyanide considerable care h be used by the operator, because the h cyanic acid gas when liberated will not kill our greenhouse pests, but is also fa humans. The new insecticide calcium cy appears to be a much safer thing to us cause when used in the correct dosag poison gas is given off more slowly, g the operator plenty of time to get out o house before the gas becomes dangerou I was in trouble with mealy bug on Vi should certainly give calcium cyanide a I should use it as soon as the Vines dormant and all the fruit cut.

There was an interesting article pub in the "Fruit Grower," page 883, Jun 1925, issue, on "The Science of Control," by Theodore Parker. In article it is recommended that the ma should be used at the rate of ⅛ oz. to ½ o 1,000 cubic feet. This is, of course amount used when fumigating plants in What the effect of the fumes of ca cyanide on Vine foliage would be I hav no personal experience, neither have I able to gather from published matter wh Vines have been experimented with or

In view of the meagre information c use of calcium cyanide for Vines I s proceed very carefully, and should us material on dormant Vines only, but I s feel quite safe in using a heavier dose Vines in this condition, say, 2-4 ozs. per cubic feet. It seems to me one ver portant point in dealing with green fumigation is often overlooked. When a fumigant in strong dosage in empt also in dormant houses the work is oft layed far too long. The operation is oft layed so long that the pest concerned ha time to go into winter quarters, these winter quarters often being in very ina ble parts of the house; also it should membered that many plant pests are se entirely, dormant during the winter m and when in this stage fumigation has or no effect, at least such is my exper When using a fumigant as a cleani agent I always try and use it as soon can after the crop is cleared.

On the question of cost, calcium cy seems to compare very favourably with other insecticides. When bought in 25-lb the material costs about 2s. per lb., wh small quantities it can be obtained in tins at 3s. 9d.. Surely at this price ca cyanide is worth a trial.

NAMES OF PLANTS

T.—Please send some flowers of the which you refer. Without flowers it is cult to name with any certainty.

E. J. Ludlow.—1, Hepatica angulo Hepatica triloba rubra plena.

L. S., London.—Santolina incana Lavender Cotton.

NAME OF FRUIT

E. H. G.—Apple Newton Wonder.

GARDENING ILLUSTRATED

2454—Vol. XLVIII. MARCH 20, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

t produce ... 186
nny 176
lavour in ... 176
ellington (syn. ow's Seedling) 177
us failing ... 186
d Stocks ... 182
eltenham op 186
undifolia ... 183
urrants, big te of 175
, destroying 188
manhoensis 178
and Shallots 188
Chrysanthemums, young, management of 182
CLEMATIS SPECIES WHICH SHOULD BE MORE LARGELY GROWN 175
Cucumbers, red spider on 188
Dahlias from seed ... 176
Dendrobium nobile ... 187
Deutzias, culture of... 188
Disa grandiflora ... 188
Eucalyptus family, the 177
FLOWERS, EARLY SPRING, BRILLIANT DISPLAY OF 180
Forget-me-Not, Creeping (Omphalodes verna) 188
Fuchsias from seed ... 188
Gardeners and their hours 177
Gardener's Royal Benevolent Institution, the 176
Gladioli, injury to ... 188
Gladiolus, pronunciation of 176
Golden Bell-tree, the (Forsythia) 179
Heliotrope, the Winter 176
Hellebores, Lent, as cut flowers... 177
Holly, the common, (Ilex Aquifolium) ... 179
Iris, a winter-flowering... 183
Justicia calycotricha 182
Lapageria rosea... ... 188
Lilacs, pruning 188
Lily of the Valley naturalised 177
Lime and its value ... 186
Lobelia tenuior 182
National Memorial to Queen Alexandra, the: Lord Lambourne's appeal ... 176
Olearia Haastii's time of flowering 178
Pear blossom, the protection of 187
PIERIS JAPONICA 179
Planting, spring versus autumn 187
Plants for cold greenhouses 182
Plants for edge of north bank, perennial 188
Plants for rooms in London 187
Rhododendrons, pruning 188
ROYAL NURSERIES, CIRENCESTER ... 185
Seed germination 185
Veronica, treatment of shrubby 188
Zinnia, the Dahlia-flowered 183

ematis Species Which Should Be More Largely Grown

TE recently I was looking through a e and important new garden book in ich I was amazed to find the author ns that the only kinds really worth g about are the large-flowered ones— with which I disagree. Such advice ly arise from ignorance of the grace arm which most of the smaller- l species display. Who has seen and ired the

ING CLEMATIS (C. Rehderiana), with ot streamers gracing the walls of or tumbling out of a large Holly-tree, ly laden with nodding, soft primrose- flowers filling the air with delicious -like fragrance from August to ?

RYSOCOMA, from Yunnan, follows the in Clematis (C. montana), and its arieties, and continues to display its il fleshy-pink flowers over a large he summer. Of this there ely hybrid, the result of C. chrysocoma and C. i, with lovely soft shell- wers and known as C. nsis. C. Spooneri and its are both very pretty and most desirable, as he rather rare and choice ldi.

INA and its varieties are plants, some of the pale ns being lovely, while

MANDI, an evergreen from with luxuriant glossy and handsome creamy- wers, is magnificent when ts best.

ERN-LEAVED CLEMATIS (C. , from Corsica, is also and a joy to behold the winter when laden eful, drooping, yellowish- ood-stained flowers, each nches across.

CINEA, a most attractive m Texas, is annually ad- It has solitary pitcher- lowers borne on elegant ems of a bright red colour ique in this lovely genus. ately, it does not appear true from seed; at least, t done so with me, and I sed it by the hundred. tty, but rather weak in s

SPA, with its fragrant rple flowers daintily the margins. What of

VIRGIN'S BOWER (C. Flammula), which covers large arches and falls about the branches of Yew and Holly trees, charging the air with fragrance during the autumn? It is a perfect treasure in the garden at that season and is largely grown.

C. JOUINIANA, long known as C. grata, is a very strong grower, but, properly placed, is a remarkably handsome plant when laden with sweetly-scented flowers of a yellow and lilac shade. Streamers with corymbs of flowers springing from the leaf axils may be cut for festivals, etc., up to 10 feet in length, to say nothing of its fine garden effect.

C. CAMPANIFLORA, from Portugal, gives us a profusion of dainty pale blue Campanula-like flowers, and although these little flowers are so singularly elegant and frail-looking, the plant itself is vigorous, thousands of flowers being out at the same time, and the lacy effect is exquisite.

C. TANGUTICA, native of Central Asia, is a very handsome and free-growing plant, and the best of the yellow-flowered kinds. In early summer its nodding flowers appear on slender stalks 6 inches long, and a plant well draped with these is a very graceful and desirable subject, each flower possessing the gracefulness of Snowdrops. In autumn the whole plant is again lovely, with myriads of large silky seed vessels often accompanied with a sprinkling of flowers.

I could add to this list of Clematis species, which the author referred to does not consider worth troubling about, but I hope that such advice will not be taken seriously, and that a place will yet be found by garden enthusiasts for a few, at least, of the lovely small-flowered kinds enumerated above and of which far too little is seen. The fact is that such plants are too often put out in positions quite unsuited to their development and are subjected to much cutting away at the wrong season. Plant them near the base of some large evergreen, which acts as host plant, and very little after-attention is required, except to prevent the latter becoming submerged in a bevy of flowers.

E. MARKHAM.

An unusual and upstanding exhibit

The remarkable group of Clematis Armandi and seedlings shown by Capt. B. Symons-Jeune, of Runnymede House, Old Windsor, at Vincent Square, on March 9th and 10th

Notes of the Week

Big bud mite of Black Currants

THIS is the best period of the year to carry out control operations for this pest. If it has not already been done, infested bushes should now be examined and all abnormal buds removed and burned. The bushes should then be sprayed with a good brand of lime-sulphur. Experiments have shown that the lime-sulphur should be used at 1-15 strength, *i.e.*, 1 gallon lime-sulphur to 14 gallons of water, and that the best time to carry out this spraying is at the period when the first foliage is about the size of a shilling. The spray is much more effective if a good "spreader" is added. Calcium caseinate is very useful for this purpose. Lime-sulphur at the above strength will cause considerable burning of the Black Currant foliage, but the

bushes recover from this later on. Up to the present lime-sulphur has given the best results of any other method of control tried. When spraying against "big bud" an effort should be made to coat the bushes all over with the spray fluid, and spraying should stop before the wash begins to drip from the foliage. J.

The National Memorial to Queen Alexandra: Lord Lambourne's Appeal

Lord Lambourne, as President of the Royal Horticultural Society, writes to "The Times" appealing to flower lovers throughout the country to show their love for Queen Alexandra in a practical way. Queen Alexandra was a great lover of flowers, and he suggests that a subscription, however small, should be sent from every Horticultural Society in England and Wales to the Memorial Fund, which will be devoted to the support and extension of the work of the Queen's Nurses, who attend the sick poor in their homes in all parts of the Kingdom. If every member of every Horticultural Society in city, town, and village would send their Secretary only twopence a very considerable sum would be raised for a most excellent cause. The Royal Horticultural Society has sent 100 guineas to the Treasurer of the Fund, 58, Victoria Street, London, S.W. Other subscriptions will be gratefully received there, or they may be paid to any of the local funds that are being opened in most of the principal cities and towns.

The Gardeners' Royal Benevolent Institution

The Duke of Portland will preside at the 81st Anniversary Festival Dinner of the Gardeners' Royal Benevolent Institution at the Grocers' Hall on Thursday, June 10th.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Pronunciation of Gladiolus

If Sir Herbert Maxwell claims to be an authority on Latin—and it is unthinkable he would give a ruling on a matter connected with that language if he is not—he must have been nodding when he wrote the observations on the pronunciation of Gladiolus which appeared on page 155 of GARDENING ILLUSTRATED. Indeed, it would be difficult to find a note of similar brevity containing so many blunders. To deal with them all in one letter would require more space than is usually devoted to correspondence in your paper, so I purpose dealing with only part of them now and with the rest in a subsequent letter.

Sir Herbert Maxwell starts by condemning a writer who had given Gladi-O-lus as the correct pronunciation of the name of a flower, and accuses him of making a "false quantity" by advocating such pronunciation. Now to explain to some of your readers what he means, I must point out that "quantity" refers to the length or brevity of individual syllables. When he makes the accusation of false quantity against the writer who gives Gladi-O-lus as a correct pronunciation, he means that by placing the stress on the "o" that syllable is sounded as if it were long, whereas, according to the rules of "quantity," it is actually short. If he had not been nodding he would have realised that he himself, in giving the pronunciation of the word as Gl-A-diolus, does the very thing which he condemns another for doing. He places the stress on the first syllable, "Glad," and, by so doing, makes it sound long, whereas according to the rules of quantity the syllable "Glad" is short. As a matter of fact, every syllable of the word we are discussing is short, as Sir Herbert Maxwell himself has pointed out.

On the other hand, in order to pronounce the word at all, the stress must be placed somewhere, and wherever it is placed it will have the effect of making that particular syllable sound long to which it is applied. If the placing of the stress is a mere matter of whim, then Sir Herbert Maxwell is entitled to claim Gl-A-diolus as being correct, but so also is the other writer who prefers to pronounce it Gladi-O-lus.

Now, all this confusion is due merely to the fact that Sir Herbert Maxwell was nodding when he wrote. He failed to recall two things. The first is that whilst "quantity" is concerned with the length or brevity of individual syllables as such, accent or stress, which is quite another matter, is concerned with the selection of the particular syllable on which the accent or stress has to be placed when the word is pronounced; and it often happens that the rules regulating stress or accent demand the placing of it on a syllable which, judged only by the rules of quantity, is actually short. The second thing which he failed to recall is that the rules of the Latin language do not tolerate whim or fancy in the selection of the syllable of a word on which the stress has to be placed. The rules are very clear and definite. In my next letter I purpose quoting the rules which govern the pronunciation of Gladiolus, when it will readily be seen that Gl-A-diolus and Gladi-O-lus are both wrong. DAWLISH.

—— I am delighted to see the attempt to stabilise the terrible false quantity in GladiOlus has been scotched by several of your correspondents. Whenever I am asked how the name should be pronounced I invariably say it consists of four short syllables with the accent on the first. I confess to a weakness for GladIolus myself, though I know it is etymologically indefensible. To hear Erica pronounced in three short syllables gives me the creeps. It should be indisputably ErIca, yet if I so pronounce it to a nurseryman I am at once corrected, and no doubt looked upon as an ignorant ass. As to Veronica, this is *said* to be derived from Berenice, with what truth I do not know, but if it is so it should, of course, be VeronIca. I never met anyone, gardener or botanist, who so pronounced it, though some say that it ought to be so pronounced. Another name which grates on my nerves is Anchusa, with the "ch" soft as in "church." This being derived from a Greek word spelt with a χ should have the "ch" hard, as in Cheiranthus. But is it possible to train up the hosts of gardeners of all classes, many of whom have had no classical education, to pronounce names correctly? I fear not, so that we must accept the inevitable, merely giving vent to our feelings, as your correspondents and I are doing.

A. H. WOLLEY-DOD.

The Winter Heliotrope

Mr. Pechey's letter on p. 161 contains a valuable note of warning against this terrible weed. I knew its defects when I introduced it into a waste place in my garden, but in a single year it had spread over more than a square yard and began to run under a cinder road, making for a herbaceous bed, so I promptly dug it out. Time will show many years it will be before I get rid An even worse weed is Polygonum cus tum. It is a pest in several gardens he dug it out to a depth of over 2 feet, came up again the following year as str as ever. I have now been four years never letting it get more than an inch without hoeing it off, but it comes up just as strongly. I imagined that ther no weed which could not be abolished was denied any foliage by hoeing off d it showed above ground, and have easi rid of Creeping Thistle and Couch Gr this way, but some things seem to eradicable. We are sometimes told to weeds like these in a shrubbery or place, which is sound enough advice, b proper advice to give, is that they never be planted anywhere where there slightest chance of their working throu a flower border, or being conveyed ther soil. A. H. WOLLEY-D

Sussex.

Dahlias from seed

I have no hesitation in confirmin views of Mr. C. Orchard on his cri concerning the letter on the above s from a "Galloway Gardener." I co raising these plants from seed is one most interesting and profitable specul a gardener can make, and surely noth easier to raise. Dahlias, like other p flowers that may be grown as annuals repay the grower, but it is well to b mind that seed should be purchased well-known raisers, even if the c shillings instead of pence. Of cours Dahlia requires room in which to gro where only half-a-dozen or so plants quired it is as well to purchase the where a batch of seedlings is raised one to see them all grow and bloom. It interesting to save a few seeds of any s variety and grow the plants on. The and Collarette varieties are more depe than the others. W. E. WR

Flavour in Apples

It is with special interest I comm the very enlightening articles and not appear in GARDENING ILLUSTRATED, "F.R.H.S., Wimbledon." Evidently fruit is concerned he is a man who his book and is worthy of consideratio page 145 he mentions two Apples of w profess ignorance, as I have not either Joybells or Laxton's Superb, th am unable to give an impression, bu certainly seen both at exhibitions, b does not allow one to form an opinio the case with "F.R.H.S." He quote Derby. With the remarks I agree, a good Apple worth growing, but it c at a season when we have a glut of Apples. On the same page Mr. Th Turner throws out a challenge to me I shall certainly accept, "but I shou to know what the side stakes will must say I have not read the refer "Weather's Practical Guide to Gard given to Dumelow's Seedling, o Wellington, but I should be very mu prised if the writer classes it as a la ing dessert Apple. With all due re Mr. T. Turner, it would be interes have the opinions of other readers much discussed Apple. W. E. WR

Stockton House Gardens, near Rug

Apple Nanny

I have often thought that in a trip some of the orchards in the Apple- countries just when the fruit was at one might come across many exceller ties now seldom met with or to be f catalogues. The thought was recal other day when a friend wrote to inq

if Nanny Apple was still obtainable, had not seen or heard of it for many It seems rather a pity it has gone cultivation, for it was a very accept- uit in its season (late September and r), very juicy, refreshing, and sugary, a pleasant flavour, reminding one a of the Ribston. It is a purely local and, so far as I know, seldom, if net with out of Hants and Sussex.
dwick. E. B.

e Nanny Apple is still grown by Messrs. al and Sons, Ltd., Crawley, Sussex. escribed in their catalogue as a "good g Sussex Apple worthy to be in every on."—Ed.]

le Wellington (syn. Dumelow's Seedling)

e might be occasions when one would d of a dish of Wellington for dessert 96), but hardly, I think, in July, when h other fruit is available. If an Apple ired at this season there is nothing to Irish Peach. Wellington is a grand and keeper, also a consistent cropper, rdly acceptable to most palates, the being retained to the last. E. B.

ent Hellebores as cut flowers

lasting quality of Lent Roses when d placed in water is an item of interest. You were certain to have nt advice as to the splitting of stems. s for your cure for curling. The plan obvious enough, yet it never before d to me. The chief use I make of nt Hellebores is to float the blooms in , for which purpose they are among st flowers I know, to say nothing of coming at a time when suitable ns are not too plentiful. The Hellebore y, I believe, of the Ranunculus family, no way related to the Nympheas and rs, but the blossom floating in water uite a Water Lily effect. Unfor- y, the handsome foliage of the Lent s too large for the floating-bowl, but ves of the Christmas Rose, which are and have the same shape, do very or the purpose, though the kidney- leaves of the Caltha will better help ter Lily illusion, if that is desirable. curious fact that, whereas Helleborus lis and its varieties behave so ill when e Christmas Rose (H. niger), in its forms, is, when cut, one of the most of flowers. If cut young it will re- resh for days, almost for weeks, until e stamens drop off, and then the rest flower, sepal by sepal, goes green. I ever, so far as I remember, seen an tative explanation of the fact that owers, when cut, wilt so much sooner thers. Wilting must, of course, be the excess of evaporation from the ex- surfaces over the amount of moisture d from the water by the stem. It is see that the branch of a shrub with a rk may fail to absorb through the cut fficient moisture to satisfy its needs. for instance, when so cut and placed er, is one of the shortest-lived of , but strip the bark off a couple of at the base of the stem and the Lilac e a long-liver. So it is with cut s of Prunus Pissardii and similar It is not so easy, however, to see wers with seemingly succulent stems, Lent Roses, should fail to draw up quisite amount of moisture to keep going. Is it that the cuticle of the s impervious to moisture, or what? I be permitted to note, as a postscript, beautiful leaf is that of Helleborus , and how suitable it is for floating e blooms of Lent Roses. H. fœtidus of our handsomest native plants. that it had a sweeter name. W.

Gardeners and their hours

"Scottish Gardener" (page 144) seems to speak in admiration of the long hours, etc., that were the rule in his apprenticeship days, and then ends his article with sarcastic remarks regarding the modern generation. Is it right, as he seems to suggest, that gardeners should work from 6 a.m. until 6 p.m. in addition to Saturday afternoons? In my opinion a man who labours from 7 a.m. till 5 p.m. daily has done quite enough to earn his wages at the end of the week. Also I think a gardener who is capable of taking duty on a large establishment and able to thin Grapes and perform other duties that must of necessity be done either in the early morning or in the evening should, in fairness to himself, be paid extra for same, however willing he be to oblige in the interests of his employer. Regarding the slackness of the modern generation, I have lived in bothies on big places and naturally came into contact with a good many of the so-called slackers, and I say, without doubt, that all of them, including myself, took a thorough interest in their duties, always endeavouring to improve their positions, whether they were improvers, journeymen, or foremen. One thing is certain, young men do not take up gardening for the sake of the wages offered, but because they take an interest in it, and all the lads I have worked with have had their hearts in gardening.

"A Young 'Un."

Lily of the Valley naturalised

The largest area of this which I have ever seen was within 10 miles of Lincoln, in the woods between the villages of Blankney and Potter Hanworth. There the plants were as numerous and as floriferous as the Wood Hyacinths are in our Scottish woods. It is many years since I was in Lincolnshire, yet the memory of the Hanworth Woods remains with me. Perhaps some Lincolnshire reader might tell us whether the display in spring in these woods remains as it did 30 years ago? W. McG.

The Eucalyptus family

It would seem from the interesting article on the Eucalyptus family, on page 96, that there are several varieties well adapted for cultivation by the amateur in the small greenhouse. The fact that they are highly ornamental, alike in flower and foliage, would render them capital companions for dwarfer plants, and from what the writer tells us it appears they can be easily and cheaply raised. The wonder is that up to the present they have been comparatively unknown in the majority of gardens. The description, too, of the giants of the family is very interesting to all tree lovers. It seems almost incredible that any member of the vegetable family should attain a height of nearly 500 feet. We are familiar with some of the giants in our own land in height, like the Poplars and some of the Abies, and in girth like the Oak and the Yew, but these fade into insignificance beside the records of some of the Eucalypti. One wonders whether in other lands they will ever attain such dimensions as in their native country. The article in question reminded me very forcibly of many interesting notes in bygone numbers of

An almost pure black Lent Hellebore

The new Helleborus orientalis Black Knight, which received an Award of Merit when shown by Messrs. Barr and Sons on March 9th and 10th

Pieris japonica shown by Messrs. W. H. Rogers and Son, Southampton
It is now flowering with remarkable freedom in many gardens, and is frequently sent to this office for identification

GARDENING ILLUSTRATED on remarkable t
both indigenous and exotic, in different p
of England. E.
Hardwick.

Buddleia manhoensis

I was interested in your issue of Jan
9th (p. 27), with reference to Buddleia
hoensis being quite hardy. I planted a
ling of this shrub during March, 1925, w
grew strongly 3½ feet high, and flow
correspondingly well, being much adm
last summer.

This year it was cut back (pruned) a
end of February to about 2 feet, but u
date shows no sign of life.

Possibly the severe winter has kill
altogether, but I shall be glad to know i
your opinion, there is the possibility o
yet making a fresh start.

Some of your numerous readers ma
able to tell of their experience with this s
in previous years. A. A. BENH
Headon Cottage, The Avenue,
Radlett, Herts.

Olearia Haastii's time of flowerin

Having been acquainted with this
known Daisy bush for many years in va
districts in the southern and western
of the country I have not as yet seen it
approaching flowering until July, and s
times August. On January 31st Ca
E. A. Saunders states Olearia Haastii (
ing). On February 15th he states it wa
(opening). Surely, by this date (March
with the mild weather and glorious sun
we have experienced in the Midlands th
two weeks, the blooms are now full out
I suggest Captain Saunders sends a
sprigs of this Daisy bush to the Edit
GARDENING ILLUSTRATED. W. E. WRI
Stockton House Gardens, near Rugby

[We have just received from Ca
Saunders flowering sprays of the Olea
Cornwall for identification. The speci
question is not O. Haastii, but O. stell
which usually flowers about this seas
ED.]

Magnolia Campbelli, the centre of admiration at the last fortnightly meeting of the Royal Horticultural Society
The flowers are each over 9 inches across and of deep rose colour

REES AND SHRUBS

Pieris japonica

IE first days of March bring the bundant showers of white bloom of this, ne of the most beautiful of the class of eous shrubs that it is still convenient to ndromeda. It is the more welcome in ns that allow of its full development, se it is not so hardy as the better-known floribunda, which is in flower at the time. The two have much in common, nly in season, but in general habit, ng dense bushes 6 feet to 7 feet or even in height, but they are very different in ay they carry their racemes of bloom, hereas P. floribunda has them stiffly nt, in P. japonica they are pendulous. ood a shrub should be tried in any southern garden that has a light soil an give it a sheltered place among other ting shrubs. The subject of the illus- n is in a garden 33 miles south-west of on. Besides its showy masses of white s in March, P. japonica has another n of beauty, for when the young growths rown up a few weeks later they are of a brilliant red colour that, when seen across the lawn, one can hardly believe hey are not masses of blood-red bloom.

G. J.

common Holly (Ilex Aquifolium)

a very amateur gardener obtaining my ation weekly from GARDENING ILLUS- D, I am greatly interested in this, the evergreen of all European species. is the best time for its removal? I tried it, almost always unsuccessfully, winter months. The roots may possibly out the stem usually dies down, and the growth spoilt. The reason was that the s came from the nursery with other . If I have a success it will be with beautifully and securely packed. If I rom a neighbouring county, with only les to travel, the chances are the trees adly packed and a week on the journey. t year I put in a couple of dozen of in March, and gave them most careful ing and overhead treatment, with a like . My textbook says that Hollies should oved from the last week in August and gh September, or late in April or May. tried this period with not much better s—possibly due to the fact that the were too large for removal.

elieve I am correct that Sir Herbert ell holds that the proper season is May, growth has begun. If delayed until n they make no new roots and suffer frost and wind. Is May the ideal time? ps others like myself would be pleased ow what experienced gardeners have to

another point I should like information. Iollies do not bear berries. I have s probably 20 feet or 30 feet high, with hes 20 inches in circumference, and to my knowledge of them for the last ars have never borne berries. Mr. y Hibberd held that I. Aquifolium ed its sex from male to female with It is an interesting physiological ques- do female Hollies become sterile later , or is it my large trees, perhaps a dozen nber, are all males, and have never pro- berries? Ten years ago I had quite a tree in my wood, which stood quite and which produced every winter a ity of berries. Now it seems to have ed suit, and it appears that its teristic period is at an end, and it has l to desire to propagate its species.

YORKSHIRE TYKE.

e time usually recommended for planting Hollies is either early autumn or early May, but the Rev. Rollo Meyer, who has planted long Holly hedges in Hertfordshire favours January planting. See article entitled "The Best Time to Plant Hollies," with illustrations, issue February 13th, page 97. Nevertheless, many gardeners consider the period from Christmas to March the "most dangerous" time for removing evergreens, including Hollies. A great deal depends on the treatment the trees receive from the time they are lifted to the time they are in their new stations. The quicker the work is done the better. If cold wind, sun, or frost is allowed to reach the roots irreparable damage is certain to follow. The roots should be covered with mats at the time of transplanting, and the trees should be removed with a considerable amount of soil attached to the roots. Hollies are frequently, but not invariably, unisexual in character, and trees often fail to produce berries when both sexes are not grown. So far as we know female Hollies do not become sterile later in life, and we should not expect them to do so. If our correspondent would pollinate the flowers of the small tree which has been known to produce fruit he would probably be rewarded with a quantity of berries.—ED.]

Pieris japonica in a West Surrey woodland

The Golden Bell-tree (Forsythia)

FORSYTHIAS are quite hardy, always bloom well, and are easily increased from soft cuttings put into light soil in a close frame during summer. They are, however, rank feeders, and if the soil is naturally poor it should be well manured, whilst plants which have occupied the same position for several years are improved by a surface-dressing of decayed manure each spring. Pruning is dealt with under the respective species, for all do not require the same treatment.

F. SUSPENSA, a Chinese species, was introduced into English gardens about the middle of last century, and has been one of our most widely-grown shrubs. It varies a good deal in habit, also in leafage, for, whilst some plants are of upright growth with rather stiff branches, in other cases the secondary branches are long, slender, and whip-like in character. This difference has given rise to the name of Fortunei to the former, although that name is not in general use. When the main branches are trained to a trellis or pillar and the secondary branches allowed to hang loosely, the effect is charming, for the branchlets, each 3 feet or more long, are clothed from end to end with blossoms. In the same way plants allowed to grow over a fence, through the branches of an open tree, or amongst evergreens are also very effective. It may also be grown in large groups and cut back hard to a height of 3 feet each year. Then strong, erect shoots, each often 4 feet high, are formed, which bear flowers from end to end. Plants grown against trellises and walls, as well as those grown in beds, should be pruned each year, the year-old shoots being cut back to within an eye or two of the base as soon as the flowers fade. In addition to there being two distinct styles of growth in this species the flowers also show a difference, for, like Primula flowers, they may have long or short styles, with a corresponding difference in the length of the stamens.

F. VIRIDISSIMA, also a Chinese species, differs from the last-named in being of stiff, rather erect habit, but forming a bush 3 feet to 4 feet high and several feet through. The young bark is green and the leaves are also a distinct shade of green. It flowers a fortnight or so later than F. suspensa.

F. INTERMEDIA is a vigorous-growing hybrid between F. suspensa and F. viridissima. Mature plants are from 6 feet to 10 feet in height with a wide spread of branches, the habit intermediate between that of the parents. The flowers are produced freely about the same time as those of F. suspensa. Several distinct forms have been given separate names; the variety spectabilis is remarkable for its free-flowering and vitellina for its large, richly-coloured flowers. Neither F. intermedia nor F. viridissima requires severe pruning as recommended for F. suspensa. As a rule, they can be left alone for several years, cutting back and thinning the branches when outgrowing their positions.

A form with lemon-yellow flowers has been introduced from Central China by Wilson. It has shorter and comparatively broader petals. There is another with dark purplish young shoots, and known as var. atrocaulis.

BRILLIANT DISPLAY OF EARLY SPRING FLOWERS

Rhododendrons, Azaleas, Cymbidiums, and Spring-flowering Bulbs

TO the plant lover the fortnightly exhibition of the Royal Horticultural Society held on March 9th and 10th must have been of exceptional interest. Many more novelties than usual were shown. There were large and brilliant displays of Azaleas, forced bulbs, forced shrubs, hardy shrubs, Carnations, Rhododendrons, and Alpine plants, making a spectacle which for brilliance of colour has rarely, if ever, been excelled at this time of the year.

Cymbidiums were the special feature of the show, and these, with many other Orchids, occupied one end of the much overcrowded hall. C. Devonianum, with small greenish-brown flowers, was much in evidence in the group of Orchids sent by Mr. J. J. Joicey, of Witley. This group also contained the sweetly fragrant Cymbidium Martin with large cream-coloured flowers.

A remarkably large and well-grown plant of Cymbidium Ceres shown by Messrs. Sanders carried no less than 12 enormous inflorescences with about 20 flowers each.

The Cymbidium of the exhibition, however, and doubtlessly the finest ever raised, was one named C. Alexanderi Westonbirt Variety, shown by Lt.-Col. Sir George Holford (grower, Mr. H. Alexander) (see illustration). The flowers are very large, pure white, with rosy-crimson markings on the lip. This variety, which had previously received the First-class Certificate, was on this occasion awarded the silver-gilt Lindley medal.

Cymbidiums and other Orchids were also shown by Messrs. J. and A. McBean; Cowan and Co.; Charlesworth and Co.; Sutton Bros., of Hassocks, Sussex; and Mr. Harry Dickson, Spencer Park Nursery, S.W.

Rhododendrons

Early-flowering Rhododendrons are obviously giving a good account of themselves in many gardens this year, for there were exhibits from Ardingly, Swansea, Gerrards Cross, and Falmouth, of flowers from the open. We illustrate on this page the group sent by Vice-Admiral A. Walker-Heneage-Vivian, of Clyne Castle, Swansea. This collection included fine trusses of Rhododendron grande, R. niveum and hybrids, R. Shilsoni, R. eximium, R. Hodgsonii, R. Falconeri x eximium, and the scarlet R. Jacksoni.

A very brilliantly-coloured vivid scarlet hybrid of R. barbatum and R. Thomsoni (the reverse cross to R. Shilsoni) was shown by Sir John Ramsden, Gerrards Cross, who also showed R. sutchuenense in quantity, to which we hope to refer on a later occasion.

An Award of Merit was made to R. Fargesii, with large rose-pink flowers and rather small neat leaves, shown by Mr. Gerald W. Loder, Ardingly, Sussex.

Messrs. R. Gill and Son showed R. argenteum and good R. arboreum seedlings, and a noble-looking variety, R. His Majesty.

A very delightful Rhododendron named Pink Beauty was seen by many for the first time. It was shown by Messrs. R. Wallace and Co., Ltd., Tunbridge Wells, w Magnolia stellata, Laburnums, and ot forced shrubs.

Of the extensive group of Azaleas sho by Mr. L. R. Russell special mention sho be made of the variety Albert Elizabe named after the King and Queen of Belgiu An Award of Merit was granted to this se double variety, which has white flow edged with carmine.

Collection of cut Rhododendrons se by Vice-Admiral A. Walker-Heneag Vivian, C.B., M.V.O., Clyne Cast Swansea

In the foreground may be seen large truss of Rhododendron grande, R. niveum a hybrids, R. barbatum, and R. eximium

The magnificent group of the Caledonian strain of Cyclamen by Mr. J. W. Forsyth, Putteridge, Luton, Beds.

The flowers are of crimson, pink and white, and some varieties have handsome silver-coloured leaves

Flowering bulbs

Some idea of the magnificent and staged display of Hyacinths in white, purple, pink, and red may be obtained f the illustration on the page opposite. V ties of special interest were Queen of Pinks, Ivanhoe (dark blue), King of Blues, Yellow Hammer (pale yellow), and pale rose-pink Lady Derby.

Messrs. R. H. Bath, Ltd., continu show bulbs in pans and bowls of fibre. T Tulips, Daffodils, and Chionodoxa Lu were remarkably fine on this occasion. often wonder why it is that no other shows bulbs in fibre consistently and so

Messrs. Sutton and Sons, who vary exhibits at every meeting, were this tim presented by a large group of Tulips in bloom and of flaming and beautiful col The exhibit which was the centre of adm tion was arranged in an original and tasteful manner.

Messrs. Barr and Sons, Covent Gar had a large group of Daffodils, presum from their Cornish nursery, while Me J. R. Pearson and Sons showed a very collection of Daffodils, most of which been opened under glass. The far Caledonian strain of Cyclamen was sh by Mr. J. W. Forsyth, of Putteridge, Lut

H.

FLOWERS OF EARLY SPRING

The above interesting and beautiful flowers were on view at the recent meeting of the Royal Horticultural Society

wl of Daffodils in fibre shown by Messrs. n, Ltd. The variety is Narcissus Unique. are packed in the bowl and carry sheaves of

new Narcissus Golden Chariot shown by Richardson, of Waterford, Ireland. This is growing self-coloured Trumpet, with strong yellow blooms of outstanding colour. It is a variety that at once catches the eye. The flowers are borne on long stems, and it is considered an acquisition for a "market" bunch.

3. The well-grown collection of Hyacinths by Messrs. James Carter and Co.

4. Narcissus Phantasy, a beautiful white Trumpet of good poise and graceful outline shown by Messrs. J. R. Pearson and Sons.

5. The rare and extremely beautiful Cymbidium Alexanderi Westonbirt Variety, for which the Lindley Medal was awarded, having previously gained the First Class Certificate. Flowers white with a touch of crimson on the lip. Shown by Sir George Holford, Westonbirt, Tetbury.

INDOOR PLANTS

Plants for cold greenhouses

ONE of the most difficult problems for amateur gardeners to solve satisfactorily is that of heating their glass structures, for, with all the varied improvements in the way of boilers, stoves, and other heat-producing mediums, there is yet a good deal to be done before perfection is attained. When one can give frequent attention, and has studied the management of these things, there is no real difficulty attending the heating of either large or small glass structures, provided the power is adequate to the demands made on it. The most economical plan is to have a boiler capable of doing more work than is required of it in an ordinary way, and to keep it working very gently, as in our fickle climate we get such sudden fluctuations of temperature that it is necessary to be always prepared. But the question has lately been strongly brought before me—Why do so many vex themselves with toy-like heating apparatuses, that constantly worry them, when such good results can be obtained by means of unheated houses alone? I have looked through many amateurs' glasshouses lately, and the only plants in them that really needed fire-heat were the Geraniums, which are mostly kept for summer bedding, and everyone knows that these are not very ornamental in winter, and if they had been stored in a small pit, where, with the aid of external coverings and a moderate-sized lamp, they would have been quite safe, the rest would have looked far better, and the heating apparatus might have been put away entirely.

The list of half-hardy plants that will stand a few degrees of frost with impunity, but that are not hardy enough to stand full exposure to our trying climate, is large enough to suit the varied tastes of all who have a greenhouse to fill, and it is perfectly useless going in for a regular display of flowers in mid-winter without the aid of thoroughly heated forcing-pits, or houses, to bring the plants on in succession. As we can enjoy a full display of Chrysanthemums in a cold house up to Christmas, only a short period has to elapse before the spring sunshine brings many of the cold house plants into bloom. The plants mentioned below are to be found in nearly all glasshouses, whether heated or unheated, and, as a rule, they look far more healthy in the latter, for what are termed greenhouse plants are nearly all perfectly safe in a well-glazed glasshouse, enjoy the perfect rest of a cool house during winter, and start off with far more vigorous growth in spring than those that have been kept in warm quarters. Amateurs' greenhouses or conservatories are frequently built so as to open into the house, and it is surprising how much of the warmth of the dwelling-house finds its way into the conservatory, so that it takes an unusually severe frost to make the temperature so low as to hurt such plants as Camellias, Azaleas, Acacias, Daphnes, Genistas, Heaths, Epacrises, Myrtles, Oleanders, Agapanthus, Eucalyptus, Aralias, Hardy Palms, Phormium tenax, Dracæna indivisa, Coronilla glauca, Ferns in great variety, Isolepis gracilis, Lycopodium, and many other flowering and fine-foliaged plants. If these are healthy, vigorous plants there will be no lack of interest, even in the dullest month of the year, for the wealth of flowers that one can enjoy up to the end of the Chrysanthemum season will make the short time between Christmas and the display of spring bulbs a sort of rest to the eyes, and the flowers will be all the more appreciated in their proper season, and, certainly, the plants will be benefited by the period of complete rest that is so necessary for the natives of temperate climes. Hardy Ferns start away in spring with far more vigour, when kept quite cool during winter, than when kept constantly in a growing temperature. I frequently find amateurs with their greenhouses covered with dust, from having a slow combustion stove in it, and many who have had to keep out the frost during the changeable weather that we are now experiencing will acknowledge that they had far better dispense with a few plants of doubtful hardiness, to get rid of the smoke and dust, or else go in for stove plants, with a boiler outside, so as to keep the interior fit for plants of every kind. G. G.

Justicia calycotricha

Many who know and appreciate Justicia carnea for winter flowering are unacquainted with J. calycotricha. The latter is similar in habit to J. carnea—perhaps a little less free in growth—and bears terminal flowers of a pleasing shade of yellow. The plant is by no means a difficult one, but it is inclined to become leggy, so that frequent propagation becomes necessary if good specimens be desired. Fortunately, cuttings of young wood root quickly when put in the propagating-case and given a brisk bottom heat. Grown on, these in 6-inch pots make very useful pieces during the following winter. W. McG.

Lobelia tenuior

This is quite distinct from all the other annual forms of the Lobelia. It grows to a height of 15 inches, throwing up slender crowded stems clad with pinnate leaves and bearing flowers of a rich cobalt blue, individually almost an inch across. Very effective specimens may be obtained by putting three seedlings into a 5-inch pot and surrounding the growths with the very slimmest of stakes to keep the plants erect. Last season I grew three batches, each of 50 plants, and they provided a colour not too common in conservatories during summer and autumn. I first saw L. tenuior in No. 4 house at Kew in 1904, and since then I have never wavered in my allegiance to this very graceful and ornamental plant. W. McG.

Mabie.

Asters and Stocks

It is now time to sow these annuals in boxes in the greenhouse, and the same applies to Marigolds, Zinnias, Salpiglossis, Cosmos, and others. Sow the seed thinly. Water sparingly and prick off when large enough to handle.

CHRYSANTHEMUMS

Management of young Chrysanthemums

PLANTS that are cultivated mainly for the production of large blooms, no matter whether they are intended for exhibition or for home use, need special attention during their youthful stages. Especially they should not be checked in any way, or they will be stunted. When the plants are well rooted and will bear exposure as referred to in a former issue of GARDENING ILLUSTRATED, one of the principal points then to observe is to see that they have sufficient water at the roots to prevent the leaves flagging, as during the time they are in the small pots with a good number of roots they absorb a good deal of water, and to be deprived of moisture in the soil means giving a check to that free growth which is at all times desirable, and no more so than during the initiatory stage. Abundance of air should be provided at all times when the weather is favourable. Draughts of air, such as would be felt in a span-r house with ventilators on both sides and opened at once with the wind blowing the east, would be detrimental to pro and would tend to bring about an atta mildew—a parasite which the plant better without at all times, but not mo than when they are young and, in son stances, weakly. The future object o plants must now be determined—those are intended to be grown for the produ of cut blooms or groups will require ping. In both cases allow the plants to with one clear stem until a bud forms point of growth, which checks the pro of the plant for a time. When the bu formed new shoots will be seen pu from the nodes immediately below th and for a distance down the stem; but growing directly below the bud will be advanced, and from these a selection be made to provide the future blooms. rule, three blooms to each plant is a fair plement for each to carry. Directly th can be handled it should be removed three of the most promising growths sel rubbing off all others. By this metho whole energy of the plant will be co trated, so to speak, into the three selected. As fast as any superfluous g is made it should be promptly removed. time of the bud forming as describe vary considerably according to the tim cuttings were inserted and the manne plants have been treated since. If they been kept in too warm a house, too far the glass, or been too much crowded, th flower-bud will form earlier than it otherwise. Much depends also upo variety itself. If it be naturally early-f ing—say, middle of October or the first in November—the first flower-bud will itself in a corresponding manner, and with the late-flowering sorts. As a the months of April and May are mo ductive of first-break plants than any The manner of growth of each variet has to be considered. While some sor show their first bud at 1 foot high, others will attain a height of 3 fee even more, before they pass throug stage. When the pots are well fille roots, and before they become root they will require larger pots. No mistake can be made than that of al the plants to remain in the pots they have filled these with roots. It possible to lay a good and proper four if the plants are checked when young i progress. From want of rooting-spa plants become stunted and checked, wh after-treatment can dispel, and much able time is lost in consequence. P inches in diameter are the right size ploy for the first potting if the flowerin are to be of the orthodox size—9 inch is better to measure the pots by inche to take the "cast" size; these vary sc in different localities. I always meas inside of the pot too. The compost first potting should be carefully pr and where possible should be compo fresh turfy loam, partly decayed, two one part leaf-soil or spent Mushro materials, adding sharp silver sand f the loam be of a heavy, retentive For the greater convenience in pottin the compost through a coarse sieve, r the fibrous pieces through also. If loam cannot be procured, add 1 lb. of son's Vine manure to every bushel prepared compost. The pots ought clean and carefully drained, with abo pieces of broken potsherds. Place o crocks a little of the rougher parts compost, and press the soil firmly i pots. M

E FLOWER GARDEN

he Dahlia-flowered Zinnia

E is often asked by gardening friends r a good annual which will give a e display of colour during the summer s. The new Dahlia-flowered Zinnia is ally the only annual which fulfils this ment. It is one of the most effective mmer-flowering plants, coming into early in July and lasting well into the n; in fact, until cut off by frost.

Zinnia is a half-hardy annual, of is habit, with flowers of many beauti- ades of colour, ranging from deep to yellow, all shades of pink, red, and

n depends upon the quality of the seed, ospective growers should therefore be to purchase only from reliable seeds- Seed should be sown some time be- the middle and the end of March in a t of good fibrous loam (two parts), uld (one part); to this add a good ng of sand. At the bottom of the box put a little old and rotten manure if possible, take from the top of a hat has become dry and crumbly. e pans in a greenhouse or frame and, eather is warm, the seed will germi- about five days or six days. As soon seedlings are large enough to handle into boxes, using the same compost, getting to put a little of the old at the bottom of the boxes. The l point is to keep the seedlings on the rom the time of germination until fully-grown plants.

Zinnia is quite happy in a good loam. ould be well dug early in the season, nty of manure and bone-meal added, a gross feeder. Towards the end y, when the seedlings are about s high, plant out into their flowering s, placing them not less than 18 inches apart, as they will grow to $3\frac{1}{2}$ feet to 4 feet high, throwing out side branches.

An ample supply of water is essential at all periods of growth. It is lack of moisture more than poor soil which results in stunted development and poor flowers.

The stems are hollow and soft, so care must be taken to stake the plants firmly. Each branch should be tied in two places to the support to prevent twisting in the wind, as the joints are very easily broken.

It is quite common to have, early in the season, blooms 5 inches to $5\frac{1}{2}$ inches across, but later they become a little smaller.

The Zinnia can be cultivated perfectly easily by the amateur; just a little care and the grower will be well rewarded.

At the R.H.S. autumn show at Holland Park in 1923 Messrs. Dobbie and Co., Ltd., of Edinburgh, had a small exhibit of the Dahlia-flowered Zinnia which attracted a big crowd. On July 14th, 1924, the same firm put up a wonderful show at the R.H.S. Hall, Vincent Square, for which they were awarded a gold medal and an Award of Merit. It was one of the most attractive sights that I have had the pleasure of seeing at any floral exhibition. A. G. WEEKS.

Limpsfield.

[Reproduced by permission of Messrs. Alexander and Brown, Perth

The Flower Garden, Sandside, Thurso

A winter flowering Iris

Iris unguicularis, also known as Iris stylosa, an Algerian species, the charm of which is enhanced by its period of flowering, should be grown in every garden, as it will flower under suitable conditions in the open, excepting very frosty weather, from October until April. The first bloom this season expanded on October 7th, and after the severe frost in January I counted 132 buds ready for picking in a narrow border 12 inches wide and about 30 feet long.

Nothing could be more beautiful during the dull winter months than these sky-blue flowers, possessing a charm and softness of their own, peeping through a wealth of foliage which protects the buds from frost.

April is a good time to lift and divide overcrowded plants and replant, as this is about the time new growth appears.

With regard to site, the plants require a hot, sunny position, and I have seen this Iris flowering freely in a narrow border at the foot of a south wall, also at the foot of an east and west wall in a narrow border along the edge of a gravel path. When planted in these various positions not only is the flowering period prolonged, but the plants receive very little of the normal rainfall, and growth becomes thoroughly ripened during summer. In these gardens this Iris grows and flowers freely in a poor gravelly soil.

Very few plants require less attention for the amount of pleasure they afford than this Iris does, but it must be borne in mind that if the plants are to flower freely they should have a sunny and somewhat dry position, and an annual combing out of the old foliage. This latter operation may be performed about the end of March, and the tool I find most useful for this combing out is an old blunt hedge-hook.

The slightly fragrant flowers of this Iris are of great value as cut bloom for house decoration, and for this purpose they are best picked in the bud stage and opened indoors, and if not placed in too hot a room will last fresh for several days. G. H. H. WASSELL.

Basingstoke.

Bellis rotundifolia

Bellis rotundifolia is an exquisite little subject with tiny, soft, downy-grey leaves and little Daisy-like flowers, all only an inch or two above the ground, and delighting all who take pleasure in such minute charmers. Its variety cærulescens is even a greater favourite with those who know it. Identical in every way except in the colour of the

flowers, it is of a charming tone of light blue, sometimes, indeed, fading away to almost white. Were it only a little more hardy it would soon acquire great favour. It is well worth while to attempt it, even should the garden be only moderately mild, as it can stand a winter of average severity, and those who have frames or cold houses could keep a plant or two in reserve or raise it from seeds when required. It is easily increased by division, and in light, gritty, well-drained soil in a sheltered position has a good chance of surviving for some y Mr. Farrer tells us that B. rotundifol the moraine becomes "as much of a sowing weed as B. perennis itself." writer has never tried it in a moraine comes from the Atlas. S. Arno

REMINDERS FOR THE WEEK

Southern and Midland

Cauliflower

Plants that have been wintered in cold frames may now have the lights left off for a few days and nights, when they will be fit to plant out in sheltered positions. I find an excellent site to grow these early Cauliflowers is in the alleys between Asparagus-beds. Otherwise ridges may be made as for Potatoes, setting the plants in the bottom. The soil may be worked between the plants later on.

Parsley

Seed may now be sown outdoors. The ground should be rich and well dug. Plants that have been hardened off may also be set out. As a garden edging in the vegetable quarters Parsley is very suitable, and can be gathered without treading on the soil.

General work

At this date there will be many crops of winter greens that have passed their best, so the old stumps should be pulled up and the ground manured and dug for the next crop. Keep the hoe at work wherever the crops are through the ground to prevent the soil becoming baked. This particularly applies to gardens where the soil is heavy.

Plants in frames

All the plants in these are making headway and call for daily attention. Violets should have the lights left off in all but wet and frosty weather. Sweet Peas may be removed to a sheltered spot to complete their hardening off. Lettuce should have ample air. Calceolarias should be pinched back to promote bushy growth. The soil should be stirred and a dusting of lime or soot given if slugs are troublesome.

Potatoes

Planting of these may now be done in earnest and the work completed as soon as possible. Where the earlies are peeping through it is wise to keep the soil hoed up around them and have some covering material at hand in case of frost.

Hardy annuals

In warm, sheltered gardens where the soil is in a good working condition there are many kinds that may now be safely sown. Those that were sown under glass during February should be pricked off as fast as they become large enough to handle into boxes or prepared beds in frames.

Herbaceous borders

During the next week all division of plants should be completed and any additions planted, also bulbs of Gladioli, Cape Hyacinth, Tigridias, and others, afterwards forking the whole over lightly to give a tidy appearance. Protect all plants liable to the ravages of slugs and other pests.

Phlox

Now is a good time to raise these plants from seed sown under glass, while the named varieties can be readily increased from cuttings taken off 3 inches in length and inserted in the same manner as Chrysanthemums.

Melons

The days are now getting longer and the sun stronger, so the early crop will need constant attention in tying in the growth and pinching the shoots as necessary. The atmosphere must be kept moist by syringing and a regular temperature maintained to induce health and vigour in the plants. Sow seeds now for plants in frames.

Vines

Tie down the shoots gradually. Stop all laterals at two leaves from the embryo bunch and all sub-laterals at one leaf. In early houses the berries will soon be large enough to thin. This should be done in several operations. Keep the house in a moist condition by damping down and syringing when necessary.

Peaches

A sharp look-out must be kept for insects when the trees are flowering and syringing cannot be done regularly. Fertilise the flowers at midday and disbud by degrees as required.

Browallia speciosa

This is a splendid blue flower for the greenhouse during summer and autumn. Seed may now be sown in a pan of light, sandy compost, pricking off, and finally potting up in ordinary potting compost into pots of 5-inch size. W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Early Peach house

As soon as it is possible to do so, disbudding may be commenced. This ought to be done by degrees in order that the trees may not sustain too severe a check. See that borders are in the correct state as regards moisture, and now that the sun gains strength fires may be damped down during the day. So long as draughts are avoided ventilation may now be fairly free, relying, of course, more upon the ventilators at the apex of the house than upon those at the sides at the present time.

Late vinery

The buds are now well on the move, and the temperature may be increased by 5 degs. at night. It is good practice to give a generous heat at this season to the late vinery so that time may be given for the crop to ripen before the short days arrive. This is particularly necessary if the Grapes have to be kept over the New Year. Should the border require watering it would be well to allow a good dressing of some good fertiliser before the watering is done.

Plant houses

At this time it is almost impossible to avoid congestion in plant—and, indeed, in fruit—houses. It is wise, therefore, to look round and see whether it be not possible to dispense with surplus plants, duplicates, unhealthy pieces, and so forth. With the longer day the greenhouses ought to be kept cooler, more especially such as contain plants in bloom. The later bulbs will now be useful. Such things as Dielytra spectabilis, Spiræas, and Solomon's Seal are effective, while Arum Lilies, Primulas, Cinerarias, and the flowering Gladioli give variety. A late of Schizanthus and of Clarkia will no better in cold frames until required. late the frames freely through the day shut up (matting on cold nights) Watering begins to take up more tim should yet be done in the early part day.

Calceolaria Clibrani

Seeds of this very useful Calceolaria now be sown in a pan filled with light, soil. Merely press the seeds into the so shade until germination has taken when the pan can be placed upon a shel the light. As soon as the seedlings handled let them be pricked off into 2 inches apart each way until they are for transferring to 4-inch pots. Good can ultimately be put into 6-inch and pots, and nothing is better than a good of this Calceolaria associated with a Palms and Adiantums in the conservat

Beds and borders

Look round all plants which may have put out during the last two or three m and firm the soil round the collar of plant. This is very necessary in the such things as Carnations, Pinks, Pa and the like, which are liable to have disturbed by frost. The sooner this is fied the better, but it is advisable to until the surface of the soil is reasonabl The division and rearrangement of pla the herbaceous borders ought now brought to a close. There are always novelties among hardy plants, and old ineffective varieties should, by degre displaced by better sorts.

Newly-planted trees

Those who have recently put out new or shrubs ought, occasionally, to them in order that the roots may be up and, if needful, the supports made s Very few planters, nowadays, fail to sufficient stake to a newly-planted tre those who have not done so should p matter right without delay. Planting yet be done, but the season wears on time should be cut to waste. Through of circumstances I have had to pla times, at what many would consider to unfavourable season, and, as a result, long ago formed the opinion that mo pends on the way in which the plant done and the care which is afterwards to the tree or shrub than upon the time at which plants are put out.

Kitchen garden

Thongs prepared from the roots of S lifted for forcing can now safely be p into well-manured ground. Should plantation of Horseradish be needed the time to attend to it, selecting straig clean roots for the purpose. New borders can also be made now. Cutti Sage, Thyme, and Tarragon will root. Other herbs can be increased by or by division. Attend to the routine ings of vegetable seeds, and cover crowns of Rhubarb so that there may gap in the supply. W. McGu

Mabie Gardens, Kirkcudbrightshire.

oyal Nurseries, Cirencester

IN JEFFERIES AND SON, LTD., not content with one nursery, they e several, and even with the aid of a ul car it takes all day to see all of The old-established house has its arters in the Market Place, Cirenthe nurseries are at Tower Street, noor, Siddington, and Somerford s.

E. A. Jefferies, who was kind enough nd some time showing me over the ies, is the Secretary of the Cirencester ultural Society, and the flourishing con- of this Society, which is largely com- of head gardeners in the district, owes t deal to his untiring efforts.

n so many nurseries under cultivation t surprising to note that there are large of well-grown ornamental and forest One of the accompanying illustrations a main drive through the Siddington y, where Conifers in great variety are

assing, it is interesting to note what dges are to be seen, especially in the ies at Siddington and Somerford s. The hedges specially admired com- the American Arbor Vitæ and Thuya italis, both of which make splendid en hedges, and the Beech trained tall archways. The Beech hedges look and brown all through winter.

RESSUS LAWSONIANA ELEGANS AND SSUS TRIOMPHE DE BOSKOOP.—A score re varieties of Cupressus are grown, n large quantities. Two of the best are ssus Lawsoniana elegans and C. phe de Boskoop, most graceful varie- the Lawson's Cypress and first-class ental trees that should be even more ively used as specimens in parks and

interesting to record that Cupressus niana elegans originated in these ies. That it is one of the most beauti- r raised no one will gainsay.

variety Triomphe de Boskoop is a very grower and one of the bluest and most ul Conifers in cultivation. Mr. s took me to see a hedge of this Cypress in the nursery. It is one of the most pleasing hedges I have seen.

ABIES PUNGENS GLAUCA KOSTERIANA. — This is another glaucous - blue Conifer to which Mr. Jefferies is devoting a good deal of attention and space. It is certainly an improvement in colour on the well-known Abies pungens glauca so much planted as a lawn specimen in many of the larger gardens of England.

We have mentioned only a very few of the ornamental trees which attracted attention in passing through these well-stocked nurseries. All kinds of trees are grown, from dwarf Conifers for the rock garden to the tallest-growing fruit-trees. There are extensive breaks of Yews, Cedars, Thuyas, Retinisporas, Japanese Cherries, Rhododendrons, Spiræas, Poplars, Laburnums, Cytisus, Ceanothus, Berberis, and a host of other ornamental trees and shrubs.

Lest it should be assumed from these brief notes that the nurseries are devoted only to ornamental and forest trees, reference should also be made to the vast collection of Roses and fruit-trees grown to suit all gardens and all tastes. Altogether these nurseries embrace a very wide selection of well-grown nursery stock.

HERBERT COWLEY.

A shapely specimen of Abies pungens glauca Kosteriana

This is one of the bluest conifers, and is planted as an isolated specimen on a lawn

One of the main drives through the Siddington Nursery

Seed germination

I HAVE read, with considerable interest, Captain Saunders' letter on this subject. I have not, in a general sense, had much experience in testing old seeds, as I invariably procure fresh stocks each spring, but I can endorse what he says regarding the time Tomato seeds remain reliable, as I have at various times used seeds of these five years or six years old, these producing plants equal to those raised from fresh supplies. Melons, too, I know retain their vitality for quite a long time. One of the best growers of this fruit I have ever met would not use newly-saved seeds, but depended on those three years to five years old. His contention was that the plants obtained from new seeds were so rampant in growth that they mostly failed to produce fertile blossoms, whereas the older seeds gave plants of greater refinement and that showed any amount of flowers of both sexes. This I have not been able, personally, to prove, but as my friend was an expert with this fruit I am quite convinced that there is more than mere theory in his idea.

While, as I stated, I procure fresh supplies of vegetable seeds each season, I have at various times tested certain flower-seeds and have discovered that some kinds remain quite reliable for a considerable time. An old friend once sent me a good packet of seeds of a small, semi-double, white Chinese Primula he had raised. It was the most floriferous variety I have ever seen, and produced very shapely little plants. Although the seeds of the Primula family are usually recognised as being only reliable when quite fresh, this packet of seed served me for five years, and my friend asserted that it was, with him, quite fresh at nine years. The Persian Cyclamen is another plant that gives the best results from seeds over two years old, and this I have proved by experiment. Some years ago a friend sent me some seeds of a specially good strain, and as the quantity was far in excess of my needs I retained the surplus, and for five consecutive years used this annually, and the last year the plants

produced were as strong, at least, as were those obtained the first year. Not only so, but in the fifth year I obtained a packet of fresh seed from a seedsman and found that the old seeds germinated several days in advance of these. The seed of Tuberous-rooted Begonias germinates well when two years old, and Stocks do the same, but in the third year are very feeble. Delphiniums, Aquilegias, Geums, Auriculas, Polyanthuses, and Pelargoniums are only really reliable for one year; at least that has been my experience with these different kinds. Cineraria, Gloxinia, and Streptocarpus are quite safe for two years. C. BLAIR.

Preston House, Linlithgow.

VEGETABLES

Lime and its value

THE seventh lecture in the series arranged by Dr. W. F. Bewley and the staff of the Cheshunt Experiment and Research Station was given at the Relph Hall, Elms Arches, Cheshunt, recently, when Mr. O. Owen, M.Sc., dealt with "The Use of Lime on Soils." Mr. J. C. Cobley presided over a fair attendance and briefly outlined the purpose of the meeting.

Lime, Mr. Owen pointed out, when found in nature was calcium carbonate, and was one of the oldest forms of manure. One of its commonest forms was limestone, but other forms were marble, chalk, marl, etc. Limestone when subjected to great heat lost the carbon dioxide and quicklime was left. When lime contained more than 1½ per cent. magnesia it was of doubtful value. Alternative forms in use were hydrated and ground lime. In the decomposition of animal and vegetable substances which led to the formation of humus, certain acids were brought about which lime would neutralise. Oxygen, too, was an important agent in the production of humus. Acids could prevent the work of the microscopic organisms which make nitrogen available, and it also stopped many of the biological processes which were going on in the soil. The use of certain artificial manures tended to the formation of sulphuric acid in soil. Sulphuric acid was one of the most powerful acids, but this could be neutralised by lime.

One of the chief effects of lime was its power to make plant food available, and land of low fertility would become more fertile as a result of lime treatment. An ordinary garden soil which had had no manure would be improved by the addition of lime, the effect being to displace potash, and it also had an effect on nitrogen. Bacterial activity was greater when lime was present. A certain amount of lime was lost in drainage, and if applied beyond the necessary amount it did little good. In its effect upon phosphates it was doubtful what happened. Clay or silt (small particles) which were surrounded by a film of water excluded air and caused the soil to remain cold by holding water. If a portion of soil was placed in a vessel containing water and shaken the water became cloudy; by the addition of an acid in a few hours the water would clear. Lime could absorb carbon dioxide and give bi-carbonate of lime.

The physical effect was equal in importance to the chemical effects. As a partial steriliser quicklime was more effective than carbonate of lime, or chalk, but none of these could compare with steam or carbolic; lime's effect was rather to sweeten than to sterilise. In some cases quicklime had been used at the rate of 8 tons per acre, but an ample dressing was 2 tons per acre. This amount had proved satisfactory at the Experimental Station in preventing sourness. More than two tons per acre was a waste on old nurseries. Carbonate of lime was also recommended for sandy soils, while quicklime caused too hasty a decomposition of organic matter. Carbonate of lime could be washed out, but not to the same extent as bicarbonate of lime, of which a great amount was bound up with phosphates. After enough was applied the rest was stored. An interesting table of figures was shown to illustrate the ability of plants to take up nitrogen in proportion to the amount of lime present.

A lengthy discussion followed as to the value of different forms of lime in crop production, and the difference in effect, if any, between chalk and ground lime. In this it was shown that lime and chalk were equal in effect upon acidity, but lime was more effective in opening the soil and making nitrogen available. On the question of using gas lime this was said to contain sulphur, and other forms of lime were to be preferred. In answer to a question as to why decomposition of organic substances was more rapid in sandy soil, it was shown that this was the result of quicker oxidation through increased porosity.

Allotment produce

I suggested some time back, in GARDENING ILLUSTRATED, that in many cases allotment holders seemed to fail to realise the folly of overplanting many things that are really only suitable for home consumption, and not, under present conditions, saleable stuff when there is a considerable surplus, with the result that much is wasted. It might not be so if one were in close proximity to a town, but cost of carriage to the same from outlying villages eats up all the profit, whether on a large or small scale. This applies mainly to green vegetables, although some of the roots, like Beet, Artichokes, and Parsnips, are not in great demand. Of Broccoli there will be little surplus later in the season, for frost, icy rain, and bitter winds have played havoc with it, and of brakes of 100 and more in the different holdings hardly 5 per cent. remains. In districts where Bracken is plentiful and can be had for the cutting one can save the crop in severe weather by slightly throwing and shaking a little dry Bracken over them, but one might go a long way in this district and not find a single plant of the common Fern, and straw at present is a prohibitive price for such a purpose. It would pay the allotment holder only to plant just enough of many different vegetables for his own consumption, Potatoes and Onions being about the only things of which surplus produce can be fairly easily disposed of. If there is a bit of vacant ground Swedes will be found a fairly useful and profitable crop, useful because an occasional root is acceptable for the table through the winter months and profitable because surplus stock will always find a customer in a neighbouring farmer.

I have tried to persuade holders to go in much more for fruit, feeling sure it would be far more profitable for household purposes, but hitherto without much success, the risk of loss from birds in positions not often under surveillance being advanced. This, however, could be overcome by having the fruit quarter in a square, compact form, and using cheap fish-netting, which, with care, would last several seasons. Black Currants, Gooseberries, and Loganberries are, possibly, the most profitable of the smaller fruits, that is, the most easily grown, and valuable alike for ordinary cooking and jam-making. A combination of the two last makes a really excellent preserve. Strawberries and Raspberries require extra attention, and, being softer, are, naturally, more affected by adverse weather, and often it is not possible for the allotment holder to pick them just about the right time. As an incentive to increased fruit-growing well to offer fairly good prizes at local sh at the same time asking judges to be r strict and not make awards, as is somet done, to very inferior produce.

Hardwick. E. BURRE

Asparagus failing

I formed an Asparagus-bed in a light s soil. I trenched the ground and planted year-old crowns in May. The ground got very dirty with weeds, so I ordered to be put on it, which, I fear, may hav jured the crowns, as I hear salt is not g ally used on two-year-old plants. It lo very sickly and weak all the summer, a November I ordered it to be cleaned trenched a little deeper, with the result far too much soil was put on the beds, now I find the crowns are much too far u this soil, and, moreover, no manure has put on it. What would you advise me to M.

[You appear to have made a sad mud your Asparagus-bed. A little salt is u on porous ground, especially for Aspar as it makes the soil retentive of moisture 1 lb. per square yard will not injure thing; but you appear to have exceeded quantity. You cannot use salt enough young Asparagus-bed to kill weeds wi running the risk of killing the roots o Asparagus. The beds will stand more a roots go deeper into the ground, and the loses its power before it reaches them, b all times it is a mistake to scatter quantities of salt upon anything which life. Your best course is to leave the b it is till the end of this month or begin of April, as by that time all the roots w have life will be showing signs of mover and you will be able to separate the l from the dead. The plants should the lifted carefully, laid on one side, and co with a mat to keep the air from them. make the bed, and plant in shallow tren wide enough to lay the roots out stra and cover the crowns about 2 inches Do not place any manure over the roots if you have any good compost, such mixture of loam, leaf-mould, wood-ashe charred garden rubbish, mix this all toge and place this over and around the roots crowns. Any manure you may have from the preparation of the ground ma used as a mulch on the surface afte roots are planted. We are assuming bed has been made on the old-fashi principle of crowding the roots together a narrow, grave-like space. It woul better to plant on well-prepared grour rows 3 feet apart and from 15 inches inches apart in the rows, and so individu each plant, and then feed with rich sur dressings, in which salt in moderation do its part, giving any spare liquid-ma which may be available during growt summer.]

Beet Cheltenham Green-top

In Scottish gardens there appears to prejudice against Cheltenham Gree Beet—a prejudice which is difficult to plain. Those who appreciate a really rate Beet—not too large, and with a de flavour—ought to give it a trial. The absolutely no comparison, when cooked tween the tender and delicious roots o Cheltenham variety and the coarse, wi and badly-coloured examples which, in gardens, masquerade as Beet, but might almost as well be called Mang The craze for size, encouraged by exhibi of garden produce, is entirely wrong i case of Beet, and judges who award to overgrown and woody specimens merely assisting in the work of extermin one of our choicest roots. KI

pring versus Autumn Planting

census of practical gardeners and rymen were taken as to the best time his work, doubtless there would be a r majority in favour of the latter hy do we advocate "early" autumn ? Simply because we consider that still retains its warmth and is in a condition for renewed root action, in that the plant or tree will be able to d an early visitation of wintry By early autumn planting I mean ich is carried out quite by the end ber, as the succeeding month is very treacherous. When such oc- l lasts a few weeks, these newly- subjects suffer a relapse as it were; has ceased to flow, and should the ch the roots they cease to function, plant is at a standstill, it may be warm spring weather again sets in, ows the disadvantage of November This early advised planting scores en we come to analyse the state of as unless we get an unusually wet it is found in a far more workable than we can expect it to be after er's rain, say, from the middle of to that of March, especially so if of nature. Such soils remain cold for ened period; in fact it is far from ory very often, and I would much ing it in the autumn. Loamy soils, somewhat stony, naturally dry more when the days begin to lengthen, and daily getting more power, warms so that spring planting can be suc- carried out with every chance of ll doing, provided they are carefully fter in the matter of staking, mulch- watering later on if need be.

oregoing remarks apply principally to s things. We frequently move ever- ubjects from mid-September, when is in a workable condition, guarding it when the same is in a parched On the other hand there are some that transplanted during March, April, y May. Hollies in the last month, ince. This late spring planting en- h labour in watering, syringing, and in some cases, so it is not practised g scale unless absolutely necessary, n the soil is particularly dry, as it is seasons, and the plants to be removed in the same garden, the better prac- ld be to draw aside the soil 2 feet or the stem, more or less according to of the plant, to a depth of 8 inches or ls, well watering the ball of roots 24 so previous to lifting. I am con- at there would be much more spring done in preference to autumn plant- it not for the more pressing work in months of the year.

herbaceous plants, the majority of uickly respond to division and re- towards the end of February and arch, which cannot always be said e work is carried out in the autumn, s aforesaid, quite early. With this ere are many species that are at their ughout September, and it would be tal to the plant to raze the current rowth to the ground at so early a he daily lengthening of the sun's avours the early re-establishment of t, while in the fall of the year things rsed, the days get shorter, soil be- oler, growth is ofttimes slow, even sence of frost, to say nothing of an l of snow in the colder counties, and an likely leaving many gaps to be in the spring. To illustrate my point arly, we have only to study the be- of the Delphinium, which is a far greater success in spring, whether divided or transplanted, than when either is done in the autumn, the more so if the soil is of a retentive nature.

From these remarks it will be gathered that my preference is for spring planting of most things, unless it can be undertaken very early in the autumn. It may be argued that where a quantity has to be tackled the work, if deferred until spring, would never be finished ere hot, dry weather may set in, but even that would not detract from the principle advocated herewith. J. MAYNE.

The protection of Pear blossom

There is every prospect of a fine show of Pear blossom, and measures should be taken wherever practicable to protect at least part of it. There is sometimes a tendency to think and say that while it is necessary to protect all stone fruits, Pears may be left to take their chance, but this is a mistake, for this blossom is as susceptible as any other, and a rather sharp frost, especially when this follows cold rain or hail, is responsible for complete destruction, except in the case of a little blossom that may happen to be drooping rather than erect. There are Pears and Pears, and so if the supply of protecting material is rather short it is advisable to make sure first of the sorts that are of good quality and crop well, and that keep fairly well in their respective seasons. Louise Bonne, Thompson's, Beurré Hardy, Winter Nelis, Glou Morceau, and Nouvelle Fulvie are examples of what I mean. It is for this reason that anyone planting a fair stretch of wall with cordons should be strongly advised to keep such kinds by themselves and not mix them up with first earlies, or with sorts that are either very short lived after attaining the ripening stage or from their rather peculiar flavour are not acceptable to some palates, as for instance Van Mons le Clerc and Conseiller de la Cour.

If there is a coping to the wall nothing else will be required, but if it is just straight to the top it is advisable to fasten some boards along temporarily that will project about 6 inches so that the material can be attached to this. Tiffany is the best, but if not available a double thickness of ½-inch mesh fish netting will keep out several degrees of frost and break the force of storms of hail and sleet. Bush trees are not so easily protected, but if not over large it can be done with the aid of some short stakes standing clear of the tree and one or two cross pieces at top. Care should be taken both at top and the sides that the material used does not swing into the blossom. E. BURRELL.

Hardwick.

ORCHIDS

Dendrobium nobile

WHEN is the best time to repot this plant? Can I do it directly after it has done flowering, or must I wait until the young growths have made some roots? P. C. H.

[This may be repotted at any time when not in active growth. The best time is when the young shoots are about a couple of inches in length, but before they commence to emit roots. By doing it at this time the roots get the benefit of the new compost. Never wait until new roots are actually formed, or it is quite impossible to avoid injuring them. D. nobile may be grown either in pots or suspended from the roof in baskets. Skilled growers are in the habit of using manures of various kinds in the compost, but these are better left alone by the beginner or anyone inexperienced in Orchid culture. Good peat fibre and Sphagnum form the best basis, and for strong plants a little loam fibre may also be added, with abundance of rough nodules of charcoal and potsherds. The drainage must occupy at least half the depth of pot or basket, and a fairly deep make of pot is, in most cases, preferable to shallow pans, though the latter are useful for large specimen plants requiring plenty of width. If the plants are well rooted in the old pots, and the compost in not too bad condition, but little disturbance will be needed, simply cutting out any dead roots that may be conveniently got at, and picking out loose portions of the old compost. With plants in this satisfactory state a good shift will be advisable, a pot at least two sizes larger than the old one being allowed. Place the plant in the centre at a sufficient height to allow of the rounding of the surface, and fill up to the base of the new shoots with the compost. Trim off the surface neatly and replace in the warm house.

Very fine specimens are produced by massing a suitable number of the young stems that are often produced from the upper part of the old ones, but a little more care is necessary in potting. Begin at one side of the pot or pan, and plant them regularly at a distance of about 3 inches apart all over the surface, placing a neat, strong stake to each to steady it, choosing the growths so that the taller ones come in the centre, the compost, as in the former case, being raised in a convex mound. Through the growing season a brisk, moist atmosphere and high temperature are needed, and the plants must not be heavily shaded—only, in fact, just in the middle of the day. The terminal leaves show in due course, and when the growth is nearly finished allow the plants full exposure to sun, giving plenty of water to the roots. This causes them to swell up fine large pseudo-bulbs or stems, and when these are quite finished remove the plants from the warm, moist house and place them in a cooler and drier structure in the full sun, and where they have plenty of air. If not later than the middle of August, they may be placed outside with advantage for a week or two, but must be returned under cover before any danger from frost is apprehended. Strive, in short, by all means to thoroughly ripen and harden the growth, and give enough water to keep the pseudo-bulbs plump.

The best place for the plants in winter is a light, sunny house that does not fall much below 50 degs. at night, and is not kept too moist. From here they may be taken early in the new year to a warmer house, and kept nearly dry at the roots for a week or two, when the flower-buds will appear at the nodes. Let them come on slowly, as flowers rushed on in a lot of heat and moisture are never good in colour, and it is not unusual, under the circumstances, for many of the nodes to form growth-buds instead of flowers. If enough plants are at command they may be brought on successionally, thus prolonging the display of flower.]

Plants for rooms in London

(Room plants).—If the room be well lighted, and the sun gets upon it, Spiræas and most greenhouse plants of the commoner kinds will do well. Ferns will grow without the sun falling directly upon the room, but nothing will grow well that is subjected to gas fumes. Remove the plants before lighting the gas, replace them every morning, and syringe them occasionally with clear water, and they will flourish as in a greenhouse.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

TREES AND SHRUBS

Treatment of shrubby Veronica

(T.).—The Veronica you refer to with white flowers is probably V. Traversi, and the pink one you should send when in bloom. It is advisable to cut out the old wood and prune it back in the spring if it is overgrowing its station. With plants such as you describe judicious thinning and pruning can be done at almost any time. If carried out intelligently the shrub can be kept within bounds and remain of a good shape. The pink Veronica, probably a form of Veronica speciosa, being somewhat tender, it is always best to defer pruning till the spring. Often when the dead shoots have been removed no further pruning is needed. When it is necessary to reduce them such work should be done in March.

Culture of Deutzias

(G.).—When they have finished flowering cut out all the old wood, taking care to leave the young shoots springing from the base of the plant. Gradually inure the plants to bear outdoor temperature, and about the end of May plant out in a light rich soil in a sunny position. Water well and give liquid-manure. At the end of September take them carefully up and pot them, let them stand in a shady position for a week or two, then bring them into the cool house, and introduce a few at a time into the forcing house as required. Under good cultivation Deutzias flower on the old wood, but never so well as on the young shoots.

Pruning Lilacs

(E. M. D.).—The best time to prune the Lilac is immediately after flowering. Lilacs give the finest blooms on the well-ripened wood of the previous year. Cut out all the thin and weak wood, and so encourage a strong and vigorous growth. If the branches are very crowded you may remove two or three, this assisting those left to perfect their flower-buds. Cut away all the suckers if there are any, and if you think the soil is exhausted, which in the case of your plants it no doubt is, apply a heavy mulching of rotten manure and well water during the summer if the weather is dry.

Pruning Rhododendrons

(M. W.).—March is the best month in which to cut back scraggy bushes. They are rather slow in making new growth, but will do so eventually. Doubtless Rhododendrons suffered considerably from the drought of last summer. After flowering it is always advisable to give them a mulching of old potting soil, leaf-mould, peat, and decayed manure in equal parts. What is known as peat-Moss litter is an excellent material to mulch with if obtained from the stables after being used there. Previous to applying this mulch the shrubs should be thoroughly flooded, then the mulch applied conserves the moisture and the plants are much benefited thereby. Of course, in a wet season the watering would not be needful, but the mulch should be applied all the same, for the roots of Rhododendrons are always found near the surface, and require a little stimulant in the form advised above.

Destroying Brambles

(Whitaker, Exmouth).—To destroy these you must grub out the whole of their roots, otherwise the cut ends will shoot again and become as vigorous as ever.

GREENHOUSE

Fuchsias from seed

(Fuchsia).—Seedling Fuchsias are not more difficult to raise than other plants. Sow the seeds in heat in spring, pot off when large enough, and treat the same as plants raised from cuttings. The probabilities are the seedlings will not be altogether like the parent. If you have saved seeds wash them out of the pulp at once, dry, and place in a paper packet till spring. Keep the old plant dry through the winter, and warm it up in spring, there will then be young shoots break out that will make the best possible cuttings. Under good treatment seedling Fuchsias will flower the same season if helped in heat in the spring.

Lapageria rosea

(G. R.).—The Lapageria delights in a cool temperature, 40 degs. to 45 degs. in winter and 50 degs. to 60 degs. in summer. It must be shaded from strong sun. The soil most suitable is two parts fibrous peat and one part turfy loam with a liberal addition of silver sand. Pot moderately firm, using plenty of good clean drainage. The Lapageria delights in a moist atmosphere when making its growth, but must by no means be subjected to a warm temperature during that period. As it is longer in starting into growth than most subjects, it is sometimes pushed on in heat, which should never be the case, as it grows more robust and flowers more freely in an ordinary greenhouse temperature.

Disa grandiflora

(A.).—This, known as "The Pride of Table Mountain," should be potted in a mixture of light turfy loam and fibrous peat, mixed with some sharp sand and nodules of charcoal, the pots being well drained. This should have been done about Christmas or earlier, as the plants begin to root during the winter months. During this time they may be kept in a cold frame, the frost being carefully excluded. In the summer plunge the pots in moist material in the frame, when plenty of air may be admitted, and a thin shading from the sun can be given. A moderate supply of water should be given to the roots, and when the weather is bright in the early spring and the growth active, gentle syringing twice in the day will do good, as this prevents red-spider and black thrips, both of which prey upon it and do much damage.

FLOWER GARDEN

Injury to Gladioli

(Flemingite).—We have exam specimens and find that some of are affected with a heart rot, prob by a fungus. We are incubating t and will inform you as to the n fungus responsible for your trouk as we can get it to produce spores your corms are quite free fro trouble. All the corms, whether disease or not, have been damage attack. You will notice a lot of h outside of the corms where insects biting. There were no signs of mens of insects in your package, the shape of the holes we think worm was the cause. Wireworm troublesome in newly broken-up pa we should advise you to use a go secticide; one containing napht calcium cyanide would answer you

Creeping Forget-me-Not (Om verna)

(Name lost).—This for natura rough, cool banks and about the shrubs—which are not so dense as all light—is not appreciated as it yet in such positions it not only pleasing undergrowth without the attention, but during March provid sea of clear, handsome blue flov white throats. It is a very usef plant, too, and may be used to fo edgings to beds of other plants, bu haps, seen to the best advantage wl lished in colonies near the foot of the Golden Bell (Forsythia) or stellata, which bloom at the same ti white variety, although a useful pla so attractive as the type, and will the same place in gardens as the latt has long been a proved favourite.

Perennial plants for edge of nort

(W., Exmouth).—These should purpose:—Campanula muralis, Vin V. acutiloba, Everlasting Peas (Lat variety, Polygonum vaccinifolium, Geranium sanguineum, G. nepalens staphylos californica (a low, trailin Convolvulus tenuissimus, Cerastiun tosum, Gypsophila muralis, Litho prostratum, Œnothera Missourien taraxicifolia, Omphalodes verna, S (Megasea) in variety, Vicia sylvatica

VEGETABLES

Cardoons and Shallots

(Cardoon).—Cardoon seed should about the middle of May in shallow t it thrives best in a light deep soil. Th should be thinned out to about 1 apart from each other in the lines must be watered copiously duri weather. This will prevent the form flower-stalks, and will increase the lence of the leaf-stalks. The leaf-stal be put close together in August, and round with bands of straw, leaving th only free. Earth should then be round them to the height of 18 Shallots should be planted at once, of the bulbs should be kept a littl ground; drawing away the soil surr the bulbs has a beneficial effect aft have taken root. They must not be in ground recently manured. Soot with the surface soil will protect the maggots.

Red spider on Cucumbers

(G.).—The house has been probab too dry. If the plants had been well sy and water poured on the paths, an

ter kept standing on the pipes or red spider would not have appeared. e thoroughly, and shut up close about on a warm day, repeating the same on several times. If the spider has trong hold you will probably fail to get it whilst the present plants are in the at least such is our experience.

or Tomatoes

grower).—Tomatoes do not require a ch soil to grow in. If much manure d before or when planting them they ay too gross and strong at first, and set or fruit well. The best material to hem in is good, sound fibrous loam n old meadow or hedgerow, mixed fourth or fifth of burnt earth, and a ing of superphosphate. If the loam is eavy you may add a third or fourth of uld, but we should keep the manure e it as a top-dressing, mixed with an uantity of loam when the plants are in aring. After the plants have fairly fruiting they may be fed liberally with nanures, guano, rich top-dressings, forth, with great advantage.

MISCELLANEOUS

slops for crops

R.).—Chamber-lye mixed with soap-nd used when cold, is good for most grown in the kitchen garden, especi-or Gooseberries, Black Currants, Cauliflowers, Cabbages, and rb; but I should not think the mixture help Peas, Beans, or Potatoes. The ages of its application to the garden more visible in a year or two than at sent time.

ving bones

Galloway).—The bones can be dis-by the aid of sulphuric acid, but it is a ous substance to use, and the cost is a considerable item, particularly if the nnot be obtained near at hand. By best plan where a good supply of is at hand is to bury the bones in the eap. The fermentation which ensues ften them, and the value of the heap plication to any crop will be greatly ed. Obviously, where it is desired to bone-manure, this would not do, but only wish to use it yourself we advise adopt this method. If you want a tion of the sulphuric acid process we ve it, but it could hardly pay you to with it for small quantities of bones.

SHORT REPLY

x.—See article "Management of Chrysanthemums," page 182.

NAMES OF PLANTS

3. *L., Stirlingshire.*—1, Andromeda japonica (see illustrations, pages 178, Rhododendron (next week).

., Bournemouth.—Deutzia scabra.

, Antrim.—Bilbergia nutans, native of

Roberts.—Odontoglossum pulchellum Unlike other Odontoglossums, the are borne the right way up on the here being no twist in the ovary. Note -shaped crest of clear lemon-yellow few red-purple dots.

a Taylor.—Berberis Darwini. Quite any good soil will grow it.

Harper.—1, The common Laurel; 2, s Aquifolium; 3, Berberis Darwini.

NAME OF FRUIT

r Mason.—Seems to be a well-kept on.

Iris Diseases

THE group of Irises known as Bearded or Flag Irises, especially the section classed as Pogoniris Irises, which includes all the newer garden hybrids, is particularly liable to two forms of disease which, under certain conditions, may cause serious damage. These are "leaf-spot" or "leaf-blotch" and "rhizome rot," the one attacking the foliage and the other the thick, fleshy rootstocks, or rhizomes, of the plants. In each case, whenever the attack is severe, complete destruction is effected. In addition to these two diseases a leaf-rust occasionally occurs.

CULTURAL NOTE. — Careful observations have led to the conclusion that the conditions under which the plants are grown, together with the cultural practice, are factors influencing considerably their susceptibility to attacks by disease. It appears to be appropriate, therefore, to state briefly the methods of cultivation which experience has shown to yield the best results.

SITUATION.—Formerly it was thought by most people that the genus Iris was a race of moisture-loving plants. However true that may be of such groups as the Japanese Irises (I. Kæmpferi) and the English Irises (I. xiphioides), it is certainly not so as regards the bearded group. All members of this group should be planted in a situation where, particularly as regards the latter part of the year, the maximum amount of sunshine is obtained, and where, also, there is least risk of permanent soil wetness or stagnation of any kind inducing acidity or sourness. For preference, the site should be a sloping bank or terrace, where efficient natural drainage is obtained. It cannot be too strongly emphasised that perfect drainage is of paramount importance, and in its absence sound growth and ripening of the rhizomes are impossible.

SOILS.—With the possible exception of pure peat, most soils will grow the Bearded Irises, provided that where lime is naturally absent it is applied freely. Hence it is that ideal soils are found in the chalky loams. Clay loams, too, given good dressings of lime or chalk, will produce equally vigorous plants. As regards cultivation, the most essential points are to see that the plants are taken up and replanted frequently—at least every three years—and to plant on deeply-worked soil. In planting it is important to keep the rhizomes as near the surface as possible, so that their upper portions may be exposed to sun and air. Fresh manure should not be used on any account, and the importance of lime must be borne in mind constantly. Experience shows that the best time to replant Irises is immediately after the flowering season, and not, as is commonly believed, in the autumn or early spring. When the plants are to be brought in, or in other circumstances necessitating their partial drying off, it is advisable to defer planting till a month or so later.

LEAF-SPOT AND LEAF-BLOTCH.—This disease was first noticed in this country in 1893. It usually becomes evident about the time of flowering, and spreads most rapidly during damp weather. In the early stages of attack, faint yellowish-brown spots appear on the leaves, which become rapidly darker and more pronounced, so that in a very short time a clearly-defined area of dead leaf tissue is distinguishable. These areas, when examined with a hand lens, will be found to bear minute black fruiting threads or conidiophores of a fungus, and on them multitudes of spores are produced, which are easily distributed by the wind and infect fresh leaves. The disease spreads very rapidly, and the entire leaf blade soon becomes covered with spots which, spreading irregularly, merge into each other, and, in consequence, the leaf collapses and dies. If this continues unchecked the whole of the foliage ceases to be of any material use to the plants, and they are, as a result, weakened considerably, apart from any question of general unsightliness of the attacked foliage. The fungus is easily recognised by microscopical examination, owing to the characteristic appearance of its spores. They are elongated with rounded ends, and are divided by cross walls into two, three, or more cells, each of which is capable on germination of sending out a germ tube which enters the Iris leaf usually through a stoma. The surface of the spore is finely echinulate or spiny. These spores are produced abundantly, especially in the summer and autumn, and are responsible for the spread of the disease. In mild climates they may also be produced during the winter, but only in small numbers. The fungus passes the winter in the form of mycelium or spawn in the old infected leaves, and in spring spores are again produced and distributed. Recent investigations in Wisconsin, U.S.A., have shown that the fungus also produces in spring, on the old dead leaves, a perfect form of fructification. This consists of flask-shaped structures (perithecia) containing sacs (asci) in each of which spores (ascospores) are developed. In some seasons, however, the perithecia remain barren, and they therefore cannot be absolutely essential for the continued existence of the fungus.

On account of the development of these perithecia it is now possible to name and classify the fungus more certainly. In the conidial or summer spore stage it was long known as Heterosporium gracile Sacc. It has now been shown on the grounds of priority and systematic nomenclature that it should in future bear the name Didymellina iridis (Desm.) v. Hoh. These changes in nomenclature are apt to be somewhat confusing, but they appear to be inevitable as systematic mycological knowledge evolves. The practical man need scarcely concern himself with them, but specialists will find full details of nomenclature and synonomy of this fungus discussed in papers by J. K. Ramsbottom (Jour. Roy. Hort. Soc., Vol. XL., iii., April, 1915, p. 481) and W. B. Tisdale (Phytopathology, Vol. X., 1920, p. 148) respectively.

Control Measures.—This leaf spot or blotch is not a disease that can be got rid of by direct attack. Spraying has been attempted, but has not given satisfactory results, doubtless partly because it is almost impossible to wet the glaucous, waxy foliage with a spray-fluid. Two points in particular have to be borne in mind. In the first place those plants are most prone to attack which are in an unhealthy condition owing to unfavourable soil and cultural conditions. Lack of lime is one of the commonest sources of want of vigour, and the application of phosphates has also proved to be beneficial. Superphosphate may be applied evenly and thinly in spring at the rate of from 2 ozs. to 3 ozs. per square yard and worked into the soil. Basic slag, which supplies both lime and phosphate, may also be used similarly and in somewhat larger quantities.

The second point is that the parasitic fungus over-winters in the old affected leaves, and these alone are the means by which the disease is perpetuated. Careful and thorough removal and burning of the affected and dead leaves in the autumn have been proved, in the

case of this disease, to be well worth while. At the same time, the ground should be dressed with slaked lime at the rate of about 2 lbs. to the square yard. This should be worked in at once and removal of the plants is not necessary. This hygienic treatment of removing the sources of infection, combined with stimulation with lime, will result in the production of clean foliage in the spring, which will remain in this condition through the season.

RHIZOME ROT.—Particularly in the case of soils deficient of lime Iris rhizomes frequently become attacked by a serious disease which takes the form of a soft pulpy rot of a most offensive nature. The first symptoms of its appearance are shown by the yellowing of a crown of leaves and their rapid collapse or by the falling over of a flower-spike. Attacked rhizomes rapidly become a soft mass of decay, and unless this can be arrested the plants are destroyed.

This disease has been known for a considerable time and occurs both in Europe and America. It is known that the rot is caused by bacteria, and it seems that under varying conditions somewhat differing types or species are concerned. Pseudomonas iridis and Bacillus omnivorus are the names of two that have been described and studied in some detail, whilst recently Dr. Paine isolated from diseased rhizome material supplied by the Ministry's Pathological Laboratory an organism belonging, like the second mentioned above, to the Bacillus carotovorus group. In all cases the result of attack is that the middle lamella which normally binds the cells of the tissues of the rhizome together is dissolved, and a pulpy more or less fœtid-smelling mass results.

It is known that the disease is favoured by excessive wetness and also by shading, and such conditions should, therefore, be avoided. When the disease has taken a thorough hold of the plants cure is almost impossible. In such cases they should be dug up and their remains destroyed by fire in order to render the infective material innocuous. The soil should be dressed with quicklime and not used again for planting Irises for a time. In cases of slight attack the diseased portions may be carefully cut away and the knife used for so doing kept sterilised by frequent dipping into a suitable disinfectant, such as a solution of lysol. The trimmed rhizomes may then be dipped in a pink solution of permanganate of potash before replanting, the site having meanwhile been dressed with lime.

It is important that healthy plants only should be bought for planting, and upon the slightest sign of the disease being detected it is safest to dig up and destroy the affected plants, care being taken to remove and burn the surrounding soil. The site should then be dressed with fresh lime. Where a plant is only slightly attacked the diseased portion may be cut carefully away and the healthy portion washed in a pink solution of potassium permanganate before it is replanted.

As in the case of leaf-spot, it has been found that where an effort is made to promote sound, healthy growth by application of lime and superphosphate the risk of damage by rhizome rot is lessened. The disease is most prevalent in wet seasons.

RUST.—Another disease of Irises is the leaf-rust caused by the fungus Puccinia iridis. This disease does not single out any particular group for attack, and is occasionally found on wild species in this country as well as on the various garden hybrids.

Small reddish or dark brown spots are scattered in more or less profusion over the leaves. They are from $\frac{1}{8}$ inch to $\frac{1}{4}$ inch long and about $\frac{1}{16}$ inch broad. They are usually surrounded by a paler-coloured halo of diseased tissue. On the older spots greyish-brown blisters arise in the centre. Rupture of the skin eventually occurs, and a bright brown powdery mass of spores is thus exposed. These are the so-called summer spores, and their distribution results in the spread of infection and consequent development of new spots. Later on in the season a second kind of spore pustule is produced, particularly towards the bases of the leaves. The spores produced here are two-celled and have very thick walls. They serve to carry the fungus over the winter, and on germination in spring produce a third form of spore from which infection occurs anew.

Further than the removal and burning of badly-affected foliage no remedy is known for this rust, which, as a rule, is not of serious importance in gardens and nurseries. Beyond disfiguring the foliage not much damage is done, since the plants are not seriously undermined in strength as is often the case with the leaf-spot disease described above.—A. H. HOARE in *Journal of Ministry of Agriculture and Fisheries.*

Benn Brothers' Other Journals

The Cabinet Maker.—Notes from the Home Journals; Merchandise Marks Act and the Furniture Trade.

The Chemical Age.—Steam Pollution by Acid; Mine Drainage; Chemical Trade Returns for February; China Clay Trade Review.

The Electrician.—The Electricity (Supply) Bill, 1926; Weir Committee's Report; Electrical Exports Improving; Cooking by Induced Draught.

The Fruit Grower.—Canning of English Fruit; Cold Storage and Gluts; The New Covent Garden.

The Gas World.—The Electricity Supply Bill; Some Gas Showrooms; Complete Gasification of Coal.

The Hardware Trade Journal.—Our Improving Hardware Exports; The Wireless Trade; A Chat on Condensers; Assistance in the Stock-keeping Branch.

Reading and District Gardeners' Mutual

"Manures" was the title of a lecture delivered before the members, Mr. F. J. Green presiding. The lecturer was Mr. H. H. Cook, of the University College Gardens, Shenfield. He said that originally the term "to manure" was used in reference to hand tillage or working the land. Now the term is applied to any substances which contribute to the fertility of the soil. Manures are classified as (*a*) artificial or chemical; (*b*) natural. Artificial or chemical manures are those which have come into use practically during recent years, whilst natural manures have been in use from the earliest times. Each manure was specially dealt with. A note of warning was thrown out with regard to the using of artificial or chemical manures, as, if great care was not taken, much damage might result. In the non-competitive section Mr. W. Chislett, Bill Hill Gardens, Wokingham, staged an excellent collection of 19 varieties of Apples illustrating the keeping qualities of the various varieties. This exhibit received the high commendation of the judges and the thanks of the members for placing before them such an educational display. A First-class Certificate was awarded to Mr. A. W. Gower, The Gardens, Calcot Grange, for some magnificent spathes of Arum Lilies, and an Award of Merit to Mr. R. Turner, Southview, Calcot, for Princess of Wales Violets. For three flowering plants Mr. A. W. Gower was the only competi and he was accordingly awarded first p for well-flowered plants of Cineraria, Prim obconica, and Cyclamens.

LATE NOTES

Royal Horticultural Society's Amat Show

It would seem that there is quite a po bility of American amateurs competing at Royal Horticultural Society's Amateur S which is to be held at the Society's H Vincent Square, on June 22nd. We un stand that Mrs. Edward Harding, of Bur Farm, Plainfield, New Jersey, has writte Sir William Lawrence, Treasurer of R.H.S., saying that she proposes to enlist interest of other American amateurs, with their assistance to send over var examples of American floriculture, espec Pæonies. (It will be remembered that Harding, who is well known to the gar ing fraternity on both sides of the Atla has presented cups for Pæony competit at Vincent Square.) The immense dist which the American exhibits will have travel does not in any way daunt this en prising lady, who, we understand, has alr thought out the problem of transportat and she is optimistic that with the aid of storage she and her American friends wi able successfully to compete with Br amateurs.

Forsythias

Few of our early-flowering shrubs are r precious than the Forsythias. One won why more people, especially suburban deners, do not make as much use of ther they might. There is an impression in s quarters that shrubs sometimes take a time before they become established if attempts to try them too near a town. so far as Forsythias are concerned, I those who are dubious would try the ex ment. No shrub is more reliable. If think of Forsythias as shrubs only w them an injustice, as one may, without n difficulty, use them as climbers. Perha is not generally appreciated, either, amenable they are for growing as stand and, having regard to their rapid gro one has not to wait very long to accom this. Immediately after flowering is the time to prune them, and weakly shoots sh be cut out. I have propagated at va times—in April from shoots taken wi heel, from cuttings of soft wood a little and on several occasions shoots have put in in August. I have never had any culty in striking them, provided a little r sand or road scrapings is incorporated the case of standards it is best to select a straight shoot, and, after planting it, to to a stake, rubbing off all side shoots as form until the desired height is reache do not know of any shrub that can be p gated with so much ease as the Forsythi one that adds brightness to a garden i early days of the year more than it does

LEAHUR

CATALOGUES RECEIVED

The Cherry Meadow Farm, Framin Centre, Massachusets.

Messrs. Dickson and Robinson, chester.—Evergreen seed mixtures.

Enquiry

Can any reader recommend any s and efficacious remedy for destroying ta spawn round the edges of a large p Ducks and waterhens live on the pond a year round. MA

GARDENING ILLUSTRATED

455—Vol. XLVIII. MARCH 27, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

, the 199
myosotidi- 200
TEARS SSUS TRI- S ALBUS) 200
ybells and 193
the Para- k 193
he keeping s of 194
hardy... ... 195
undifolia ... 193
mixed, pic- e aids to the 191
ers failing 204
Carnations, border, in pots 202
Carnations, Perpetual, in July ... 204
CHERRY PLUM OR MYROBALAN, THE 195
Cyclamen with cup-shaped flower 204
Daffodil conference ... 192
Dahlias 196
Daphne Mezereum ... 193
Erythronium Dens-canis The Queen ... 200
Ferns, repotting... ... 199
Foxgloves 196
Gardeners and their hours 192
GARDEN FRIENDS 202
Gladioli, scented ... 193
Gladiolus corms, diseased 203
Gladiolus, pronunciation of 192
Holly, the common (Ilex aquifolium) ... 194
Imantophyllums (Clivias) 203
Kerria japonica... ... 204
LAWN AND WOODLAND 196
Lettuces in frames ... 201
Lilies, planting... ... 203
Lilium auratum and L. Henryi 203
Lily, the Belladonna (Amaryllis Belladonna)... 203
Melons in July 204
Mistletoe in Scotland, the 194
Mosquitoes 204
NARCISSUS PALLIDUS PRÆCOX ... 194
National Gladiolus Show, the 192
"Nymphs and Shepherds"... 197
Peaches, disbudding 202
Peas, sticking 201
Pea, the Bladder (Vesicaria utriculata) ... 200
Pelargoniums damping off 204
Phloxes, Perennial, cultivation of 197
Plants, bedding, hardening off 200
Plants for border beneath Cedar 203
Potatoes, planting: Fresh stock 201
PRIMULA DENTICULATA SUPERBA ... 199
Primula obconica, the poisonous properties of 193
Prophet Flower, the (Arnebia echioides) 199
R.H.S. Gardens, Wisley, means of access to the 192
"Rose Annual" jubilee number, the ... 194
Rose Climbing Caroline Testout 203
SAXIFRAGA LIGULATA SPECIOSA... 191
Saxifraga oppositifolia splendens ... 199
Scilla autumnalis ... 194
Syringa velutina ... 195
Tomato seedlings, raising... 201
Vines not breaking ... 204
Violets, growing... ... 204

Picturesque Aids to the Mixed Border

NEVER beautiful the mixed border y be, it is not well to neglect certain s in the way of breaking up the surd providing a little shade and variety d there. In any sort of garden or rangement of plants it is better to formula or fixed rule of doing things, ee to break away into any good ways fancy. An important thing which left out in the arrangement of mixed is variety of form, which cannot ome from perennial plants, but which s the effect very much, and sometimes gs give us some gentle shade which tial for the success of a fine mixed Plants in borders made in the full er but a short time, especially in dry nd are not nearly so satisfactory as alls, trellises, or other structures give ade during a certain part of the day. he finest mixed borders we know is ar, but not too near, a grove of everes, which cuts off the afternoon sun border and leads to a very prolonged bloom. As aids to breaking-up the order we should ers and climbing ith choice shrubs d there. The Roses flower well bushes or as s, supported by ak or Chestnut Clematises also did for this purere they do well, 1 be supported same way by r Chestnut t in a triangle. Clematises will r several months way, as on the t Kew, and we nothing to equal breaking-up the f a mixed border. we are happy o make a mixed gainst a wall we fine background, at certain times day agreeable A wall is, perbest background overed with tises, Jasmines, lias, or any we like. Where no wall the next best thing is a trellis, and if in the country, and we have trees of our own, the best trellises are made of Oak posts and Chestnut small wood. Where people have not these they must be content with stout wire, and the aspect of that is very much modified by having a light trellis of cane or Bamboo over it, splitting up the trellis into squares of about 10 inches. Things grow so very freely on these trellises that they quickly cover them, so that however rough the material it is not much seen and does not mar the good effect. From these trellises, which should not be more than 7 feet high, we also get a certain amount of shelter and coolness, and it is a most excellent way to grow the climbing Roses, Clematises, and in many districts the beautiful Flame Nasturtium, Sweet Peas, and many other things that will grow on them.

Where we break up borders in this way, the winter, as well as the summer, effect is improved. All things that may be freely grown are the best for the trellised background, such as—in addition to the plants we have mentioned—the fine Vines now in cultivation, and in moist districts the best China Roses. Among the plants often used to give a background is the common Yew, which in such a position must needs be clipped, but that will not save us from the exhausting and robbing effect of the Yew on borders. It is the last plant we should use for this purpose, and near walks or places frequented by ponies, or where stock can even by accident gain access to it, it is a deadly danger. There are other fine native evergreens which are better than Yews, but they all have the drawback of robbing the borders, whereas if we use a trellis or a wall it steals nothing in any way from us, but gives us a rich surface of beauty.

Saxifraga ligulata speciosa

NOTES OF THE WEEK

Saxifraga ligulata speciosa

THE broad-leaved Saxifrages are a section of this large genus separated by some authorities under the name Megasea. This distinction is useful in horticulture because the smaller Saxifrages are so much more numerous, and even have to be classed in 14 different divisions. The broad-leaved Saxifrages or Megaseas most commonly seen in gardens are S. crassifolia, S. cordifolia, and S. ligulata. S. crassifolia is the least interesting both in flower and foliage. S. cordifolia is a good garden plant, both in the type form with pink flowers in April and in the major form with very large and handsome leaves and flowers of a rather rank pink on tall scarlet stems. S. ligulata is tenderer than either of these, a native of Nepal, but it does well in sheltered places anywhere in the Home Counties. The leaves are not so handsome as those of S. cordifolia, but the flowers are a good light pink, the

colour sometimes paling to nearly white, and they come in quantity in the end of February, when, and for a week or two onward, they are of great use as cut flowers. The illustration shows them set up with some bloom of Laurustinus. The best form is distinguished by botanical authority as S. ligulata speciosa. It was given me many years ago from the Duke of Rutland's garden at Belvoir Castle, in the time of that fine gardener, Mr. Ingram, whose successors so well kept up the reputation of the Belvoir gardens for their wonderful display of spring flowers. The situation of the place, on the northern border of Northamptonshire, is none too favourable for tender plants, but Mr. Ingram would not be beaten, and a sheeting of newspapers was laid over the Megaseas on cold March nights. This year protection in my more southern garden in south-west Surrey has not been needed, but it is not a bad precaution to stick small twiggy boughs of Scotch Fir upright between the plants. This is not only a comfortable protection from frost, but helps to draw up the flower-stem to a height that is more convenient for cutting. G. J.

The National Gladiolus Show

The third annual Gladiolus show will be held at Burton-on-Trent on August 11th and 12th, 1926, in conjunction with the Staffordshire and Midland Counties Floral Fête. The schedule provides sections for trade and amateur exhibitors (43 classes in all), and the amount required for cash prizes is £75, towards which the sum of £50 has already been promised, including a generous gift of £30 from the Staffs and Midland Counties' Floral Fetê Committee. Full particulars may be obtained from the Secretary, Albert E. Amos, 10, Bergholt Road, Colchester.

Daffodil conference

The R.H.S. Daffodil Show will be held in the Hall at Vincent Square, Westminster, on Tuesday and Wednesday, April 13th and 14th. On the second day of the show a Conference will be held in the Lecture Room. The morning session, from 11.30 a.m. to 1 p.m., will be devoted to diseases of Daffodils, while in the afternoon, from 2.30 p.m., there will be discussions on the aims of Daffodil breeders and the garden value of these popular spring flowers. It is hoped that all Daffodil lovers who are in London that day will attend the Conference and add to the common stock of knowledge by joining in the discussions.

Means of access to the R.H.S. Gardens, Wisley

Wisley, as most people know, lies a few yards off the Portsmouth Road on the banks of the Wey, about 1½ miles on the London side of Ripley and about midway between two lines of the Southern Railway from Waterloo. Four stations—two on the Waterloo-Salisbury line, viz., Byfleet and Weybridge, and two on the "new" Guildford line (served by electric trains), viz., Effingham and Horsley—are each about 4 miles or 5 miles from the entrance to the Gardens. The walks from all are pleasant ones, but too long for many. Taxi-cabs can be had always at Byfleet and Weybridge, but at Horsley and Effingham only by ordering beforehand. The London General Omnibus Co. runs an hourly service of motor-buses (No. 115) between Kingston and Guildford, and this passes within five minutes of the Garden entrance, and recently another service of motor-buses has been started between Horsley and Ripley Village. Passengers by the latter can alight at Stratford Bridge, half a mile from the Gardens, which can then be reached by a pleasant road skirting Ockham Common and by a path through Wisley Woods. All these ways of reaching Wisley (except the walks from the station) bring the Gardens within about an hour and a half's journey from the City.

The Gardens are open to those bearing Fellows' tickets (each of which will admit three) between 9 a.m. and 7 p.m. on week days. The Sunday opening does not start until May 2nd, and continues during the summer from 2 p.m. to 6 p.m.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Pronunciation of Gladiolus

IN accordance with a promise made in my former letter, I now give the rules which concern the correct pronunciation of Gladiolus, and for the sake of convenience they are numbered. Rule 1: "No Latin word can have the accent (stress) farther back than the antepenultima (the last syllable but two)." Now, it will be seen at once that in the pronunciation "Gl-A-diolus," advocated by Sir H. Maxwell, the stress is placed on the last syllable but three. His pronunciation is therefore obviously wrong, because "it goes beyond the limit!"

Incidentally, this rule provides an interesting comparison with Sir Herbert Maxwell's statement to the effect that "Gladiolus must be pronounced as a word of four short syllables, the stress being on the first syllable," for the rule shows there is no single word of four short syllables in the whole of the Latin language which can have the stress on the first syllable.

The rule quoted above, whilst showing that "Gl-A-diolus" is wrong, does not indicate which pronunciation is right. The following rule does that. Rule 2: "Latin words of more than two syllables have the accent (stress) on the last syllable but two if the penultima (the last syllable but one) is short, no matter what may be the quantity of the last syllable." Now, in Glad-i-o-lus, the last syllable but one, "o," is short, as Sir Herbert Maxwell states; therefore, according to the rule, the stress must be placed on the last syllable but two, which is the "i," and we thus get "Glad-I-olus" as the correct pronunciation. I think nothing further need be said on that point, which is the only real one at issue.

Another statement made by Sir Herbert Maxwell runs as follows:—"Gladiolus means 'a little sword,' a diminutive of gladium, which, etc., etc." This statement also happens to be incorrect, but as, like "the flowers that bloom in the spring," it has nothing to do with the case (which happens to be "the pronunciation of Gladiolus"), I need only point out that were it correct we would all be wrong in calling a certain flower GladiolUS at all. We ought to call it GladiolUM, and many of them GladiolA, it being a rule in Latin that diminutives agree in gender with the primitive words which they dwarf. The primitive word of Gladiolus is GladiUS, a noun of masculine gender, otherwise the diminutive would not end with the masculine termination "us"—which, as a matter of fact, it does. Most Latin scholars know that gladium is an archaic form of gladius, but they also know that it is absolutely obsolete.

In conclusion, I would just like to give a warning to such of your readers as are interested in the Latin names of plants. B quantity and stress happen to coincide English language it is fatal to assum they do so in Latin. Notice, for ins the English word Hellebore. In pronou it the first syllable is the one stressed, also long. In the Latin word Hellebor first syllable is also long and the secor short. Yet in pronouncing it the str placed not on the first syllable, but second. It is another example of the of Rule 2. DAWI

—— Reference to a Latin dictionary that the very word *Gladiolus* (with vowels short) was used for a small swor it appears that Pliny applied it as the of some sort of plant, supposed to be Sword Lily" (not, of course, our Gla which came from South Africa). Joh Gardeners' Dictionary is an adn authority for the correct pronunciation Latin names of plants. Gladiolus is given with the accent on the first s The pronunciation should be Glad-iol Gla-diolus) according to the usual met indicating a short vowel. With reg "W.'s" amusing note about Eric Veronica, I wonder if he winces, as when people (even educated people) sp ArbUtus UnEdo instead of Ar-butus U CHARLES A. C

—— I agree with "W.'s" pronun of Gladiolus (issue March 13, page 16 certainly with his standard of "c ness" in pronounciation. It seems by the way, that the old English forms word—"Gladwin" and "Gladdon"— have been fixed to the rather obscure perhaps under-rated) Iris fœtidissima. F. A

—— Did I actually write "gladiun "gladius," a sword? I will not st suggest a printer's error, but accept proof so gently administered by Woulfe Flanagan and "W." (page 1 a slovenly *lapsus calami*. Verily, it is of *Dicite quis medici medicis medi ipsis?*

With all due respect to my anor critic, "Dawlish" (page 176), I ven submit that laying the stress upon t syllable of Gladiolus does not chan short *a* into a long one. It remains same value as it has in "gladius," "gladiolus" is the diminutive. But i possible to stress either *i* or *o* without it long. I do not suppose that "Da would speak of "gladIus" without his and our teeth on edge. Why, ther a different stress in "gladiolus"?

Monreith. HERBERT MAX

Gardeners and their hours

The letter from "A Scottish Gar in your valuable paper on Marc page 144, was, to my mind, very f finding favour with the present-day g and the giant strides that are being horticulture. Progress in our profes your correspondent states, is raised t fine art, and far more clever garder the product of to-day in regard to t vation of fruit, flowers, and vegetables one can see, when visiting the sum autumn shows, the produce put be public being of far better quality tha time of our Scotch friend's early car regard to working hours, I wonder ho gardeners in charge of places con necessary to work during all the available? Just as much actual work obtained from the under-staff from 7 5 p.m. as during the old routine, 6 6 p.m.

Surely, it also counts for progress gardener to enjoy his Saturday after

e rest of his fellow-workmen. Wages ve risen from the low ebb they had before the war, and I consider the ng profession financially equal to the ic. The majority of us are employed keen business employers, and at the he year the expenditure and the output e place are known, so I fail to see slackness in horticulture at the present es in. SURREY GARDENER.

Mr. Bruce Hewitt, F.R.H.S., has misread my note concerning gardeners ir hours. In any case his remarks to call for some comment. Nowhere, did I indicate that I regret the long f what he calls "the unhappy past." iter, too, goes out of his way to sneer nestic servants," and here I may give me information. Unless the next paper differs from its predecessors, rs (we "professional" men) are to describe ourselves as "Gardener tic Servant)." Surely, that will dis- the claim of Mr. Bruce Hewitt, S., that gardening is a "profession"! ter all, is there any disgrace in being, ing described as, a domestic servant? ardening is, as your correspondent a profession is, in one word, nonsense. this way. If Mr. Bruce Hewitt, S., is a gardener, does he draw the isually paid to a professional man? an employer, does he pay his gardener salary as will maintain the status of a nal man? I much prefer to be known ster craftsman than as a poor relation rofessional classes—after all, no great on in these democratic days. Garden- t a profession, but a very ancient and nourable craft. I demur to the state- at one is bound to find men who "in every garden." To say so is to esent the facts. Unfortunately, how- "many" gardens the cigarette- slacker may be found, and as there t sufficient "professional" men, vs, to go round, the slacker must, at be tolerated. May I ask that, in before Mr. Bruce Hewitt, F.R.H.S., nto print he will pause and consider, he will not make rash guesses at the of what others have written?

A SCOTTISH GARDENER.

poisonous properties of Primula obconica

ce your correspondent, "W. McG.," ather lightly of the poisonous proper- 'rimula obconica, and this, no doubt, se he has so far not experienced the ng effects caused by the poison con- the leaves of this plant. As I have good many bad cases in addition to I write to warn others to be careful vorking among these plants, as, one may escape for years, there is langer of infection. In my own case the plant for 35 years before being ; then I was so severely attacked er being examined by three doctors, t me to the hospital for treatment. ing in great pain from swelling and the poison eventually run its course skin came off all over the body, even tongue and mouth, the eyes being t painful, and I took weeks to get ain. The doctors thought my right ld have to be amputated, it being so nd enormously swollen. I sincerely here are hundreds suffering from this who do not know what it is, as I own many persons who keep a few the dwelling-rooms to have had it s, and not every doctor one goes to s it rightly, although the three in my e all unanimous, and since giving up the plant I have been quite free.

I contracted it first on the inside of my right arm after potting up some young, vigorous plants, my arm being bared (with no scratch upon it), and I am firmly convinced that the young leaves contain more poison in the sacs at the end of the hairs than do the flowers or other parts of the plant, and I also think that more poison is given off at some periods of the plant's growth than at other times. J. G.

Taunton.

—— If those who are interested in the discussion as to the alleged poisonous properties of P. obconica would forward instances of those who handle this plant being affected, data so obtained would be of considerable value in settling the matter. So far we have records of three cases from "C. B.," and the personal experience of Mr. Wright, the latter of which must carry weight. Nevertheless, I consider that the percentage of those who suffer from irritation of the skin after handling P. obconica must be a trifling one, and, I think, much smaller than was the case when the original type was grown.

W. McG.

Scented Gladioli

Having worked somewhat with the species of Gladiolus, I read with keen interest the article in GARDENING ILLUSTRATED by Mr. J. L. Gibson about scented Gladioli, and I can but agree with him about the present status. As he says, G. tristis has apparently yielded no really fragrant offspring. I fear that his hopes for G. grandis may go the same way as those for G. tristis. G. grandis has flowered with me here this winter. It proves a weaker grower than G. tristis; its brown-veined, yellow flowers are of about the same size and with the same scent. Botanically it is different, but horticulturally it seems similar and inferior.

My collection of species is a large one for this country, but the account of seed of 55 species from Dr. Pole Evans makes me envious. I have only about 25, most of which have flowered. Several of them have been illustrated in the monthly Official Bulletin of the American Gladiolus Society. Should your correspondent be interested in exchanging different species with me I would be glad to do so. FORMAN T. MCLEAN.

Agricultural Experiment Station of Rhode Island State College, Kingston, R.I., U.S.A.

Daphne Mezereum

In his useful notes on plants for heavy soil (page 159) Dr. Hampton mentions Daphne Mezereum as "a capricious plant, flourishing in one place and failing in another apparently similar." I do not think the nature of the soil is the cause of this; plants raised from seed seem the reverse of fastidious in that respect, whereas grafted plants never survive for long. It is the same with Daphne Cneorum and D. Blagayana. For full 20 years I strove to get both species established, buying innumerable plants of both, always with the same discouraging result. Here and there a plant of D. Cneorum has endured and flourished, but D. Blagayana has invariably dwindled after producing just enough of its ivory blossoms to make one wish for more, and ultimately has disappeared. It was not until quite recently, when standing with Mr. Harrow beside a beautiful sheet of D. Blagayana in the rock garden of the Edinburgh Botanic Garden, that the source of disappointment was revealed to me. It seems that these and other dwarf species of Daphne can only be grown successfully on their own roots and must be propagated by seed or cuttings. I do not know on what stock the plants usually supplied are grafted.

Monreith. HERBERT MAXWELL.

Bellis rotundifolia

Will someone tell me whether this species, referred to by Mr. Arnott on p. 183, is correctly so called? I have seen it at the horticultural shows with bright red ray florets, and there is a variety called cœrulescens, in which they are presumably bluish. The only B. rotundifolia known to me is the species of Boissier and Reuter, which grows in N. Africa and near Gibraltar, described in Willkomm and Lange, Prod. Fl. Hisp., ii., p. 32, though Lange expresses some doubt as to whether the Spanish plant is identical with the Moroccan one, and calls the former v. hispanicum. I know the Spanish plant, which is a rather coarse perennial, considerably larger than our native B. perennis, and with suborbicular or broadly oval subcordate leaves, not a bit like the B. rotundifolia of British gardens. May the latter be B. annua, which it much more nearly resembles, and which occurs with very pretty lavender ray florets, though normally white? B. annua always seemed to me to be well worth cultivating, an opinion I never held about B. rotundifolia. A. H. WOLLEY-DOD.

Apples on the Paradise stock

"F.R.H.S." (p. 145) is quite correct when he states that certain Apples do not take kindly to the Paradise stock. Nevertheless, I found (and find) that Lane's Prince Albert does quite well on the Paradise. In one block, at one time, the following varieties were planted, all—beyond possibility of mistake—being on that stock:—Warner's King, Tower of Glamis, Earl Grosvenor, Early Transparent, Lane's Prince Albert, and Ribston Pippin—six of each. A more even lot I never desire to see, nor a lot which bore so consistently. On the other hand, I was never satisfied with Lord Derby and Frogmore Prolific on the Paradise. These bore fairly well, but did not extend themselves, the growths being scanty, and reminding me of the behaviour of those fine Pears, Thompson's and Fertility, upon the Quince when not double-grafted. W. McG.

Mabie.

Apple Joybells and others

I can endorse "F.R.H.S.'s" remarks regarding the good qualities of the Apple Joybells. I do not think it is as widely known as it deserves to be, and I doubt if any Apple can surpass it for flavour. I myself prefer it to Cox's Orange Pippin. I have only known one tree of this Joybells, a large, tall standard, of a decidedly pyramid shape in growth. It bears a heavy crop, but the Apple is on the small side. The wasps follow the tree, and also birds, and destroy the fruit. Wild rabbits come from a near hedge and devour the Apples as they fall to the ground. This is proof of its qualities. I have a bundle of scions from the tree to graft this season, and I am wondering whether to graft on Paradise or Crab; also how it would succeed as a bush, cordon or trained. It appears a strong grower, clean, and very free from canker. If anyone can advise me on this point I would be pleased.

Another Apple of wonderful flavour is Sops and Wine. I know of a tree on a local estate; it may be a local seedling. Its Pear flavour and soft juicy flesh make it the ideal. Most people who have tasted it put it down as the best they ever had. In this county there are many unknown Apples, probably locally raised and of great merit. In one old orchard I know of there are three trees which bear a yellow Apple of excellent quality; a continuous bearer of wonderful crops, known as the Pig's-nose Apple. The fruit has a snout which resembles the nose of a pig. It is a remarkable Apple in many ways and cooks

well. I wonder if anyone has ever heard the name before.

Another Apple known locally as the Glass Apple takes some beating both as dessert or cooking; it is a very large fruit, a glossy yellow with a shiny glassy skin. I have some hundreds of seedlings I myself raised from seeds sown in boxes, and I wonder sometimes if any will turn out a worthy variety. What patience one needs, alas, to wait and watch, year after year, for seedlings to fruit! I sometimes wonder why more Apple-trees are not raised from cuttings. A year ago I put in several with a heel. They have nearly all rooted and grown well, with a mass of fibrous roots and clean growths.

Cornwall. NETHWAY ALLEN.

The keeping qualities of Apples

Recent correspondence on this subject leads one to the conclusion that we are now concerned with a competition as to who can keep Apples for the longest period—this, too, apparently without any particular reason why they are so preserved. When one comes to read of an Apple being kept for 21 months the discussion appears to be rather a joke. One might as well brag about keeping a Potato over a similar period. Most of us, who are not fanatics or cold storage men, will be satisfied if we can maintain a supply of Apples until April or early May; and when other fruits come into season Apples may be dispensed with until the year's crop is again available. Such a variety as Wellington syn. Dumelow's Seedling is but a cooking Apple when all is said and done, and who desires cooked Apples when such things as Rhubarb, Gooseberries, Currants, and Raspberries are available for stewing or for tarts?

A SCOTTISH GARDENER.

The common Holly (Ilex Aquifolium)

I have been greatly interested in several articles that have appeared in GARDENING ILLUSTRATED of recent dates on the above subject. Much has been written on the transplanting of Hollies. The letter signed "Yorkshire Tyke" and the answer by the Editor, issue March 20th, page 179, is very enlightening and deals well with the problem when these should be transplanted. My own experience is that large Hollies are the most difficult of all evergreens to transplant with success. I maintain that the smaller the plants the better, and where these can be grown from berries and transplanted when about 1 foot in height in the garden at home so much the better, and this may be successfully done at any season, and I should feel inclined to favour the views of the Rev. Rollo Meyer to plant in January rather than in May. The greatest difficulty with Hollies is that, unless they have been transplanted several times, if of a larger size they have a very small amount of fibrous roots. I find, when planting, it is wise to dip the roots in a bucket containing thin mud, and plant firm in deep soil that is mulched during the summer.

W. E. WRIGHT.

Narcissus pallidus præcox

THIS beautiful Pyrenean Daffodil is one of the earliest to bloom. It is already showing in the last days of February, and is fully out in the first and second weeks of March. When it was first made known in gardens I had it in well-cultivated ground, but there it did not thrive. Year after year it dwindled, and, fearing I should lose it altogether, it was taken up and planted in the edges of the copse that adjoins the garden. The soil here is very poor; thin peaty sand over hard sand, and for 100 feet below nothing but sand and rock. But either the poor ground or the shelter of the wood suited the Daffodil, and what began as a dwindling dozen has grown into hundreds, and they are now appearing as self or bird sown seedlings all over the wood. It is a lovely thing, a nearly self-coloured flower of luminous citron-yellow, only a very slight shade deeper in the trumpet than in the perianth. Now that it has so much increased it is interesting to observe a number of variations, not only in colour, but in form. Not far from its main place there is a number of unnamed trumpets that were given me by the late Mr. Peter Barr as odds and ends of small lots from those he collected in Spain. I sometimes think that, as my Pyreneans seed so freely, the variations I have noticed may have been brought about by the neighbouring yellow trumpets. Some of the seedling forms have a strong look of Johnstoni, and the Johnstoni near them. But this seem likely, as N. pallidus præcox is the e and Johnstoni one of the latest, ar would suppose that the pollen of Jol would be too late for the possible rece of the very early kind.

Narcissus pallidus præcox naturalised in grass
An early and refined Daffodil from the Pyrenees

Scilla autumnalis

This is rarely offered by the bulb trad I have just looked up one of the mos prehensive bulb lists in existence finding it quoted. This is unfortun there are now many amateurs who are seeking for dwarf bulbous plants whi give their flowers late in the year.

S. AR

The Mistletoe in Scotland

For many years an impression prev Scottish gardens that the Mistletoe wo grow in Scotland. Presumably, the for the impression was that a few peo tried sowing the seeds, but had be successful in raising plants, but I i the main cause for this erroneous bel that the Mistletoe, which should b now, had not been tried to any great It must be 40 years since a Scottish minister who was keenly interested in ing and loved to try plants new to him me, on the occasion of my first visit garden, a plant of Mistletoe growing Apple-tree. The plant was young a small, but in course of time it attain proportions. The clergyman spoke common belief, and pointed with speci to his little plant. Since that time seen very many fine plants of Mistleto ing in Scotland, yet I find that the er impression that it will not thrive th lingers in quarters which ought to b informed. In ordinary seasons it berri

S. AR

The "Rose Annual" Jubilee nu

It is not given to many societies to c a jubilee, but this year the Nation Society is celebrating the 50th year of broken progress and success. The m ship has now risen to 12,520! The Annual," just published, which is co Mr. Courtney Page under the direc the publications committee, is more hensive, and, we think, more interesti that of any of its predecessors.

The Bishop of Norwich has written word in appreciation of Her late Queen Alexandra, who for many year keen and close personal interest Society's welfare. It was, as many ber, her practice, under the guidance Willmott, to make her way roul National Rose Show every year.

The "Rose Annual" contains int articles by Rev. Joseph H. Pemberto H. R. Darlington, W. B. Price, J. N George M. Taylor, and many others chiefly with the Rose literature of the years.

Mr. H. R. Darlington takes as a his review "Twelve Good Garden F the Past 10 Years." The varieties are Miss Willmott, Mabel Morse Dunlop Best, Admiration, Los Angele Uprichard, Mme. Butterfly, Mrs. Morse, Mrs. Henry Bowles, Lord Cha Covent Garden, and Etoile de Hl Coloured illustrations, which in years have been so popular and at have been extended in the present "A It is announced, with much pleas gratification, that Her Majesty the Qu consented to honour the Society by b its new Patroness.

EES AND SHRUBS

Cherry Plum or Myrobalan

E value of Prunus cerasifera as a edge plant is not sufficiently appre-ated. It is an early-flowering species nost striking and beautiful when in . The scheduled time for flowering is rch, but the specimens shown in the panying illustration were taken from which were in full bloom the third week bruary in North Devon. The Myro-flowers practically at the same time as ll-known descendant P. Pissardi, but ossoms are even more crowded on the t species, and they are of the very white. P. cerasifera has all the quali-a good hedge plant. It will thrive in ratively poor soil, it makes a dense growth when properly pruned, and it e grown to as great a height as any is required to be. The fruits make an nt preserve, but, unfortunately, they t produced to any great extent in this y, although I have heard of quite nice rops in good summers in the south and In any case this Plum might certainly re often planted as an ornamental sub-nd in parks and public gardens it might e employed as a substitute for less ting subjects. The Myrobalan is of ain origin, but Mr. W. J. Bean men-he Caucasus as a likely birthplace.

H. Greaves.

Hardy Bamboos

sidering their evergreen nature and in-value for either beds, borders, or as en plants on the lawn, it is a matter arprise that Bamboos are not more ally planted, especially where space is o limited. While we can hardly expect to prove such a success as in Devon ornwall, there are very few counties in Britain but merit a more extended han has hitherto been accorded them. r, many varieties form capital wind for choice flowering shrubs when t a convenient distance so as not to be adowed by the former, or their rapidly-sing root-stock allowed to monopolize ound chosen for the latter.

cerning wind-breaks mentioned above, well to avoid as much as possible the easterly or direct east winds that prove urious to many a shrub during the and early spring. There are but few s where some partly-sheltered nook or could not be found for the less hardy es. The Bamboo garden at Bicton, , is somewhat sheltered by tall-grow-ciduous trees, with an undergrowth of mmon Rhododendron ponticum, and ound on either side slopes to the north uth towards a shallow stream always g to a large lake below. Here a great r of varieties succeed admirably, in-g in height and breadth within two of planting, the soil being a good deep loam. At planting time they were a little good manure and plenty of leaf-p-dressing annually with like material, rf being removed for a yard around lump so that the young growths could p freely in early spring and summer. well not to plant too near a water-, though that old rampant grower, inaria Metake, grew there like a weed, as frequently flooded at all seasons. less less robust varieties would resent o that it is wisest to keep the station e plant some 6 feet away from any waterway. None of the Bamboos require a moist root-run provided the d is deeply cultivated and enriched pre-to planting, which may extend from October to the end of April, mulching with a light material 4 inches in thickness and giving a good soaking now and again during spells of drought during the first season of planting.

Any variety that exhibits flowers and seeds on its uppermost growths should at once be cut away, in fact grubbed entirely. The same never recover. By the way, we do not read in the garden papers of late of any flowering specimens like we did a dozen years or so back.

J. Mayne.

32, *Wigtown Road, Eltham.*

Flowering sprays of the Cherry Plum or Myrobalan are of great decorative value

Syringa velutina

In the autumn of 1918, while on a visit to the Arnold Arboretum, I secured a one-year-old seedling of Syringa velutina. The next spring it was planted in a rather exposed part of my garden. During the summer of 1923 it produced a few flowers and in 1924 and 1925 flowered freely, while in August of the two latter years a few flowers were again produced. This specimen is now a bush 6 feet in height and has never shown any signs of winter-killing, although the common Lilacs were on one occasion rather badly injured, some of the finer forms, such as Miss Willmott, being killed back to the snow-line.

The individual flowers of S. velutina are rather small and of a pale pinkish-lilac in bud, becoming white as they open; the panicles are rather loose and have more of the airy grace of a Spiræa than the somewhat heavy appearance one usually associates with the flowers of the common Lilac. Although not quite so strongly scented as the common Lilac, it possesses a pleasant and rather haunting fragrance somewhat reminiscent of Narcissus poeticus.

Flowering as it does just after the common Lilac, this species helps to lengthen the Lilac season and should form a welcome addition to the list of flowering shrubs which are hardy throughout the Northern United States and Canada. Judging from the behaviour of this and several other North Korean shrubs in my garden I believe that much of the Korean flora from north of latitude 40 degs. will prove hardy throughout the Northern States and adjacent parts of Canada. W.

From house to wood

Foxgloves

Were this not a common British plant it would doubtless be oftener found in the shrubberies and borders of our gardens than it is, but too many condemn it because it is abundant in our woods and hedgerows. Of all wild plants the Foxglove is one of the most useful summer decorative plants for woods or other unkept places. It would be, however, a sad mistake to confound the Foxglove of the florists with the common Digitalis of the woods, for although the former does not differ from the latter in habit, yet, from a decorative point of view, it is far in advance of it; it has much longer spikes of flower, more variety in the way of markings and tints of colour, and the blooms are larger than those of the common Foxglove. Seeds of the Spotted Foxglove, sometimes called Digitalis gloxiniæflora, may generally be bought true to name. They should be sown in a pan or box in a cool house or frame in May, and even if there be no glass at disposal it is best to sow them in that way, as the seed is so small that should it germinate during the night and get roasted up by the hot sun during the day, the young plants would be inevitably killed. Plants raised in pans or boxes, when well in rough leaf, should be pricked out in a shady spot and kept watered for a few days, but once fairly rooted they will need no further attention until the autumn.

The Foxglove, being a biennial, flowers the second year, and the stronger the seedlings planted out the finer will be the blooms. The colours of the spotted forms of the Foxglove range from the purest white to deep red, the intermediate shades of pink especially being most pleasing; the spots or blotches are all placed inside the throat of the flower, and are generally purple, crimson, or maroon. On strong, robust plants it is not unusual to find spikes of bloom 4 feet in length, almost rivalling the Hollyhock in stateliness and beauty. A by no means common Foxglove is Digitalis lutea, a true perennial, with foliage usually a pale green, and more pointed in form than that of the biennial section; the flowers, too, are smaller than those of the class just referred to, and of a somewhat dull yellow colour, slightly spotted with brown. As a hardy border plant, which can be propagated either by division or by seed, it is well worth cultivation. To those who have woods or wild gardens it may be worth while to point out that it is possible to beautify these largely by the sowing of seed of the spotted Foxgloves discriminately here and there, especially in spots where it is likely a foothold will be obtained by the young seedling plants. Although it is possible that the kinds thus grown may degenerate in time, yet it is easy always to grow a few under garden cultivation, and thus yearly secure an abundance of seed to grow in the woods and keep the strain true.

C. P.

Dahlias

As quickly as cuttings from plants started in heat can be procured they ought to be slipped off and put into the propagating-case. When rooted, pot off into 3-inch pots, give a trifle of heat until they are established, and then remove the young plants to a very cool house.

LAWN AN

NEARLY 30 years ago a small hou local cottage type was built in one c hilly districts in south-west Surrey. site is on a northern slope, but sheltered the east by neighbouring woodland. upper part had lately been cleared of a pl tion of Scotch Pine about 90 years old. already there was a number of young w growths of Birch, Oak, and Spanish C nut, as well as small seedling Pines. O two fairly-grown Beeches were on the gr and here and there a fine old Holly. It evident that this would soon grow in pleasant bit of woodland. So, as passed and the trees increased in size, all was needed was to keep a watchful eye would observe how best to clear and wh leave. There were young trees enough c different kinds to allow of letting them in large groups, so that there are al separate regions of Pine, Oak, Chestnut Birch. Birch and Holly always ma pleasant association, and as some of came near the part of the ground wher house would probably stand they were and a few planted Hollies were added. fortunate incident was the leaving of tw old Scotch Pines, whose trunks, e doubled or distorted, or branched too made them unsuitable for cutting for tim

One of the first considerations was to vide pleasant and easy means of getting among the trees. First, two wide, str grassy ways were cleared, one of them the southern house-front, running n north and south up to one of the old P the other from the eastern part of the gr running westward to the same old tre clearing for Azaleas was made about middle of the woody ground, and anothe Rhododendrons; separate from the Aza but not far off. The Rhododendrons planted some years before the house built, and are now of some 40 years' gr They are encroaching too much on the green walk, as may be seen in one o illustrations, and a drastic cutting is in prospect.

There are three ways by lesser paths the wood from the narrow lawn, each having its own rather distinct character

From wood to house

OODLAND

ing through shrubby growths to the voodland. These paths are grassy at it bare when they get clear of the lantains. A thin layer of sandy peat mmed off them and became a useful for planting Rhododendrons and other e, the hard sandy surface left being ht. Paths in woodland or any wild should never be treated like garden here should be no hard edges, only ind any uneven places should be away or levelled. Daffodils were among the wild trees in the middle trumpets near the lawn, gradually place to hybrids of these with rabilis; then typical forms of Incom- followed by the hybrids of these ticus, and poeticus at the further end. ity of Lily of the Valley was also n the upper wood and there are occa- itches of white Foxglove.

ie house-walls are Vines and Figs, lesser growth of China Rose, white , and Myrtle; there are also Rose- d Hydrangeas in the border next to se-foot. There is also a narrow n the lawn side of the front path. It with Scotch Briars and Andromeda ioe) axillaris, a precious thing in our nd in many of the shrub and wood Something was wanted to clothe the the entrance porch. An Ilex was and though it would naturally grow e and tall for the place, it is kept to size by an occasional trimming.

G. J.

Nymphs and Shepherds"

and Shepherds, come away, come y,
grove let's sport and play,
is is Flora's holiday.
o ease and happy Love,
isic, to Dancing, and to Poetry,
cks may now securely rest,
you express your jollity.

and Shepherds, pipe and play, pipe play,
ong, a festal lay,
is is Flora's holiday.
ve tread o'er all the ground,
Music, with Dancing, and with ry,
we round, with merry sound,
iss the day in jollity.

PURCELL, 1658-1695.

ration of Perennial Phloxes

different varieties present us with idid forms of floral beauty, and I el as I cast back my thoughts to my days of the Phloxes then thought so They bear no comparison with the varieties of to-day. Among florist hey rank very high and are very for autumnal exhibitions, being easy , and the trusses last for days when e the great variety of colours renders attractive as any flowers that are in t that season. These Phloxes are three distinct purposes. In the first large beds that skirt the lawn. In nd place the more robust varieties ers generally self-coloured are splen- ments of the shrubbery border and e clumps and corner-pieces in the walks, for from early spring their een foliage is very pleasing and from r the middle of June right on to a Michaelmas Day they produce their flowers of the most glorious shades of rose, purple, crimson, and scarlet, with purest white to heighten the effect. Lastly, they are grand exhibition subjects, and for this purpose a separate plantation should be formed and the plants given good cultivation to ensure big trusses composed of large round pips true to colour, with none of the deterioration that must occur when the plants are half-starved. Although they must not be under or near large trees shelter at a sufficient distance is desirable because of the liability of Phloxes to suffer from frost in May and later in the season by gales. To commence a collection secure one-year-old pot plants in autumn and plant at once. A sheltered spot is desirable for the plantation, but the bed cannot be too fully exposed to sunshine and air to grow first-class Phloxes. The bed should, if possible, be a deep loam thoroughly well dug and enriched with plenty of good manure. Plant 15 inches apart and water regularly unless the weather is showery. During dry weather in summer give copious supplies of water, and as soon as the flowering stems commence to rise mulch the beds and give liquid-manure, weak at first, increasing in strength as the plants develop. As soon as the plants are tall enough to feel the wind stake them carefully, and if more flower-stems rise than is thought the plants can carry thin out a few, for some varieties show more flower-stems than they can develop perfectly. When the bloom is over and the foliage turning yellow cut the stems down and put on the bed a thin mulch of manure, and leave it for the winter. The following February take up the whole of the plants and replant them 20 inches apart. I have found it a good plan to place in the front line all round the plantation the yearling plants at 15 inches apart and the strong stools inside at 18 inches to 24 inches asunder. When arranging take care to distribute the white and light-coloured flowers pretty evenly to light up the lot. Like Roses, Phloxes

The narrow lawn between house and wood

The entrance porch and narrow lawn

harmonise with each other no matter how planted, provided the lightest colours are pretty evenly distributed amongst them. When the stems are 3 inches long they must be judiciously thinned. A good average to allow a two-year-old plant is six flowering shoots. The thinnings make good cuttings, which may be rooted in a cold frame. The next year commence again, for the large two-year-old plants are considered worn out. Young plants from cuttings are to be preferred to those obtained by dividing the stool. Thus the cultural circle is complete and the Phlox is grown somewhat in the same way as the Chrysanthemum, but is much easier to manage, for there are no stopping and training, and we are sure of the flowers as they come before frost can injure them.

Phloxes are easily grown in pots, and make fine exhibition and conservatory subjects. The great thing is to keep them well supplied with water and feed well, for if neglected the bottom leaves fall and the plants have not a nice appearance.

The following will be found a selection of first-class varieties that should find a place in all up-to-date collections:—Elizabeth Campbell, light salmon-pink, white centre, compact habit; Firebrand, bright orange-scarlet; Frau Antoine Buchner, a splendid white; large flowers, and enormous trusses; Hugh Aldersey, a pretty coral-scarlet, large trusses; Le Mahdi, rich amethyst with deeper shading; Marie Jacob, a beautiful pale lilac with white centre; September Glow, very useful as it is late flowering, the flowers are coral-red, shaded salmon; Baron Van Dedem, l rich scarlet blood-red flowers; Coqueli bright scarlet flowers make it ver spicuous; Evelyn, rich salmon-rose, centre, large trusses; Mrs. Ethel Pri rosy-lavender shade, very large trusse Scholten, rich dark salmon; Marsha rich carmine-crimson, deeper centre; Strohlun, rich orange-scarlet, carmi large trusses; Miss Willmott, a b shade of lavender, flowers very larg Rutgers, fine trusses of rosy-lilac Thor, soft salmon blooms; Baro Huckeren, a charming salmon-rose trusses and pips very large, dwarf Jenkins, the best white, at its best second year if top-dressed heavily.

REMINDERS FOR THE WEEK

Southern and Midland

Peas

The earliest rows will now require staking, and, previous to doing this, several inches of soil should be drawn up on either side. The most suitable sticks are Hazel or Beech, and these should be cut 6 inches longer than the recognised height of the Peas. A further sowing should be made, repeating this fortnightly. It is wise to dust the rows occasionally with old soot to ward off slugs.

Beet

It is much too early to make the main sowings, but a few rows of an early round kind sown on a warm border will provide useful roots during the summer. Beet should not be sown on land that has been freshly manured.

Turnips

A sowing of Early Milan or Model may now be made on soil that has been brought to a fine tilth. Birds are very destructive to these plants when showing through the soil, so where these abound the beds should be protected with netting or cotton stretched on pegs.

Vegetable seedlings under glass

Onions, Brussels Sprouts, Cauliflower, and Lettuce raised early in the year in heat should now be growing freely in cold frames, and should be gradually hardened off in preparation for planting out during the latter part of April. See that the plants are not overcrowded, as if checked at this stage the best results will not be obtained.

Salads

Make successional sowings of Lettuce, Radish, and Mustard and Cress on a sheltered border, as it is much better to have small lots in succession than a large breadth which usually means a great waste.

Chrysanthemums

This is a busy time amongst these plants, and as the pots become full of roots they must be potted on. Decorative varieties should be pinched when 6 inches high if bushy plants are desired. It is not too late to take cuttings of border varieties, as they root more quickly now than earlier in the year.

Amaryllis

As these plants go out of flower they should be given a warm and light part of the greenhouse and syringed frequently to promote healthy growth previous to the resting period. If the plants require repotting it is the best time to do this, although they should be disturbed as little as possible, as they flower more freely when the pots are well filled with roots. An annual top-dressing is always beneficial.

Ferns

The young fronds should now be pushing up freely, and it is essential that the plants should not suffer from want of water. The roof of the house should be shaded from the rays of the sun; and an even, cool, moist temperature suits them best.

Primulas

Now is a good time to sow seeds of the Chinese species, and they should not be subjected to strong heat. A cool house or frame is the most suitable in which to grow the plants in their young stages. Eureka and the obconica forms sown earlier should now be pricked off into small pots or shallow boxes of light sandy soil.

Border Carnations

These should be planted without delay where not already done, and the beds in which the autumn-planted ones are making headway should be dusted occasionally with old soot to keep away the Carnation-fly, which at this season puts in an appearance. Now is a good time to sow seeds of a good strain of these Carnations, which will make fine plants by autumn.

W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Lawns

This is the time at which lawns ought to be inspected, and any weeds should be removed. Where the sward is poor top-dressings may be applied with benefit to the grass. There are now many reliable lawn manures which lend themselves to this purpose. Thin places may be reinforced by sowing seeds of a good mixture, which ought to be raked in and covered thinly with finely-sifted sandy soil. Rolling and sweeping will now be matters of routine, and if there are symptoms of growth the lawn-mower must be put to work as soon as the surface is moderately firm.

Walks and paths

Now, too, a general clean up is due among walks, woodland paths, carriage drives, and so forth. If considered needful the grass verges can be re-cut, but in a general way recutting is not necessary every year if the edging shears be conscientiously used. During March there is, as a rule, some chance of dry, settled weather, and advantage ought to be taken of such a condition to apply weed-killer where such is required. It is always more effectual, I think, when it is put on just as the paths are drying up after rain, but when there is a likelihood of a few days of good weather

Seed sowing

This is a busy time among the flowe and sowings of many things ought made. Among these may be me seeds of Asters, Stocks, Nemesias, Pentstemons, Marigolds, Salpiglossi any other half-hardy annuals which favour. The single Asters appear steadily increasing in popularity, an appears to be something like a rev favour of Marigolds of all kinds. S Balsams, Cockscombs, Celosias, P and, if necessary, of Coleus should b for pot work. A moderate amount only is now needed to ensure a good nation of all these seeds.

Sweet Peas

Towards the end of the month, if th not pasty, sowings of Sweet Peas made out of doors to furnish scr hedges. Despite the reiterated advice thinly," it is better, in practice, to sow thickly. There are certain to be ca from attacks by mice or slugs, and tunately) the seedlings are too thick lines it is always possible to thin the they can be transplanted. Coating t with red lead is recommended in the Sweet Peas sown in the open.

Fruit houses

Continue fertilisation in the case of bloom in Peach or orchard houses. late Peach-house has been kept witho heat, and if the trees are now in flow good practice to run the heat throu pipes for 10 days or a fortnight until set has been secured. This is especi sirable when Nectarines also are grow house. Borders in vinery and Peac alike must be inspected regularly an ture applied as circumstances indicate which are beginning to swell away assisted with some quick-acting c fertiliser. Nitrate of soda is useful purpose, but it must be used cautiou with intelligence, otherwise it were left alone.

Kitchen garden

Blanks can be made good among autumn-planted Cabbages. These a numerous than usual. Continue the of Potatoes when the soil is in a fit co and get out a bed of Onions fr autumn-sown batch. Stir up the soil Spinach Beet in order to promot growth. Sow seeds of the various Brassicas, and attend to young plante family in cold frames. Cauliflower raised in heat should now be g hardened in order that they may go o a south border at the earliest moment.

W. McGu

Mabie Gardens, Kirkcudbrightshir

ALPINES

imula denticulata superba

ıeir alpine exhibit at a recent meeting ıe Royal Horticultural Society Messrs. 'richard and Sons, Riverslea Nurseries, hurch, planted a delightful little group ıula denticulata superba with globular of almost pure blue flowers. It is by bluest variety of this well-known a we have seen, and very distinct in from all others. By an oversight on t of the exhibitors it was not brought he Floral Committee with the new and ınts. H. C.

The Alyssums

ır the best-known and most generally in the garden is the old spring e, Alyssum saxatile, or Gold Dust as niliarly called. Invaluable as an edg- ıt in spring-bedding schemes, it never more effective than when planted ely with a good purple Aubrietia, such Mules or Mrs. Lloyd Edwards. From vn in May good sturdy plants can be l that will give plenty of flower the g spring. The variety compactum is straggly as the type, and consequently oth for edging and rockery. For the ıe double variety, A. saxatile fl.-pl., is improvement, being not only double, a much richer and deeper gold, and y more compact in habit. The lemon- variety, A. saxatile citrinum, is charming, while for those who ad- ariegated foliage there is another A. saxatile variegatum, with boldly- leaves. The tiniest of all is the known as Tom Thumb, an exact part of the type in miniature—a compact plant for the rock garden. arieties are all best propagated from of side shoots, as they are not re- ue from seed.

er Alyssum much used for edging ower beds is the little white, sweet- annual, A. maritimum, of which a charming variegated sport which is as often as its merits deserve.

of the other species are best suited to garden proper, but we have a fine ll subject in Alyssum argenteum, as reddish stems and grey ovate and produces veritable clouds of tiny flowers. It should have plenty of it is rather a big grower. A very plant is Alyssum spinosum, a dense rublet with silver-grey foliage and owers. Its variety roseum has pale ink flowers. The type may be readily d by seed, and should be given a dry, position in the rockery. Among ecies, A. montanum is the one most ly met with in gardens. It has grey- ats of foliage and lax heads of light notched flowers. It occurs in many European alpine ranges and is quite and content under cultivation, and very freely. Alyssum alpestre, mountain species, is greyer in foliage, so compact in habit and not so gener- ful. A. serpyllifolium is a charming ostrate plant with tiny silver-grey aped leaves and light yellow flowers. s on rocks at high elevations on the enis, Pyrenees, etc., and should be choice, well-drained position on the with plenty of grit. A. amanum pro- ostrate mats of narrow, oval, sharply- grey leaves and flat heads of good flowers. It is one of the first to A. podolicum is a little Russian with green foliage and small white dainty but not exciting. A. creticum, from high elevations in Crete, is more woody and upright, and has fine yellow flowers. It is rare in cultivation. A. gemonense is closely allied to A. saxatile, while A. Moellendorfianum, from Bosnia, is near A. montanum, and in view of its name we shall probably prefer to write labels for the latter species. There are many other Alyssums, which are largely of botanical interest only, or only slightly distinct from the above kinds and which, for garden purposes, are not greatly interesting.

R. J. M. S.

Primula denticulata superba

The flower heads are remarkable for the deep blue-purple colour. Shown by Messrs. M. Prichard and Sons, Christchurch

Saxifraga oppositifolia splendens

This is one of the most attractive of the Saxifrage family, inasmuch as it often hides its leaves with flowers. In March its bright rosy-pink blossoms appear. The single flowers are each nearly 1 inch across, and the multitude of blossoms completely covers the small dense foliage. Bare parts in deep, slightly-shaded spots on the rock garden are the best places for the plant, but the soil must be very sandy loam. It is desirable to establish wide-spreading patches on slightly elevated spots. A few bits of broken limestone together with a good dressing of sand placed among the plants will keep the ground cool. When old-established plants become untidy it is a good plan to divide them and to put each little piece firmly in fresh soil. Old plants should be kept down with pegs or top-dressed with sandy soil.

H. Stevens.

The Prophet Flower (Arnebia echioides)

This is seldom met with. It bears in spring one or two stout flower-stalks each with four or five blossoms about 1 inch across, of a primrose-yellow colour, with, on the corolla, five black spots which fade away with age. It is best grown in the fissures of the rock garden. Fix the plant, if possible, so that its flowers hang in an oblique position. It is a moisture-loving plant, and during spring and summer water must be given in such a way as to interfere as little as possible with the crown, as moisture about the neck or stagnant soil is fatal. The Arnebia revels in sandy loam in a shady position, and a good, deep, congenial soil is necessary. H. Stevens.

FERNS

Repotting Ferns

A MIXTURE of rough loam, rough peat, and plenty of sand suits all Ferns. In potting, the finest of the mixture should never be put at the bottom. It must be on the top if anywhere, but very fine material should not be used. What soil requires to be put at the bottom should be placed carefully over the crocks and be firmly rammed down before the plant is put in, and, when space is limited between the old ball and the sides of the pot, it may be a difficult matter to get rough pieces filled in, but they should be pressed firmly down with a piece of stick, and care should be taken that no little vacancies are left. After potting, one thorough watering at the root should be given, and the soil will not become dry again for some days. By one watering I, however, mean more than once filling the space left for this purpose. After the first quantity has soaked in, another should be given, and if it is thought that this may not be enough to wet all parts of the soil, more may be applied. Once the whole of the material has become thoroughly wet, the roots are sure to go on well, but if only the surface soil is wetted growth will neither begin nor continue satisfactorily.

Ferns whose fronds have become ragged and discoloured should be cut down to the crown. Plants which are not to be repotted should be treated in this way before they have begun to grow, and those which are repotted should be cut over when that operation is being performed. It is astonishing how much Ferns may be benefited by weak doses of liquid-manure given twice a week or so. Soot-water and cow manure water are both good, and when these are used—especially in the case of plants which have not been repotted—the result is most satisfactory. C.

Angel's Tears (Narcissus triandrus albus)

Angel's Tears (Narcissus triandrus albus)

THIS sweet and dainty little Daffodil is now flowering well in pots and pans in which the bulbs were planted in a firm and gritty soil. It is a great favourite for growing this way, and now that the bulbs are easily procured many are growing it successfully as a room plant in bowls in fibre. Its great value lies in its charm as a plant for a well-drained pocket in the rock garden. Among the many Narcissi which we can use in such a position few combine the extreme daintiness of colour and form with ease of culture as does N. triandrus, var. albus. The colour of the flowers, which are borne one to three on a stem, is of a delicate shade of cream, and the graceful way in which the flowers depend from the stalk renders a group most attractive in April. With me the bulbs seem quite at home in sandy loam and leaf-mould, planted in groups about the rock garden in almost any aspect, though I have some mostly in sunny positions, say, at the base of rocks, and where they are somewhat protected from wind. I plant the bulbs deeply—not less than 6 inches—so that any cultivation in their neighbourhood will not be likely to disturb them.

The drooping flowers are each about 1 inch long and the entire cup-shaped corona is pure white. It was found by the late Mr. Peter Barr on the mountains of Portugal and Spain growing in hard, firm, gritty soil, sometimes in the narrowest fissures of granite and slatestone rocks. C. T. K.

The Bladder Pea (Vesicaria utriculata)

This appears to suffer from the information frequently given in catalogues that it has a curious bladder-like pod and from the withholding of anything regarding its other qualities. Certainly, the bladder-like pod is a very distinct and interesting feature, but V. utriculata has other things to recommend it. It is a member of the Cruciferæ, and, but for the inflated capsule, is like a Wallflower in its inflorescence. It forms a bushy plant about 9 inches high, with clusters of good yellow flowers, and a single plan group in the rock garden or border for object not by any means to be ignore is quite hardy and perennial, but several years old have a tendency to b bare at the base, and it is well to have spare plants of less age. These can ea secured by taking off cuttings or by s seeds, which V. utriculata produces in Self-sown seedlings frequently appear the conditions are suitable, and thes be utilised to replace effete plants. may be sown either under glass from to May or in the open in shallow dr light soil in May or June. A sunny and a light, gritty, well-drained soil s utriculata best, but it is not too partic these respects. S. Arn

Hardening off bedding pla

BEDDING plants should not or well-grown and healthy, but to the conditions under which their life has to be passed. There is no important point in their early culti than that they should be sufficiently ha off. In the process of production th majority of bedding plants have been, intents and purposes, treated as exotic directly they have reached a particular of development the process of weaning and hardening them off in readiness for air conditions, has to begin. The pro gradual, and where the necessary fa are permanent the task is merely routine. But every grower does not p the facilities, and therefore has to them. One of the best and oldest m we know is the utilisation of m frames, which, placed in rows, are fille wet Hops straight from the brewery these, being trodden down, soon gene strong heat. The newly-potted plants no roots near enough to the sides of th to get burnt, are plunged in this m By the time they begin to make ro fiercest heat has gone from the Hop sufficient warmth is still available to them from frost till late in April, after date, if sharp frost should occur, the tion of mats must be given at night the fortnight preceding planting out lights should be wholly removed, so th plants are actually open-air stuff, and put out with every confidence. Such are much better than the quickly-forced stuff offered at tempting figure which would be expensive at any price.

Erythronium Dens-canis The Queen

This was found by the late Mr. Allen, of Shepton Mallet, near Pa named by him The Queen. Apart fr earliness, it deserves notice on account large size of its flowers, which are twice the size of those of the ordinary flora forms of E. Dens-canis. Th white, passing off blush, and with base. The leaves are very handsome flowers opened with me this year in th days of March. S. Arn

Anchusa myosotidiflora

This is a charming dwarf plant rese a giant Forget-me-not in flower. Th is somewhat tufted in habit, and nu branching flower-stems each bearing a tude of delightful blossoms appear early March. It is a splendid border growing freely in good soil. A group plant by the margin of a border is a sight and one not easy to forget. The should have plenty of room—2 feet ea —so that the individual beauty of ea shall be apparent. It is easy of incre root cuttings. H. Stev

Planting Potatoes: Fresh Stock

ERE have been many complaints this ar about the poor quality of seed Pota- s. It appears that the trade in seed es is gradually drifting into the hands le who do not know the trade or recog- e vital importance of sending out first- ibers for seed purposes. We have seen ibers this year that have been most ar in size, varying in weight from o ½ oz. in the same sample. Some have been badly damaged, and, in con- ce, have been returned.

tubers should be carefully selected and and readers are advised to deal only ms of repute.

from Scotland holds a deservedly high ion amongst English growers, and uccessful gardeners prefer fresh Scotch ch year for their main-crop planting. intelligent allotment holders and gar- have arrived at the conclusion that wn "once grown" seed yields poor by comparison with fresh Scotch seed. er, it is not every gardener that prefers seed, as is evidenced from the follow- n a West of England gardener:—

fact has become pretty well estab- that tubers from a different part of igdom yield better crops than home- eed. This, however, depends on soil eat extent. Years ago, when Scotch- seed tubers were much boomed and much was said about Lincoln and dge Potatoes, I procured some Pota- ith the hope that at digging-time I find a return commensurate with the This, however, was not so; the lid not compare with those of home- stock, and so I lost confidence in the ed reports of the period. I now avoid her Scotch seed, and instead procure n stocks, and here I find the gain is rable. The difference was strikingly nt from the earliest period of growth, ilm being more vigorous. It is pre- that the climatic change from Scot- the West of England is too extreme Potato, adaptable as it usually is for den or field. I believe many Scotch- tubers are brought into Lincolnshire nting, and where report says they do From Irish seed tubers the results are qual to those from Lincoln seed, both lm, growth, and yield. This gain from conditions that are not quite or, naturally, one's own stock, stored ow trays at the time of digging, and posed to light at all favourable times the winter, gains a development of t in advance of that made possible rted seed that does not come to hand rly in winter. I have found, too, that of earliness there is not much, if any, the sprouted seed over that which rom Lincoln growers in bags and sub- rough usage in railway transit. It is that the early sprouts get caught by eacherous morning frosts of early when they push their heads above the d it is well known that such injury a distinct set-back in the progress of nt and crop.

ighbouring gardener of my acquaint- ho has a peculiarly light soil to deal inds that local seed one year from suits his purpose better than if he lirect, and the advantage is so marked engages each year to exchange a given y with a local grower who procures ck direct from Boston salesmen. In e I gain quite a third in bulk from ed seed compared with my home- notwithstanding in my case early s are placed direct into shallow trays e soil at digging time, and are thus well sprouted at the next planting season. Though the purchased seed tubers come to us in bags, and necessarily have no care taken of the shoots or sprouts, they appear to give table produce quite as early as do those over which we spend much more care and time. For the purpose of comparison I have planted alternate lines of home-grown and purchased seed. The latter outdistanced its rival in growth with extraordinary clearness, and in the season would have gained quite 12 inches, if not more, in height. In lifting, the crop revealed the same apparent difference. The well-known Factor was that chosen for these comparisons. Though Scotch-grown seed affords no advantage, it is well known that differing constitutions or soil give others the same material gain that we get from Lincoln stocks.

CUTTING THE SETS.—I formerly had an idea that medium-sized whole Potatoes were best to plant, but recent experiments have shaken my confidence in planting whole Potatoes. I believe that large ones, cut into single eyes, will furnish a better return than planting whole tubers; moreover, and this is of some importance, the crop will be fit to dig at least a week earlier, a circumstance for which a reason is not far to seek, inasmuch as one strong stem from each set is better than a cluster of weakly ones; the former will produce on the average from four to six good-sized tubers, whilst the latter will yield a host of small Potatoes, in addition, perhaps, to one or two good-sized ones. The crown eyes are better and more prolific than those produced on the sides of the tubers.

Seed Potatoes should never be stored in large heaps; the best way is to lay them out thinly in shallow boxes or on shelves in some building from which frost is excluded. Where space for this cannot be afforded, the heaps should be as small as possible, and should be frequently turned over to keep growth in check. A heap of Potatoes, even if small, will generate warmth, and if not moved occasionally will grow, and that will weaken them for seed purposes. It is not advisable to cut the sets more than 24 hours before planting time, or they will shrivel, and the growth will be thereby weakened. It is a good plan to lay the tubers out thinly somewhere to sprout, and then to select and cut out the strongest eyes only for planting. A little extra care in this way will not be altogether labour or time lost. WEST OF ENGLAND GARDENER.

Lettuces in frames

Where Lettuces have to be provided all the year round, and those in the open ground fail, a fresh supply may be had, if a warm greenhouse or pit is at command, by sowing seeds of any of the white Cos varieties in boxes at intervals of from three to four weeks. Procure some shallow boxes, or large seed pans, and fill them with soil in which there is a good portion of leaf-mould and sharp sand. Sow the seeds thinly upon the surface and cover them with sandy soil; water through a fine-rosed pot, and place the boxes or pans in a temperature of about 55 degs. When the young plants have made a third leaf, fill as many boxes with loamy soil as will be required to hold the number of plants needed for one crop, planting them 3 inches asunder and watering them in well. Then place them in the same temperature, viz., 55 degs., and keep them as near the glass as possible, in order to keep them dwarf and from damping off. In six weeks' time they will be fit to cut and ready for use in salads. It must not be expected that they will have hearts, but when grown quickly in this way they are crisp and tender, and will be found extremely useful to cut up with Endive and other blanched leaves of plants used for salads. During the spring, crops of green Lettuces can be successfully grown upon hot-beds in which there is some slight warmth, and from which all rank steam has escaped. If there is the least steam in the frame the young plants will damp off. Put 9 inches of sandy soil inside the frame and tread it firmly, keeping it about from 12 inches to 15 inches from the glass. Young plants which have been growing in boxes, and have from three to four leaves, will be found most suitable for planting in such frames. Plant them from 4 inches to 6 inches apart, give ventilation on all favourable occasions, and if the temperature rises above 55 degs. leave a little air on by tilting the lights about ½ inch at the back. I have found Cabbage Lettuces most suitable for giving quick returns in frames. Tom Thumb is the variety which I grow in this way upon fermenting materials, but other Cabbage varieties will do equally well, and I have no doubt will be found equally good when ready to cut, which may either be in a green state or they may be allowed to heart. C.

Raising Tomato Seedlings

There are several reasons for the so-called damping of Tomato seedlings, and washing pots and crocking the same are not a prevention. The soil is the principal cause of the trouble, and the best thing to do is to water the seed-pans immediately the seed has been sown, with Cheshunt Compound.

The seedlings must then be pricked off into boxes or pots before the first rough leaf is formed, and the plants let down into the soil up to the seed leaves, watering at once with the compound. The position for the small plants at all times must be as near the roof-glass as possible.

The soil must not be too rich, and if on the heavy side sharp sand or anthracite ashes should be added. After the seedlings leave the seed-pans crocks are not necessary, and time is wasted by using them, a piece of coarse loam being ideal. If the pots are to be cleaned nothing less than boiling is good enough; washing with cold or warm water only makes them look clean. R. J. WILLIS.

Sticking Peas

Various ways of sticking Peas are practised in different parts of the country, but none of them beats Pea-sticks. Hornbeam is, perhaps, as good as any when it can be obtained; Hazel and Spruce, too, are often used, and answer the purpose admirably. In preparing the sticks they should be made flat or fan-shaped, just taking off the straggling shoots at the top, in order to give them a neater appearance; little time need be spent in sharpening, a cut made in a slanting direction being all that is needed; a little judgment must, of course, be used in cutting them to the required length for each variety, too short sticks being comparatively worthless. Care, too, should be taken to place them wide enough apart at the bottom and upright, *i.e.*, not sloping inwards at the top as is usually the case, allowing the haulm to escape at the sides instead of finding its way to the top inside the sticks. In the case of very tall Peas it is a good plan to put a short stick and a long one alternately on each side of the row. Pea-netting has special advantages. This is generally made with a 5-inch square mesh. It is supported between stout stakes, and thus constitutes an excellent hold for either Peas or Beans. It is both neat and economical. We know a good many keen growers who have used the same netting with excellent results for five years or more. Inquiries for this special netting should be sent to Mr. Thos. Johnson, of Corporation Street, Man-

chester, who has manufactured it for a good many years.

Market gardeners seldom stick their Peas; they allow them to come to maturity, then pick them, and pull them up. They are seldom gone over more than once or twice, and for market purposes this answers very well, but where a continuous supply is desired sticks or netting are decidedly needed. When they are not employed, stopping the points of the shoots is often practised to induce the plants to grow more dwarf and bushy, which in this case is no doubt advantageous, but, as a rule, little is gained by stopping. It is said by some to throw the energy of the plants into the pods, but it is a question if it be not as harmful as beneficial. Where a crop of Peas is required to be fit for use on a given date, and where, from all appearance it is not likely to be ready by that particular time, we have frequently seen the tops of the shoots removed, and only the most forward of the pods left. The moulding up of Peas after they have been sticked is generally done with a spade; a line is stretched along the side of the row in order to make straight work, and the soil is then carefully placed round the bases of the plants. Too much soil should not, however, be put around the stems of Peas, as the roots push from the stems with considerable reluctance, and the earthing-up throws off the water instead of allowing it to descend to the roots.

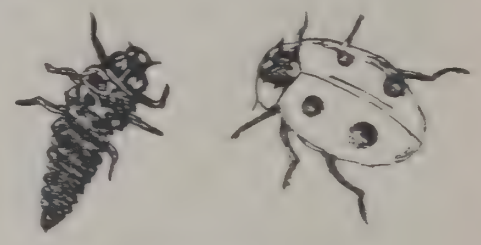
FRUIT GARDEN

Disbudding Peaches

IT is difficult in a brief article to give sufficient details to clearly describe the work of disbudding in Peaches. There is a deal of necessary study and application to carry on the growth of trained Peach-trees successfully. They are so profuse in growth that disbudding must be continued over a lengthened period. It is a bad plan to remove all superfluous shoots on one day. It is better to extend this over a week, or even two, to avoid the check to the future growth. Nor must fruit be considered the first year of planting. It is better, in fact, to remove any flowers there may be in a bud state now. In the course of disbudding, Peaches and Nectarines always choose a well-placed shoot, as near the base as possible of every existing principal one, allowing as a leader the bud growth at the extremity of the same. If the matured branch should be of a fairly good length, then allow an additional shoot between these two. In the case of a young tree not yet fully furnished, this course would be easy. The object of the choice of the basal growth is to provide for the fruiting growth of the following year. Often the growth allowed from the extremity is pruned back, though not in every case, to the fruiting shoot behind it. Much of this depends on the tree itself and the fulness of its furnishing. Crowding is confusing, causing unnecessary labour, and is not good for the trees, thus disbudding should be carried out so that this after-trouble is avoided. Never leave two fruits at one joint, because one is ample, and choose those Peaches for the crop that can be fully exposed to the sun, and which occur on the upper side of the branch. Always choose permanent shoots on the upper, not the under, sides of existing fruiting wood. Those that occur on the under sides are the first that can be removed. In many instances there will be at least 10 shoots where two only are required, thus it is advisable to retain those best placed for the formation of the future tree. Manipulation of the green shoots of Peach-trees becomes in itself almost a fine art, which cannot possibly be dealt with in a faultless manner by the amateur grower. A little professional assistance is of great value in giving a proper insight into the initial courses of true manipulation. Except in the case of a very strong shoot, no stopping of Peach growths is necessary, and the lateral branches formed this year are those which produce fruit next season. Apricots differ in their habit from Peaches and Nectarines in that once the trees are well shaped the future crops are produced on short spurs, formed by pruning in summer and winter. Peaches fruit on spurs, but it is not a natural course of production. Tying or nailing, whichever course is taken, of the growing shoots must be undertaken periodically, so that they are early trained into their proper shape, and make sure they are kept free or in front of the wires, and are not too tightly bound.

Garden Friends

WITH the approach of spring activities the wise gardener will soon be keeping an eye open for the first signs of aphis and other garden pests, and take prompt action, for experience proves that it is the early-applied remedies which count. But however zealous one may be in these matters, it is not wise to indiscriminately slaughter every living creature which makes its appearance, because some of the insects are valuable friends of the garden, and every effort should be made to protect them and encourage their activities. But it is first necessary to know them.



Ladybird and its larva

Among the most useful of our insect friends is the ladybird, whose diet consists largely of aphids. But while the majority of gardeners know this and welcome the ladybird, they, more often than not, fail to recognise its larva, which is a much greater feeder and devours large numbers of green-flies. The young ladybird is not a bit like its parent, and not nearly so handsome. It rather resembles a little blackish lizard, and even professional gardeners, on encountering it in considerable numbers on fruit or Rose trees, have often regarded it as an injurious pest, and taken energetic measures to remove it. Let it live! Half-a-dozen young ladybirds will clear the fly off a Rose bush in a very short time.

Another valuable insect is the ichneumon fly, which lives as a parasite on caterpillars. It pierces a living caterpillar and deposits an egg within it. This soon hatches, and the young ichneumon feeds on the caterpillar and kills it. The adult ichneumon is not often noticed, but its grubs, after feeding, leave the dead caterpillars and spin little yellow cocoons, usually in colonies, on the undersides of Cabbage or other leaves. These groups of cocoons are, at first sight, easily mistaken for eggs of the Cabbage butterfly, and destroyed as such, but on a closer examination the difference is easily noticed, and they should be left undisturbed, as they will, in due course, account for large numbers of caterpillars. It is possible to assist the breeding of ichneumons by handpicking a number of Cabbage caterpillars and placing them in a flat box with a few leaves and covering the box with fine netting of rather less than ¼ inch mesh. This will prevent the caterpillars getting out, but will allow the ichneumon fly to get in, and such a box placed [illegible] Cabbage patch will become a nursery [illegible] useful little fly.

The common centipede and the [illegible] or "devil's coach-horse," both prey on [illegible] insects and should never be destroyed.

C. H.

INDOOR PLANT

Border Carnations in pots

IN cases where the soil is not suit[illegible] growing Carnations in beds or [illegible] and there is a light airy greenhouse, [illegible]lent results can be obtained by g[illegible] border Carnations in pots. This is [illegible] to be desired where the object is exh[illegible] as the plants are well under hand and [illegible] regulated so as to be in perfection [illegible] date of the show, which is not always [illegible] plants growing in the open border. T[illegible] time to purchase the plants for this [illegible] is during the early part of March. [illegible] should be obtained in small pots from [illegible]liable Carnation grower, as it is w[illegible] time and labour to grow inferior s[illegible] 8 inches in diameter will accommodate [illegible] pair of plants, thus economising space.

SOIL FOR POTTING.—This should con[illegible] these plants good fibrous loam, the [illegible] rather heavy, greasy nature being [illegible] This should be pulled to pieces several [illegible] before using, and if any insects such as [illegible] worm and eelworm are detected it sh[illegible] treated with some soil fumigant. T[illegible] bushel of loam one 5-inch pottful of [illegible] should be added, and likewise s[illegible] mortar rubble and wood ashes. T[illegible] open and porous nothing is better th[illegible] gritty sweepings that can be obtained [illegible] the sides of roads that have not been [illegible] with tar. After mixing thoroughly th[illegible] pile should be covered with sacks [illegible] allowed to remain so for at least a [illegible] After selecting the number of pots re[illegible] taking care they are quite clean, they [illegible] be well crocked. Over these may be [illegible] 1 inch of well-decayed manure, the [illegible] old Mushroom-bed being preferred. T[illegible] more beneficial to the plants at a time [illegible] they need it than mixing with the [illegible] which is apt to cause superfluous g[illegible] which would be against the firm [illegible] quality blooms. A few handfuls [illegible] rotted compost should now be [illegible] mixing this firm with the potting [illegible] up the pot, so that when the plants [illegible] in the lower pair of leaves will be [illegible] below the rim of the pot, thus allowing [illegible] room for watering. When turning the [illegible] out of the small pots the crocks should [illegible] carefully removed without damaging [illegible] roots, and after placing in position [illegible] should be added in layers and made [illegible] the work proceeds. A firm [illegible] is the secret of success in Carnation g[illegible] When potting is completed and each [illegible] rectly labelled, they should be placed in [illegible] frame on a bed of sifted ashes [illegible] thorough watering through a rose; [illegible] lights may be kept close for several days [illegible] the roots have taken hold of the new [illegible] post. Afterwards it is important [illegible] ventilation be given on all occasions [illegible] wards the end of May the plants will be [illegible] ing freely and the lights should be [illegible] altogether and the plants subjected [illegible] air treatment. Stake the plants as [illegible] the flower-stems appear. They should [illegible] secured lightly to neat stakes or [illegible] canes, tying regularly as growth advances.

WATERING.—This needs attention, especially when the plants are in their [illegible] stages of growth, as they must never be [illegible] tinually wet, and yet they must [illegible] allowed to become dust dry. Examine [illegible] plants each day, and when the pots are [illegible]

d hollow a thorough soaking should , and no more until the same occurs

DDING AND FEEDING.—When the buds aring they are usually in clusters, re fine blooms are required only the hould be left, pinching out the re- when small. The plants must be lly sprayed to keep away insects. flower-buds are formed the plants e assisted with some stimulant, I am not an advocate of a great nimal manure in the culture of Car- I find at this period weak doses of ade from cow dung and soot are if given twice a week, alternating some reliable Carnation artificial

G THE PLANTS.—The chief idea of protect the blooms and hasten the if necessary. So long as the is favourable and the buds are not they may be left outside, but when ry hot weather sets in they are better he house should be clean, and if the n be covered with shingle, pebbles, so much the better, as this keeps cool and moist. When the plants n housed all ventilators and doors kept wide open to allow a free circu- air, and the pots should not be together, but given ample room, as is delight in an airy and free circu- all times.

the plants are in full bloom, and to ir beauty as long as possible, some is necessary. Houses that have nds fixed to the roof are all that can l, as these can be lowered when the werful and drawn up in the even- kept up on dull days. When these o hand strips of tiffany or canvas tacked to laths, and in this manner be easily removed or replaced accord- weather. When exhibiting Carna- hing is better for vase decoration rnation foliage, which may be from healthy plants growing in the

W. E. WRIGHT.

n House Gardens, near Rugby.

antophyllums (Clivias)

Y TO "O. M. G.," New York.)

e we have a most useful class of er for supplying cut blooms or for ation of the conservatory. When supply cut flowers large plants are , but when grown for decoration nts are the best, as they can be to greater advantage. These plants quire much heat; in fact, they may d in a cool house provided the frost d, but for their flowers to be of the alue a gentle heat should be given t the middle of December in order may bloom from January onward. to allow plenty of pot room, as they feeders and delight in an abundant water during the growing season. in a rich, light soil and given due hey will make offsets freely, so that n soon be worked up. When the e attained a fair size the roots can ed, provided abundance of nourish- iven them during the time they are heir growth. Pots 9 inches or 10 liameter are very suitable for grow- in to produce cut blooms. Plants are also useful for large conserva- t for rooms or for arranging in se having one spike are preferable. them in flower by the middle of a batch should be introduced into t the second week in December. A re of about 50 degs. suits them ct, no greater heat should be given e on bright, sunny days when air en, for when brought into bloom gradually the flowers have more substance, and the colour is also better. Treated in this way they will succeed the Chrysanthemums, the bright orange-scarlet flowers being much appreciated, as they can either be taken off the trusses and used singly in small vases or cut with long stems for specimen glasses. To keep up a succession a second batch should be introducted into heat early in the New Year, and so on as required.

When the plants have gone out of bloom or the flowers have been cut, they should be given a temperature of not less than 45 degs. till they have completed their growth, by which time it will be warm enough for them to be stood out-of-doors for the summer months. Most gardeners are acquainted with the old Imantophyllum miniatum, but those who have not seen the newer types can have no idea of their beauty. The trusses of bloom are much larger and more symmetrical, the individual blooms also larger and of better shape. The colours, too, are more attractive, and at this dull period very effective.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

Rose Climbing Caroline Testout

(Florence).—In common with the climbing sports of other dwarf-growing Roses this is very often apt to become leggy, making, as described by you, one thick stem on the head of which lateral shoots are sent out standard fashion. This was probably caused by allowing the young plant to remain full length at the time of planting, whereas to obtain a more bushy plant it is desirable to cut such plants down to two or three, especially if the plants should be single-shooted when bought. The remedy lies in arresting the growth at the top, thus forcing the plants to send up basal shoots as desired. If the plant is sufficiently pliable this may be done by bending it over and fixing it to a peg in the soil by means of a strong cord. This, in all probability, will force the bottom eyes into growth, the undesirable top portion being cut away when the young shoots have obtained a fair height. If it is inconvenient to tie the plant over as described, the same result may be had by bending the plant round a tripod. Should your plant be too hard and stiff to bear this treatment the best plan is either to cut it down now to within 2 inches of the ground or to take it up and replant it. You will find nothing better than bone-meal for feeding your plant. Remove some of the top soil and replace with a mixture of loam and bone-meal.

Lilium auratum and L. Henryi

(A. B.).—The best time to plant is any time during March. A great drawback to early planting is the usual wet condition of the soil, and as the bulbs have no roots they are very liable to perish if put into such ground too early. A good way out of the difficulty is to start the bulbs in Cocoa-fibre in boxes or pots in a dark frame, afterwards transplanting them to their permanent quarters. So long as the Cocoanut-fibre is just moist no water will be necessary, but care must be exercised when planting out, as the young fresh roots are very brittle. Another way is to take out holes where you wish to plant the bulbs and put in about ½ peck of Cocoa-fibre, planting three or more bulbs into this in such a way that the bulbs are quite covered.

Planting Lilies

(L. Y. C.).—Although imported Lily bulbs are frequently planted direct in the open, and sometimes with satisfactory results, it is held by leading growers of Lilies in this country that to plant imported bulbs at all in the ground is to court failure in the case of L. auratum particularly, and to a degree less so with L. speciosum. These bulbs should be cultivated in pots for the first season and planted out in the autumn, if and when they have made good roots.

Plants for border beneath Cedar

(A. R., Sevenoaks). — Epilobium sulphureum, the large-leaved Rockfoils, Saxifraga (Megasea) in variety, Day Lilies (Hemerocallis), Periwinkles, especially Vinca major and V. acutiloba, Lilium auratum, L. a. var. platyphyllum, L. croceum, L. Martagon, Aucuba japonica, Andromeda Catesbæi, Rhododendrons, Erica lusitanica, E. arborea, Hypericum calycinum, Skimmia japonica, Danæ Laurus, Sarcococca ruscifolia, Berberis japonica. E. M.

Diseased Gladiolus corms

(Flemingitie). — After incubating your Gladioli we can find no trace of a fungus likely to cause the corms to be diseased. We are inclined to think that the primary cause of the corms failing was insect attack, and, as suggested in our previous reply, wireworm attack is the most likely. Try and get rid of the wireworm, and if you are troubled with the corms going off again send us some specimens when they are growing. We could then form a better opinion as to the primary cause of the trouble. The only thing we feel certain about at present is that wireworm has been worrying the corms. T.

The Belladonna Lily (Amaryllis Belladonna)

(O. M. G., New York).—We are supposing this is the Amaryllis you refer to. This beautiful Cape bulb may be grown well in the open, and blooms in autumn. There is a variety called A. B. blanda which blooms earlier. The flowers are white, turning to pale rose, and very handsome. The Belladonna Lily might be grown more than it is. Its scapes rise to a height of nearly 3 feet, and bear large Lily-like blooms, which, when seen in quantity, have a striking effect. No place suits the bulb better than a warm border facing south. Some preparation is necessary before planting, and the soil should be taken out to a depth of about 3 feet, 6 inches of broken brick being placed in the bottom for drainage. The

best soil is mellow loam, mixed with well-decayed leaf-mould and sharp silver sand. Plant the bulbs in clumps, each clump about 1 foot apart, and put a little sand about them at planting time. If the planting be done in autumn cover over the surface of the soil with Cocoanut-fibre refuse, dried Fern, or similar material. When the weather is very dry in summer give water occasionally.

GREENHOUSE

Cyclamen with cup-shaped flower

(T. C., Wicklow).—It is not unusual for seedlings to produce flowers like this; it is the result of high cultivation and over-selection. A sport of this nature is sometimes the forerunner of a new type. The seedling is of good colour, but we have not formed a very high opinion of its form, neither are we enamoured of some of the so-called modern improvements. Speaking generally, we prefer a Cyclamen flower with petals turned back and with a half-twist, as in the wild types. It is, however, a matter of taste. The foliage is that of Asparagus Sprengeri.

Perpetual Carnations in July

(C. Sheard).—To bloom Perpetual Carnations in July only those shoots which are elongating to flower should be cut back, leaving two or three of the more backward and smallest shoots uncut. This must be done at once, and unless the plants are already in 6-inch or 7-inch pots they should be potted on, otherwise they should be top-dressed with fresh soil and Carnation fertiliser (equal portions), feeding again every two or three weeks in May and June. They should not be stood outside until May, and, if blooms of quality are required, are best left under glass.

Pelargoniums damping off

(P. Knight).—In all probability an excess of moisture at the roots is the cause of the failure of your cuttings, as in the winter only sufficient water must be given to keep the soil slightly moist. Watering should always be done on a bright, mild day so that plenty of air can be given to dry up the excess of moisture. A free circulation of air is all-important for keeping Pelargoniums in good condition during the winter. You say nothing as to whether your house is heated, but if not we should advise you to have this done so that you could run the heat round the pipes to dispel any excess of moisture.

Growing Violets

(Erica).—Runners should be put in every year, April being the best month for doing this, whether these be for outdoor beds or for frames. The situation of the bed may be open or partially shaded by trees, according to the nature of the soil. In light land, which invariably suffers more or less in dry weather, a little shade is beneficial. On more holding soils Violets are just as well, if not better, planted in the open. This applies to double or single Violets intended for frames or for outdoor culture only. Ground for Violets must be of good quality, well prepared by trenching or deep digging, and should also receive a fairly liberal addition of decayed manure, and, if possible, some leaf-mould. Stable manure, or that which has been employed for Mushroom-beds, is the best for heavy soil—decayed cow manure suits light land. It is, however, best to manure and dig up the beds in winter so that frost pulverises them prior to the planting of Violets. Similar treatment is required for the double as for single varieties, except that the latter need more space because of their coarser growth. Single varieties of the modern kinds, such as Princess of Wales, flower freely on the runners which issue from the parent plant, and for this reason can be left. The double varieties require the runners removed frequently in summer, so as to concentrate their strength on the crown which gives the finest blooms. In frames the plants should be so arranged that their leaves come within a few inches of the glass lights, over the whole extent of the bed. Unless they are kept well up to the light they sometimes give a deal of trouble from damping of the leaves. Ventilation is an important item in Violet culture. This should be given freely on every favourable occasion, and the lights are best removed daily in mild weather.

TREES AND SHRUBS

Kerria japonica

(Senex).—This forms a handsome bush in shrubbery borders, but it is, on the whole, most effective as a wall or pillar plant either intermixed or associated with Cydonia japonica. It is readily increased by division or cuttings of the ripened wood. By cutting out the old flowering shoots that spring from the base much finer flowers than can be had when disturbed will be forthcoming.

FRUIT

Melons in July

I want to grow Melons and have them in July. How long does it take to grow them and what are the earliest kinds?

C. Sheard.

[If grown in a well-heated greenhouse, *i.e.*, one in which there is an ample supply of both top and bottom heat, you should be able to cut ripe Melons in from 12 to 14 weeks from the time of sowing the seed. In a house not so well heated or, say, without bottom heat, or in a frame on a hotbed a period of 16 weeks had better be allowed. Favourable weather conditions, *i.e.*, plenty of bright sunshine, is an invaluable aid in Melon culture, and by making the most of sunheat at closing time daily after the fruits are set and swelling off, the period between the ripening stage is shortened. Time may also be saved if the first two or three fruits which show on a plant are fertilised and allowed to swell off instead of waiting to secure a full crop. A very early white-fleshed variety is Hero of Lockinge. An early green-fleshed kind is Ringleader. If you can get it true a variety named Eastnor Castle would also suit your purpose. A good scarlet-fleshed kind is Sutton's A1.]

Vines not breaking

(Anxious and Troubled).—If the buds absorbed much of the paraffin, or, in other words, if much of it penetrated the outer covering or casing of the buds, it may be the cause of their failing to break, but, judging by the account you give as to the condition of the Vines, we are not surprised at their breaking irregularly. Even when in the best of health we have had buds fail to break both on Alicante and Muscats. In your case the fact of shanking being prevalent goes to show that the root system is thoroughly out of order, and this alone would suffice to cause the non-starting of the weaker, or of buds not thoroughly matured, and it is to this we should say that the trouble may be attributed. At the same time it is rather risky to apply paraffin in the manner mentioned, and would not advise its use in future.

VEGETABLES

Cauliflowers failing

I can get Cauliflowers along very well for a time, and then I find all at once they drop with maggots around the root. How can I prevent this? C. Sheard.

[The failure complained of is doubtless due to the larva of the Cabbage root-fly, deposits its eggs on the stems of plar when young and after having been planted. Preventive measures are lows:—After the seedlings have made three leaves sprinkle the soil betw drills and close up to the stems of th with something of a deterring nature, soot, or, what is much better, fin ashes, or sawdust moistened with using 1 pint to ½ bushel of either of stances named, and mix thorough plants set out singly in permanent p make use of tarred felt discs, slipp round the stem of each plant close ground. The latter may be had from in garden sundries.]

MISCELLANEOUS

Mosquitoes

(T. H. D.).—Gnats are most abur the neighbourhood of water. The constructs a sort of raft for her eg raft floating about until the eggs When the larvæ are born they take water, in which they swim about tail These mosquito larvæ are provide breathing organs at the tail end, and cannot make use of the oxygen cont the water they have to come up occa to breathe. They change when fully pupæ, but when in this state they fl their heads upward. Control n against gnats or mosquitoes should one or both of the following:—(1) away with all still waters. You do n if your moat is running water; if it is speed up the flow, and make sure th sides there are no little pools which still water. The pest will breed freel still water, even in about half an water in the bottom of a tin. If make all your water running wa should have no further trouble. (2) impossible to make your moat into water your next best plan is to c surface of the water with a film of " oil " when the larvæ are breeding. T prevent their breathing when they co the surface for that purpose. If y any plants growing in the water wh value they should be removed bef " paraffin " is put down.

Market sales

(E. L.).—No licence is required rabbits, eggs, honey, or dead poultr market.

SHORT REPLIES

An amateur's garden.—(1) Seeing y your canes for stakes, you may c Bamboos down at any time. (2) Y break the Dahlias up now, seeing t you reserve a growth to each piece them in your frame in Cocoa-fibre or leaf-soil.

Walter Baily.—The probable caus the birds are the culprits. We shoul you to dress the bushes with lime.

Tinto.—You cannot do better th Figs, seeing to it that the roots are in stations for each plant. These should be built of bricks laid in cem a bottom of rubble in cement.

CATALOGUES RECEIVE

Messenger and Co., Ltd., Loughbo Horticultural building.

Guy L. Wilson, Boughshane, Co. Ireland.—New seedling Daffodils, 19

J. Cheal and Sons, Crawley.— Dahlias, 1926.

Bridwell Bros., Foresburg, Texas. wild flowers.

LAWES' IDEAL

FERTILISER
LAWN SAND
WORM KILLER
JPERPHOSPHATE

d in Cartons and Bags.
tainable from Nurserymen,
dsmen, Corn Merchants, etc.

Full Particulars of :—

wes' Chemical anure Co., Ltd.

(Dept. G)

Established 1842

Mark Lane, London, E.C.3

SEEDSMEN BY APPOINTMENT

GRASS SEED

ALL lawns should be reconditioned immediately if the turf and surface are to be in good condition for the coming season, consequently preparations should be made in advance, and all the required materials—Grass Seed, Fertiliser, Worm Killer, etc., assembled. For particulars how to renovate your lawn, make a new lawn, diagrams and instructions, write to-day for Carters Booklet on "Lawns and Sports Grounds," post free on application. Fill in Coupon below.

PLEASE SEND POST FREE, BOOKLET
"LAWNS & SPORTS GROUNDS"

M. .....

G. I. .....

Carters
TESTED SEEDS

Grass Seed and Turf Specialists

SERVICE AND ADVICE
Carters will answer any question in regard to the improvement or up-keep of your turf

RAYNES PARK, LONDON, S.W.20

Ryders

WARNING

to the phenomenal demand this for Ryders Quality Seeds it is ry to urge all customers who desire eds for Easter sowing to make out rders at once and post them to , St. Albans, with the least delay.

RYDERS
'26 CATALOGUE

have not yet received a copy of the Academy Picture Edition of Ryders ustrated Catalogue Guide, send a day.

Ryders
(Ryder & Son (1920) Ltd.)
St Albans

FOOD FOR YOUR GARDEN

Healthy Plant Growth

is the outcome of the proper association of all the elements of plant food. You get this in

NORCO
COMPLETE FERTILISERS

THE PERFECT GARDEN FOOD

Which supplies the essential constituents contained in stable manure, but in a far richer and more convenient form.

PRICES (Bags Free and Carriage Paid):—

	7 lbs.	14 lbs.	28 lbs.	56 lbs.	112 lbs.
"NORCO" Complete Garden Fertiliser (For Flowers, Fruit and Vegetables)	2/6	4/3	7/3	12/6	23/-
"NORCO" Complete Lawn & Turf Fertiliser	2/4	4/-	6/9	11/9	22/-
"NORCO" Complete Potato Fertiliser	2/6	4/3	7/3	12/6	23/-

Send for free Booklet on the use of Lime, Stable Manure and Chemical Fertilisers

"NORCO" (Regd.) is obtainable only direct from the Sole Manufacturers :—

CHARLES NORRINGTON & CO., LTD.
Cattedown, PLYMOUTH.

Makers of High Grade Fertilisers since 1846. No. 9

The Border Carnation

WHERE space can be allowed, beds of one or two colours give a lovely effect during July, but, as a rule, in the open border in a good season, where planting has been carried out the previous autumn, the blooming period begins in June and continues in some varieties until September. At least, Linkman, Hector, Queen Eleanor, Cleopatra, and Salmon Clove, among others, will all give late blooms, and for garden decoration it is advisable to study floriferousness as well as shapeliness.

One would like to be able to add perfume, but it would tend to a very much more restricted choice, as so many of the loveliest flowers lack this greatest charm of all. The Cloves, of course, can be relied on in this respect, which is very probably why they are so universally grown by the amateur who requires a good flower for general purposes, most of the varieties now in commerce being stocky in growth, which is a great advantage where plants are being left to grow as perennials, the true way to get the best out of Cloves.

Many of these are perfectly shaped and constantly seen on the showboard, King of Cloves, Steinforth, and Mrs. A. Brotherstone being examples, and no better varieties can be had as regards habit and hardiness, but this class is growing so rapidly that individual taste as to colour can be gratified in selfs and fancies.

Seed can be sown in frames or a cold house right through April, and will next year give a display which cannot be rivalled by any plant. Indeed, if garden decoration is the chief end and aim of any amateur desiring to grow Border Carnations, this is the best way to achieve his object at a very small cost and little trouble, for if the seeds are planted in seed-pans about an inch apart and half an inch deep in light sandy soil, carefully watered, and kept covered with glass and a sheet of paper until they germinate, which they quickly do, and then freely exposed to light and air, the tiny seedlings will soon make two pairs of leaves, when they can be pricked out into slightly richer soil, and by August will be ready for planting out about 18 inches apart, as they make very big plants and good seed gives a large percentage of beautiful blooms, the single "Jacks" being very useful for foliage.

Lime is essential to the welfare of Carnations and must be freely incorporated in the soil if it is not naturally calcareous, good drainage and a light and airy position being their other requirements, a very little well-rotted manure sufficing, bone-meal being the fertiliser most suited to their needs.

The Carnation only requires to be grown for its hardiness to be recognised, and if plants are put here and there in a border and left to develop naturally they will give dozens of blooms and increase in size year by year.

J. B. WELLS.

Doronicum caucasicum

Flowers for cutting are so scarce in the early days of March that it is a good plan to box up some tufts of Doronicum caucasicum from the open ground in good time beforehand, and to bring them on to bloom in a cool greenhouse, so having them ready a good three weeks before their normal time of flowering and so filling a gap in the supply of material from the open ground. G. J.

Margyricarpus setosus

This is a neat, trailing, small evergreen shrubby plant with insignificant flowers succeeded by small white berries. It is a useful plant for the rock garden when its evergreen masses fall over rocks. It is a good grower, and in gravelly soil in an open position on the rock garden soon spreads into a broad mass. The foliage is finely cut and yellowish-green in colour. It is of easy increase by cuttings.

H. STEVENS.

2, Elm Dale Villas, Chepstow, Mon.

CHRYSANTHEMUMS

Seasonable hints

PLANTS that are now standing on shelves near to the glass in the cool greenhouse are making rapid progress—too rapid, as a matter of fact. It is of the utmost importance that the young plants be kept growing on. With the not infrequent bursts of bright sunshine throughout the day, the temperature of all glass structures rises very suddenly, and unless means be taken to ventilate them, in a little while the young plants may suffer very considerably. The warmth from the hot-water pipes, together with that derived from the sun's rays, quickly brings about a state of affairs that is most detrimental to most plant life, and to Chrysanthemums in particular. Growers should, for this reason, ever be on the alert to give ventilation when it is needed. They must remember that the small quantity of soil in the "thumb" or small "sixty" (3-inch) holds but little moisture, and during hot spells the moisture is quickly absorbed, and the soil becomes quite dry. For this reason, when the watering is done, see that the ball of soil is thoroughly moistened, watering two or three times in succession if need be. Each succeeding day the sun continues to increase in power. For this reason it would be better to find other quarters for the young plants. Provided adequate protection against frost can be ensured, there is no better position for recently-rooted Chrysanthemums than the cold frame. It is not a very difficult matter to exclude frost if a little trouble be taken. Straw, leaves, and litter of all sorts may be placed around the outside of the frame, or frames, and this in sufficient quantity to ward off all frosts that we are now likely to experience. Risk from the same source may further be reduced by filling in the frame with ashes, spent Hops, or Cocoanut fibre refuse, and plunging the pots. By carefully covering the lights in the late afternoon and leaving them thus until the morning, removing the mats only when the weather justifies one in doing so, the plants may be kept steadily growing.

Some of the readers of GARDENING ILLUSTRATED may have a very forward lot of plants, and are now in doubt how to proceed. It may be possible to give such a batch of young plants their first shift, but very often young plants are potted on into larger pots before they are ready for the shift, and when this is so a great mistake is undoubtedly made. To take a batch of plants as a whole and pot them up at one and the same time is a mistake. The chances are that only a small proportion of the plants is ready for repotting into pots of a larger size. It is better, therefore, to deal with each plant individually. Better wait a few days longer in the case of those that are not sufficiently rooted. Chrysanthemums are ready for potting on when the roots have well worked through the ball of soil in which they are growing. Do not wait until the plants get pot-bound.

Compost for this first shift or repotting may be made up of the following ingredients: One bushel of good fibrous loam, one quarter-bushel of well-decomposed leaf-mould, one quarter-bushel old mortar rubbish broken up and passed through a sieve with a ½-inch mesh, one quarter-bushel of well-rotted manure, and half a g coarse silver sand or clean road gri this compost a thorough mixing, the whole of it through a sieve with mesh. The rougher siftings will do over the crocks, providing excellent material. Pots 3 inches or 3½ i diameter should be used for this shift the stronger growing plants in th pots. The pots should be clean an drain dry. Pot rather firmly. It necessary in some cases to work t post down between the ball of soil pot by the aid of a label. Never more than one plant at a time, other fusion of names may take place, a calculations be upset when pinching growths has to be done. After r water in the plants, using a fine-r and place them where they may be k close for a few days. Continue to i tings of all types as stock is availab

Benn Brothers' Other Jo

The Cabinet Maker.—Annual Number; "C.O.D.;" Retail Adver

The Chemical Age.—Special Annu Chemical Markets of the British Packing Chemicals for Export; S ship Conditions in Colonial Markets Alkali Meeting: Sir Max Muspratt'

Discovery. — "Has London's Forum been Discovered?" by Home; "Mosquitoes," by Sir Art ley, G.B.E., F.R.S.

The Electrician.—Annual Sprin Promotion Number: "Increas Domestic Load," by James "National Electricity Supply," Wilkinson; "Boiling Plate Des S. F. Bickell; Annual Meeting National Register of Electrical I Contractors; Electrical Contractor Municipal Trading Proposals.

The Fruit Grower.—Are Ins coming More Resistant? National I at the Guildhall; The Hop Honoured.

The Gas World.—J. R. Reeson o Structures; Benzol as a Motor Spi Gas Boilers with High Pressure St

The Hardware Trade Journal Spring Issue; Spring Hardware T spects; Ironmongers' Opposition t Postal Service; Planning the Shop Lines; Aids to Factory Efficien fighting Appliances for Home and

NAMES OF PLANT

Mrs. Owen Powell.—We are so we fail to recognise the leaves of t send us. It is not Hedera dentata.

Miss L., Co. Cork.—The small (?) growing in the shingle close near Alassio, flowering in July an is probably Pancratium maritim and furnish a specimen.

Mrs. Macfarlan, Helensburgh.— yellow Daffodil is Narcissus nanus. shortly to illustrate the difference N. nanus, N. minor, and N. minin

J. Fleming.—1, Cupressus L (Lawson's Cypress); 2, Berberis ja

E. B. L., Stirlingshire.—A whi seedling of Rhododendron arboreu are in cultivation many forms of t ranging in colour from rosy-red to

V. A. Cooke, Woking.—1, Spir 2, Erica Darleyensis; 3, Leucojum (Summer Snowflake).

A. R.—Redwood (Sequoia semp

Ulsterunda. — 1, Celsia Arc Megasea cordifolia; 3, Cupressu iana.

GARDENING ILLUSTRATED

2456—Vol. XLVIII. APRIL 3, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in CAPITALS

llis" blooms
ng-off 220
: Wellington, and others 209
lbida fl.-pl. ... 214
ing 218
, sowing ... 220
villea glabra, of 220
s, seasonable n 218
ns, Border ... 214
nt hemums, ly on 220
es on a trellis 220
CLIVIAS 217
Cucumber, manure for 220
Cypripediums, notes on Canadian 212
Cytisus racemosus losing its bloom buds 220
DAFFODIL, A GREAT WHITE 214
DAFFODILS, ALPINES, AND CLIVIAS, GOLD MEDAL EXHIBITS OF 212
ERYTHRONIUMS AND THEIR CULTIVATION 207
Fern-case, management of a 220
Fuchsias, how to rejuvenate old plants 218
Garden, cesspool contents in a 220
Gardeners and their hours 208
Gladiolus, pronunciation of 208
Grapes, shanked... ... 219
Green manuring... ... 219
Herb Paris (Paris quadrifolia) 220
Hot-bed, making a ... 220
Lawns, improving ... 214
Lettuce, cultivating... 218
Lily of the Valley naturalised 208
Lycaste Skinneri ... 212
Peaches, lime for ... 219
Primulas, Chinese, how to grow 217
Report on condition of horticultural crops on the 27th March, 1926... 220
Raspberry stem bud caterpillar... 219
RHODODENDRON CAUCASICUM VAR. CUNNINGHAM'S SULPHUR 211
Rhododendron ferrugineum 208
Rhododendron multicolor Curtisi 208
RHODODENDRON PRÆCOX 209
RHODODENDRONS IN SOUTH-WEST SCOTLAND 210
Rhododendrons, grouping 211
Rhubarb renewals ... 218
Saxifraga ligulata ... 208
Spring Star Flower (Triteleia uniflora) 207
Tomatoes without manure 218
Viburnum Tinus var. lucidum 207
Vines break their lower buds, how to make... 219
Vine weevil, the... ... 220
Violets for the rock garden, sweet 207

Erythroniums and Their Cultivation

the end of February, just as Crocuses e finishing, the Dog-tooth Violet ightens shady rock gardens or edges of beds with its Cyclamen-like flowers ırming foliage. Of the seven or eight known, one only, E. Dens-canis, was introduced to our gardens in the ntury, is a native of the Old World, t is widely distributed from Southern , through Asia to Japan. I have t growing in thousands on a northern f the Apennines in short grass. The of the type are reddish-pink, hence ne from Erythros, red; but there are ıite forms, and the Japanese variety p purple flowers; the foliage is beautiarbled with purple, brown, and white. Favourable conditions the corms multiidly by offsets, and they are also inby seed, which, however, takes four five years to flower.

North American species, which were ed 40 years or 50 years ago are found untainous regions from British ia to California. They are somewhat ıan the Old World species, but have foliage, except one, E. grandiflorum, ıas it light green with no blotches. vers are also often two or three on k, those of E. Dens-canis being soli- The American species also do not seem ıse by offsets, but set plenty of seed, always sow at once round the plants own pocket or patch. I grow six , which with me flower in the amed:—E. grandiflorum robustum -yellow), E. californicum (nearly ith maroon band at base of petals), ersoni (light purple with deep maroon E. Watsoni (whitish flowers with ntre), E. citrinum (creamy-white, ntre), and E. revolutum Johnsoni (a l rose-pink). The first and last are of the basket.

ɔrms of these American varieties are e long-lived and freer-flowering than Dens-canis, which often waste their e in offsets. Dog-tooth Violets all preal shade and a well-drained sandy or ım with old leaf-mould. Part of my s an old sandstone quarry, and they dingly well on the north side and ne outer branches of a Cedar of . The corms should be planted for more than 2 inches apart and in the ibed, 9 inches deep for grandiflorum less than 6 inches for the rest. The ommend 2 inches or 3 inches!! but ɔt at all in accord with their natural habit. Some 35 years ago, when shooting in the Selkirk Range, B.C., I noticed a mass of yellow on a green patch at the foot of a glacier. A closer inspection proved it to be a mass of Erythroniums, which I had never seen before. All efforts to get up corms with a hunting-knife were futile, so I returned in a day or two with a borrowed miner's pick, and have not forgotten the depth at which those corms were buried. I laid them in

Erythroniums or Dog-Tooth Violets in cool woodland

in a convenient spot that evening to ripen, and picked them up two months later on my return to Europe and sent a box with pressed blooms to Kew. I had a similar experience with a clump of a white Iris Tingitana near the Serbu River in Morocco in 1899. My botanical trowel was useless, and I had to return to camp for a trenching tool. I also once spent a day in a Barley field near Batna, Algeria, getting up Tulipa primularia, of which there were thousands; some were a foot deep and the ground as hard as iron. Crocuses, again, in hard ground are 4 inches to 5 inches deep. Bulbs, of course, in contradistinction to tubers, require ripening by the sun, but even allowing for difference in climate, I have found that in light soil much is gained by deep planting. H. M. W. B.

NOTES OF THE WEEK

Viburnum Tinus var. lucidum

A REMARKABLY handsome shrub at the present time is the above, which is rapidly opening its flowers. Growing alongside the type (both about 15 feet in height) and laden with bloom, the distinctness is very marked. It is of a more open habit than the type, with larger, more richly polished green leaves, and much larger trusses of flowers, pink in the bud, pure white when fully open, the trusses of bloom being from 3 inches to 4 inches across. The old Laurustinus has been a feast of flowers for months, and welcome, too, but it is surpassed at the present time by this handsome variety. E. M.

Sweet Violets for the rock garden

With flowers almost as large as Pansies, which fill the air with their delicious perfume, a number of varieties of these popular plants is a feature of attraction as I write (March 10th), falling over stones. It is a mistake not to make greater use of them in the cool flats of rock gardens carpeting little colonies of the graceful species of Narcissus, such as N. cyclamineus, N. minimus, N. Bulbocodium, N. triandrus, and N. moschatus. Among these handsome Violets I would mention the following as very lovely:—Princess de Lamonte, Askania, Cyclops, Sir J. D. Josse, John Raddenbury, Eynsford Giant, and Princess of Wales.

E. M.

Spring Star Flower (Triteleia uniflora)

This hardy little plant, which hails from South America, comes into bloom early in March, established groups providing a perfect sheet of pale blue, star-like flowers over several weeks. The plant increases each year and eventually becomes a mass of low green foliage. The flowers are borne singly on Rush-like stalks not more than 6 inches in height. Whereas the flowers possess a delicate fragrance, the base of the stalk when culled has the smell of the Alliums. There are several variations of colour, some of which

are of a deeper blue than the type. It is a very easy plant to grow, but once planted in fairly good soil it should remain undisturbed for years, in which case a profusion of flowers will appear each spring and thus add variety to the interesting and rather numerous small bulbous plants which bloom at this season of the year.

Rhododendron multicolor Curtisi

This Rhododendron's chief claim to fame lies in the fact that we owe to its influence many of the Javanese section which are, in their way, so useful. R. m. Curtisi, in addition, is very useful for pot work when grown under glass in an intermediate temperature. Although dwarf in habit, the plant branches freely, and it flowers most profusely. In colour the blooms are of a bright ruby-crimson shade, and these are, in shape, like a small bell—perhaps thimble-like would describe them more fittingly. Quite small pieces flower most freely, and I have found R. m. Curtisi amenable to the greater heat of the stove. W. McG.

Rhododendron ferrugineum

This plant, although of some antiquity, is seldom met with in modern collections of Rhododendrons. Known as the Alpine Rose, it forms a rather prostrate bush, the leaves of which are not unlike those of Box, and during June the plant is entirely covered with reddish-pink blossoms. R. ferrugineum is perfectly hardy and succeeds in the same soil as suits more prominent members of the species. It associates well with such things as Kalmias, Ledums, and Heaths. KIRK.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Gardeners and their hours

I APPEAR to have brought more than one hornet's nest about my ears in connection with my note on gardeners and their hours —from which, by the way, the discussion has gone far astray. So far as I am concerned I shall not again trespass upon the hospitality of the columns of GARDENING ILLUSTRATED in connection with this subject. I would like, however, to offer a few remarks to "Young 'Un" and to "A Surrey Gardener," which, I hope, they will take in a friendly spirit. No doubt my young friend is right in insisting upon being paid for extra work if, for example, he thins Grapes at night. In my apprentice days, however, I was glad to be permitted to learn how to thin after hours, as were very many others of my "group," and the consequence was that when, as a journeyman, I received an inside appointment, I was an expert at the work instead of being a "fumbler," and could keep my end up. Things may be different now in some gardens, but few, I fancy, would pay an apprentice for overtime to "thin" Grapes, though he might have his chance during the day as part of his training. If he be at all desirous of learning he will not scruple to sacrifice an hour or two at what is, after all, seasonal work; if he does scruple to do so his is the loss. But perhaps "Young 'Un" knew by intuition how to thin Grapes when he saw them for the first time. There are such, but their name is not Legion.

"A Surrey Gardener" surely does not seriously mean that the present-day exhibits of vegetables excel those of three decades ago. If he does, then, I fear, his experience of exhibitions is a limited one. I have seen for 30 years all the important exhibitions in both Scotland and England, and have, on occasion, staged exhibits. Opinions differ, but I maintain that the exhibits—and the exhibitors—of former days were no whit inferior to those of the present time. If "A Surrey Gardener," in these days of motor-cars, can turn out exhibits as good as his predecessors did he is doing very well indeed, and I make him my compliments.

A SCOTTISH GARDENER.

—— Your correspondent who hides his personality behind the nom de plume "Scottish Gardener" would do well, in view of his sweeping statements, to come into the open. I must administer a little wholesome reproof to my Highland horticulturist. First, I deny ever having any idea of sneering at domestic servants, a honourable occupation which it has ever been my pleasure to uphold and to publicly defend. Second, the fact that a Government paper directs gardeners to describe themselves as domestic servants is no proof that they are domestic servants, or that they agree with the Government classification. It certainly does not dispose of my claim that gardening is a profession, a claim which is very far from nonsense, except for those who refuse to take a hand in raising the standard of gardening. Third, Mr. Bruce Hewitt, F.R.H.S., etc., etc., is at the moment a head gardener, and a professional one at that. He draws a salary which most "Scottish Gardeners" would *worship*, and he frequently draws fees equal to those paid to the medical and legal profession—or are these, too, "arts and crafts"? Fourth, I did not know for certain that the Editor of GARDENING ILLUSTRATED would publish my letter, therefore I cannot see the sense of "Scottish Gardener's" words about my rushing into print. But I appeal to the same Editor to accept this, my reasonable views, that they may be presented to the professional and unprofessional, to the slacker and worker, to those who wish to progress and to those who would content themselves with sticking in the mud. Finally, let me quote part of what Johnson's "Gardeners' Dictionary" says about "Gardener":—

"The day is gone when the spade and blue apron were the only appropriate devices for the gardener. He must now not only have a thorough practical knowledge of his art, but he must also have a thorough, intimate acquaintance with its sciences. No man can have stored in his mind too much knowledge, but there are always some branches of information of more value than others. Of these, to the gardener there are none so important as botany and chemistry—botany physiological as well as systematic—chemistry, especially as applied to the examination of organic nature. . . . The head gardener is the superior of the valet or butler, for his education and knowledge are of a higher order. . . ."

Now, Johnson says "art" and "art" is skill, and if skill is not professional what is? The butler is the highest of the "domestic staff" of a house. Domestic servants are, of necessity, "of the house." Unless a gardener be also one who helps in the house he cannot be a domestic servant.

BRUCE HEWITT.

Saxifraga ligulata

I have a form of this Saxifraga which is entirely pilose, that is, hairy all over the leaves. I do not think it is rare, but I have not found any mention of it. There is a recognised variety called ciliaris, but ciliate, according to Bentham and Hooker, means "bordered with thick hairs or fine hair-like teeth." I got the pilose one from a frie Leeds, who must have got it some 40 ago from Backhouse, of York. I raise seedlings of it crossed with S. cordi which are intermediate, viz., ciliate, bu just possible they may have only revert type. One point is worth mentioning in tion to "G. J.'s" article of March which is, that although the leaves die first frost in autumn and the flowers kill frosts in March, yet the rhizomes, ho much exposed, are absolutely hardy.

Oxford. L. J. ROGE

Lily of the Valley naturalised

On page 177 Mr. McGuffog tells u largest area he has seen was growi Lincolnshire. The largest I have ever naturalised is to be found in the famous Valley, in a wood known as Wyndcli tween the two old historic towns of Che and Monmouth and not far from the Tintern Abbey. This wood is visite thousands during the summer from all Wales and various parts of England. or so before the war one of my assi gathered a buttonhole of a beautiful variety. Unfortunately, the spot wa marked or the roots taken up on th chance of obtaining a stock of this st novelty. Although search was made f odd spike the same year and by severa lant searchers the following year no could ever be found of it again, so fa was concerned. Without a doubt the are still growing in this wood. This may possibly meet the eye of some lo visiting reader who knows this magn Lily of the Valley bed that receives no tion other than the annual top-dressi fallen leaves. If someone should hap find the pink variety in question I sho glad to hear from him. There are ho other naturalised British plants grow large colonies, including Daffodils, Blu Wood Hyacinths, Foxgloves, Snow Soapworts, and others, to say nothing lovely Woodbine and Ferns.

W. E. WRI

Stockton House Gardens, near Rugb

Pronunciation of Gladiolus

"It would be difficult to find a n similar brevity containing so many blun is language a little strong and strange anonymous correspondent to apply to a of the reputation which Sir Herbert M has so long and worthily enjoyed, esp when it precedes the remark as to the in dispute that "every syllable of Gla is short, as Sir Herbert Maxwell himse pointed out." Upon the question of "tity" we are all agreed; that of pron tion remains—how is this word of fou syllables to be pronounced? Sir Herbe "Dawlish" agree in rejecting Gladi- Sir Herbert (with whom, until we ar squashed by the superior scholarsh "Dawlish," I venture to agree) woul Glad-iolus, the first syllable being pron as the first "a" in the last word of th known line

Alike th' Armada's pride, or spoils
Trafalgar.

"Dawlish," on the other hand, sa the correct pronunciation is the Lati Glad-I-olus. Knowledge has doubtle vanced considerably since either Sir H or I were at Eton, when if correctly

memini quae. . . . . mihi parvo
Orbilium dictare

it used to be said that the only certa dence of the old Roman pronunciatio derived from the well-known story showed that "Cauneas" was pronour as to sound like, and, in fact, be mi for, "Cave ne eas." So I think we

r some evidence on this point rather convincing than the *ipse dixit* of an nous and none too courteous corre-nt. JOHN EDWARDS-MOSS.
ley-on-Thames, March 21st, 1926.

I notice that sword still crosses sword e minor namesake. The Gladiolus was troduced into Great Britain in 1596. say, 1700 we may call it an English

t is the *correct* pronunciation of *any* word?
ly, the *jus et norma loquendi* Gladiolus escape its fate. It will be pronounced ng to Time and Place as the educated e and Place direct. To those who still to the classics and take umbrage at a uantity I may observe that Gladiolus is the VERY few Latin words of length in all vowels are of equal value; they are t.
s Latin form no one vowel or syllable r accented or stressed at the expense other.
ay interest some to know that our late Victoria was a rigid observer of the —the Latin—pronunciation of the M. L. M. VAUDIN.
tlands, near Kingsbridge, S. Devon.

I wish I were as certain about any-s "Dawlish" is about this point in . He cites certain rules regulating ition of the stress in Latin possibili-s it permitted to a learner to ask where rules are laid down? And do they rom all other rules by admitting of no on? HERBERT MAXWELL.
eith.

The French have a word, "glaïeul," from the Latin "Gladiolus." This is g argument that the accent was on " in Latin, for an accented short or "o" normally becomes "eu" in . An accented short "i" becomes in French, and the result would pro-ave been gléoil, which, of course, does st. An accent on the "a" would have d glail. It is quite possible, however, tin grammarians and prosodists disap-of the accent on the "o" on cal grounds. Your various disputants seem to realise that our conventional pronunciation would have been un-ble to a Latin-speaking Roman, we put the accent (i.) on the "a," the "i," (iii.) on the "o."
) our "a" is flat instead of open, he "o" and "u" are blurred and In (ii.) the "i" becomes the long diphthong, which did not exist in In (iii.) we make the "o" long and ngal, but it might just pass muster Roman ear.
every way we pronounced this word e equally wrong to a Roman, might allow a little latitude and consider ually right for ourselves?
d. L. J. ROGERS.
Humanum est errare, and nothing edifying than to see a mistake ad-in the very frank way in which Sir Maxwell has done it. Such a thing a mind open to conviction, and I the hope that Sir Herbert may yet other mistake in upholding the pro-on "GlAdiolus."
oubt Sir Herbert imagines he places dilemma by saying, "I do not sup-hat 'Dawlish' would speak of is'; why, then, apply a different n Gladiolus?" Now, flattery quite feel that sort of argument does in-to a man of the type of Sir Herbert, it is nearly as absurd as to say that in English we stress the first syllable mily" we should do the same in ar."

But to keep to the point, and to show that the dilemma in which Sir Herbert thinks he places me, is no dilemma at all, I answer thus. In pronouncing "Gladius" I place the stress on "glad," because that syllable is the last but two, and in pronouncing "Gladiolus" I place the stress on the "i" for the very same reason, viz., that the "i" is the last syllable but two, and according to Rule 2, already quoted in a previous letter, the stress in each case must be placed on the last syllable but two, and nowhere else. The inconsistency, therefore, is not on my side, but on Sir Herbert's, who applies the rule in the case of "gladius," but refuses to apply it in the case of "Gladiolus."

As Sir Herbert seems to persist in the idea that stress may not be placed on a short syllable of a Latin word, because the effect is to make that syllable sound long, it comes to my turn to place him not in an imaginary dilemma, but a genuine one. Will he, please, tell us why, in pronouncing the Latin word "carminibus," he places the stress on the second syllable (as every Latin scholar does), although by doing so he makes the "i" sound long, whereas it is actually short? It is becoming obvious to me that sometimes Sir Herbert observes Rule 2 without being aware that he does so, and by a sort of classical instinct—but only sometimes. CArmina-carmInibus: glAdius-gladIolus: fIlius-filIolus. The three pronunciations stand or fall together. As a matter of fact, they stand, because Rule 2, which deals with the pronunciation of such Latin words, enforces them, and tolerates no other. Apart from all this, Rule 1, which states that no Latin word may have the stress farther back than the last syllable but two, proves that the pronunciation "glAdiolus" is absolutely out of the question. DAWLISH.

Apples Wellington, Nanny, and others

Wellington is one of the best cooking Apples, but I cannot admit it as a dessert variety. Mr. Turner's soil at Godalming is very light; our soil here at Wimbledon is clay. I have not grown it because I have always been told that it will not grow in Wimbledon, but, anyway, I will plant next autumn.

As regards "Nanny," the Editor is quite right when he states that it is still grown by Messrs. J. Cheal and Sons, of Crawley, and it is the only catalogue, so far as I know, which mentions it. The following is the quotation from "Hogg's" book regarding Nanny:—A dessert Apple of excellent quality, and, when in perfection, a first-rate fruit. It is in use during October, but soon becomes mealy; it also bears some resemblance in flavour to Ribston Pippin.

Now, Mr. Allen, with regard to your scions of Joybells (issue March 27th, page 193), by all means graft them on Paradise, but you might try, say, a couple on Crab stock, so that you may see what the difference is. I have heard of and read about "Pig's Nose" Apple, but cannot find the book in which I read an account of it. I have looked through several works that I have on "Pomology," but cannot find same. There are a number of varieties in Cornwall, also in the adjacent county of Devon, mentioned in "Hogg's" Manual. Several varieties are grown in Devon only. F.R.H.S.
Wimbledon.

Rhododendron præcox

Rhododendron præcox

IT is not every season that allows of the blooming of the deciduous Rhododendron præcox, but this year it has escaped that combination of frost and sleety storm that so often destroys its promise of flower. The illustration shows a small one grouped with some old bushes of Pieris floribunda in a part of a West Surrey garden where lawn gradually gives place to woodland. There are some larger ones further up the wood edge, but this little one is the best-placed for companionship and harmonious colouring, for it goes well with the quiet white of the Pieris, and has at its foot, just out of the picture, a setting of one of the early hybrid Heaths of a subdued pinkish colour. The texture of the Rhododendron bloom is thin and tender, and the colour is a pure mauve-pink. The specific name "præcox," though it well describes the early season of bloom, and is the name by which the plant is commonly known in gardens, seems to have no botanical authority. Having put the question of its identity to a friend who is a careful botanist I learn that it is a hybrid, R. ciliatum x dauricum. G. J.

RHODODENDRONS IN SOUTH-WEST SCOTLAND

The Californian Rhododendron (R. californicum)
A little-known species but worthy of a place in gardens

IN the policies of many estates in the south-west of Scotland Rhododendrons are planted freely and with great effect. During the season of flowering the display is, in most cases, a magnificent one, more especially when the soil, as not infrequently happens, is adapted by Nature to the requirements of the shrubs. The showy hybrid forms are usually employed, but here and there one finds an enthusiast or an expert who specialises in the Rhododendron and who plants the less-known varieties in addition to raising seedlings. Such an enthusiast is Captain Stewart, of Shambellie, New Abbey, in the Stewartry of Kirkcudbright. The Rhododendrons at Shambellie are worth going to see at any season of the year, for not only are there rare and uncommon varieties, but, in addition, seedlings which have been raised by Captain Stewart and of which great things may be expected. At the first glance the soil at Shambellie does not give the impression of being such as is specially adapted for the wants of Rhododendrons. It consists, to a large extent, of granite detritus, and, throughout, huge boulders of granite, many of them tons in weight, outcrop. Yet by studying their requirements and by attending to their wants it has been found possible to grow Rhododendrons with surprising success, and those who are interested in the family will find a wide selection judiciously planted. In a nursery bed near the mansion, for instance, may be observed lines of healthy seedlings as well as young plants of repute. Among the latter may be mentioned R. sphæroblastum with its somewhat ovate leaves of an intense dark green colour; R. levistratum, well furnished with buds; R. plebeium and R. Beesianum; and a piece of R. Fargesii with its characteristically blunt leaves. R. argenteum shows symptoms of the severe winter, but R. croceum, R. bullatum, and R. maximum are thrifty plants. Nor must mention be omitted of R. adenogynum, R. lichiangense, and the Burmese R. sperabile. The latter and R. longisquamatum are particularly noteworthy. All these, and others, are in the nursery bed, in which also may be found a plant, small, it is true, of Ilex Yunnanensis, and a good specimen of Tricuspidaria lanceolata.

Leaving this bed of promise and crossing a sward covered with Daffodils in bloom (among which innumerable clumps o charming N. minimus are conspicuou Rhododendron ground proper is reached eye is at once held by a magnificent pi R. Falconeri, the foliage alone of might win favour for the variety, eac being 15 inches in length, with its disti midrib of pale yellow. Close at hand almost equally fine example of R. fictola which, one regrets to note, has suffere the severe winter.

In close succession are found specim R. barbatum, R. calophyllum (which do appear to be too happy), the uniquely-fo R. Thomsoni, and the very attracti cinnabarinum var. Roylei. The la over 8 feet in height and is very ev thriving. The Californian Rhodode (R. californicum) is studded with bud its immediate neighbour, R. discol worthy of its place. A distinct form Smirowi from the Caucasus, and whi its season, ought to be effective.

At the time of my latest visit to thes interesting Rhododendrons (March 13 Chinese variety, R. lutescens, was i bloom. The colour is fairly good— lemon-yellow which ought to appeal to who desire early-flowering Rhodode which differ in colour from such as R. p and R. Nobleanum. Of course, it m added, the blooms of R. lutescens ar different type from those of the sca crimson forms.

A dainty plant is R. oreotrephes, 2 feet in height, with a bud at the te tion of every shoot. R. glaucum, fro Himalayas, is less promising, but a w ful little plant of R. æruginosum is between the two. Reference has been to the huge granite boulders which, ho appear, in some cases, to be va Planted exactly in front of a boulde 6 feet in height is R. ambiguum. Wh be fortuitous, or whether the boulder sponsible owing to the shelter it provid fact remains that R. ambiguum is one most thriving in the collection.

R. oreodoxa, R. campylocarpum w neat foliage, R. Fortunei, R. adeno and R. decorum are also represented

R. oreodoxa, with neat flowers and foliage

. sutchuenense and R. catawbiense may so readily arrest the attention, yet they good examples. In the rock garden, h is just outside the garden, a notable of the dwarf R. intricatum was in nificent bloom.

ch are a few gleanings from a very ble collection, and among other choice in a young state may be mentioned ofagus obliqua and N. procera (both Chili), Abies sachalinensis, A. subalpina, A. Veitchi, the Californian Pinus muri- and Picea Breweriana, also from the lden State," Picea Jezoensis, Corylus rna, and the New Zealand Podocarpus a, reminiscent of a loosely-leaved nica Traversi. To conclude, just behind site in which these young trees are ed is a young, clean, well-grown planta- of Japanese Larch, 15 feet to 20 feet in t, which is worth a Sabbath Day's ney (and more) to one interested in try. W. McGuffog.

bie Gardens, Kirkcudbrightshire.

hododendron caucasicum var. Cunningham's Sulphur

HIS beautiful plant originated in the urseries of Messrs. Cunningham, Fraser, and Co., Ltd., Edinburgh, and is considered a rare plant, and one most ble for spring decoration. It is per- hardy and develops lovely sulphur- red trusses.

owering as it does in April with an dance of flowers, it never misses a year some of the other Rhododendrons.

e plants in the northern area attain a t of 4 feet and form a head of an aver- f 7 feet.

e leaves are elliptic in shape and of a ing green colour. It is a suitable plant a rock garden, or can be grown in a r.

grown in a mass it makes a great show, t can be grown as a single plant just as ively. It has a fine constitution, and do in any part of Britain.

grown in a shady position the sulphur- w colour becomes much more pro- ced. The specimen from which the graph is taken may be seen growing in Royal Botanic Gardens, Edinburgh, and w coming into flower.

Rhododendron Cunningham's Sulphur in the Royal Botanic Gardens, Edinburgh
It is now coming into flower

Grouping Rhododendrons

Rhododendrons will grow in almost any soil from which lime is absent, although, of course, they succeed in a greater degree when peat can be provided. The ever-increasing attention which is being paid to this highly ornamental and desirable family is a proof of its adaptability and of its popularity. Unfortunately, in planting the showy hybrid varieties the proper grouping of colours is very often faulty. Another error into which planters fall is that of putting out their young pieces much too thickly. In suitable soils, and especially on peat, Rhododendrons grow so rapidly that overplanting defeats the purpose of the planter, and crowded groups cannot show their beauty. In the case of very choice kinds it is better to dispose the plants rather thinly and to plant Lilies among them. I like this plan because the very fact that Lilies are present and must be cared for tends to compel us to keep the Rhododendrons open so that their flowers and their forms are, alike, more effective. Where, in previous plantings, the bushes have become crowded, severe thinning ought to be promptly done, leaving, naturally, the choicer kinds and the most shapely pieces. In this way light and shade will be obtained, and the groups will not be of a flat, uniform level.

While bloom may be expected every season, yet, I think, Rhododendrons give their best effect biennially. Established plants can, as a rule, look after themselves. Nevertheless, when it is possible to do so, a good soaking of water in early September is always of advantage. I have frequently observed that it is in early autumn Rhododendrons appear to suffer, and this is especially the case when planting has, perforce, to be done on thin soils.

As regards grouping everyone, of course, has his own ideas. Yet it is always wise to keep purple shades away from reds, although the former blend well with any of the white sorts. A good group isolated on a lawn of Doncaster is very attractive; so is a group of Pink Pearl or of Lady Eleanor Cathcart. A single specimen of Kettledrum is more effective than half-a-dozen pieces closely planted. A brief selection of some of my favourites may assist others who are thinking of adding to their collection, or those who may be planning to make a beginning with this undoubtedly valuable family. *Salmon-red:* Lady E. Cathcart and Mrs. R. Holford. *Rose and rose-pink:* Fair Rosamond, Mrs. Penn, Bianchi, Cynthia, and Ingrami. *Red:* J. M. Brooks, Baron Schroeder, Atrosanguineum, Alex. Adie, and John Waterer. *White:* Pictum, Fair Helen, Mme. Carvalho, Minnie, and Mrs. John Clutton. I prefer to keep Lady Eleanor Cathcart and Mrs. R. Holford, as well as others of the salmon-red colouring, well away from all the others, for, to my eye, this particular tint clashes with that of other Rhododendrons.

W. McG.

Rhododendron arboreum, 20 feet high and in full bloom, at Castle Kennedy in South-west Scotland

Gold Medal Exhibits of Daffodils, Alpines, and Clivias

Novelties at Vincent Square

THE Royal Horticultural Society's Daffodil Show is not due to take place until April 13th and 14th; nevertheless, owing to the earliness of the spring, Daffodils predominated at the fortnightly show held on March 23rd and 24th. Daffodil novelties of real merit were more numerous than ever, the Narcissus Committee granting no fewer than 11 Awards of Merit and two First-class Certificates.

The finest group was shown by the well-known expert Mr. J. L. Richardson, Waterford, and it received the Society's gold medal, with the special congratulations of the Council. This group was rich in novelties of the highest order, of which Beersheba and Glorious each gained the distinction of a First-class Certificate. A special article on Beersheba appears on page 214. Glorious is a white Poetaz variety with a brilliant orange-red cup. Fine blooms of Fortune were shown in this group, also a solitary flower of Fortunatus, the first seedling from Fortune, to which we hope to refer in a future issue. Mr. Richardson also gained Awards of Merit with Alroi, a yellow self giant incomparabilis with broad perianth and short trumpet—a well-proportioned flower; Loyalist, a refined golden-yellow trumpet; Mitylene, a beautiful white Leedsii with pale primrose-yellow trumpet, raised by the Brodie of Brodie; and a very modest little Leedsii named Fairy Circle, which Mr. J. T. Bennett Poë characterised as "a pretty little toy."

Another gold medal group of Daffodils from Ireland was staged by the Donard Nursery Company, of Newcastle, Co. Down. Foremost among the varieties was Everest, which gained an Award of Merit (see illustration, page 215). It is a most beautiful trumpet with self-coloured ivory-white flowers of fine form and substance, with splendid broad, overlapping perianth segments of pure colour. Other varieties which attracted attention were Prospector, a bold, deep golden trumpet, which gained an Award of Merit as a market variety, Grenade, and the very large-flowered Gog.

The double variety Mary Copeland, pure white with orange-red centre, was shown in splendid form, and was one of the best novelties in the comprehensive group staged by Messrs. Barr and Sons, of Covent Garden.

A notable collection of Alpines

One of the most striking displays in the whole show was the collection of alpines in full flower from Mr. Mark Fenwick, Abbotswood, Stow-in-the-Wold, Gloucestershire (gardener, Mr. F. Tustin). The group was backed by various forms of the floriferous and highly-coloured Kurume Azaleas, which do well in a cool alpine-house. Some of the more noteworthy of the alpine plants were Androsace pyrenaica, a beautiful green hummock peppered with tiny white flowers; A. arachnoidea, with silky grey-green leaves and white flowers like a very small Primula; Cypripedium ventricosum album, a rare white Lady's Slipper, which gained an Award of Merit; and Draba imbricata, with emerald tufts and golden flowers on thread-like stems. All of the foregoing alpines are here illustrated. Daphnes, Primulas, Gentians, and Soldanellas were also shown in variety and in full flower. The Veitch Memorial Medal in gold was deservedly awarded to this superb collection for the best exhibit of alpines staged by an amateur at this meeting.

Draba imbricata

Emerald tufts and golden flowers on thread-like stems. Shown in the Alpine collection by Mr. Mark Fenwick

The Westonbirt Clivias

Never before have we seen Clivias (Imantophyllums) so well represented as they were in the gold medal group sent by Lt.-Col. Sir George Holford, K.C.V.O., Westonbirt, Gloucestershire, who for many years has made a speciality of these brilliant greenhouse flowers. The group comprised a great many varieties raised at Westonbirt, one of which, named Westonbirt Brilliant, gained an Award of Merit. Each plant in this extensive group illustrated the immense improvement that has been made on C. miniata, A typical example is illustrated on page 217.

Mr. G. H. Dalrymple, of Bartley, H again showed his well-known and h coloured strain of Freesias, and the m coloured Freesia Wistaria was shown in profusion by Messrs. Dobbie and Edinburgh.

Mr. James Douglas, of Bookham, wa sent with a choice collection of Auriculas.

The outstanding new plant was R dendron lacteum, with large sulphur-y flowers.

The exhibit sent by Lady Aberconwa Mr. H. McLaren from their garde Bodnant contained many of Captain Ki Ward's discoveries, chiefly Primulas, so which were flowering for the first time i country.

H.

ORCHIDS

Notes on Canadian Cypripedi

IT seems strange that hardy Cypripe are not better known and more grown, for they are the most fascinat flowers, and, as far as my knowledge they are not difficult to establish if the cultural requirements are carried Most species, with few exceptions, like shade, with plenty of moisture. Three ago C. hirsutum was sent me from C in quantity. A piece of moist woodlan trenched, and into the top spit was w plenty of peat and rough leaf-soil. Orchids were planted in this in Dece By the following June quite half pro flowers, which are large and white pinkish lip. From that time they flowered annually and are increasin acaule is another easily-grown Orchid, monly called in Canada the "Moc flower. Its colour is of a pink shade. Orchid grows in fairly moist places splendid where one finds it difficult commodate a species that must have of moisture. C. parviflorum is a yellow Orchid which is very fragran easily grown. It is suitable for either shade. C. candidum is, to my mind, pick of the basket"; is white, with twisted brownish petals. This Orchid a strong one, but sometimes reaches 12 high. It must have plenty of moistu collected this on Signal Mountain at in the Rockies. I have it here in pa do not know how it will do when plant next year. C. arietinum is the rarest I have it here, but I have not seen flower yet. It is more quaint than and revels in swamps.

R. Mo

Thorp Hall Gardens.

Lycaste Skinneri

There is at present a splendid speci this beautiful Orchid in bloom in one greenhouses at Cambusnethan Ce Wishaw, and Mr. James Graham, the intendent, is justly proud of it. Th has been under his care for quite a n of years and is in vigorous health, flo freely every spring. There are at the time fully 60 flowers expanded on it, a the admiration of all who see it. I think there are not many plants Lycaste to surpass the Cambusnethan men.

W

1. A white-edged show Auricula from Mr. James Douglas. Within the black circle is a white ring and a green centre. The flowers, stem, and leaves are densely covered with white flour-like farina, dearly loved by the florists of bygone days.

2. A beautiful hummock of Androsace pyrenaica eight years from seed, in a pan. The mossy grey-green foliage is freely peppered with tiny pure white flowers.

3. A rare Australian Bottle Brush Tree (Callistemon citrinus splendens), shown by the Director of the Royal Botanic Gardens, Kew. The flowers are brilliant red—very showy. The inflorescence is tipped with silvery grey foliage, and the leaves are more or less lemon-scented when crushed.

4. Androsace arachnoidea. Flowers white with green centre, and borne in great profusion above the small, silky, grey-green leaves.

5. Cypripedium ventricosum album, which received an Award of Merit. This rare and hardy Orchid was shown by Mr. Mark Fenwick in a choice collection of Alpines.

PLANTS OF SPECIAL INTEREST AT VINCENT SQUARE ON MARCH 23rd

Improving Lawns

NOW is a much better time to alter, renovate, or improve lawns than later on, when the grass is in full growth. Doing anything then very often spoils the lawn for the best part of the season, but if done now it will be in fine order by the beginning of the summer, and will remain good throughout the season. No lawn that has not been well made at first will ever be found to remain good for any length of time. A good firm foundation, and not less than 3 inches or 4 inches of good soil for the grass to grow in, will keep a lawn always in order. Sometimes there are holes which gradually sink here and there in different parts of the lawn. In that case the turf should now be cut, and either lifted or folded back from these parts. A quantity of good soil should be put in to fill up the hole to the surrounding level, and the turf should be put over again, and beaten down firmly. Edges of turf near walks which have become ragged and broken should be taken up altogether, and fresh turf put down. The edge turf should be at least 6 inches wide, and sound and firm. Those making new lawns with seed should always try and get as much good turf as will make up the edges. This keeps the whole together, as it were, and always makes a good finish. In extensive lawns there is seldom any attempt to dig out or exterminate the Daisies, but in small places they are objectionable, and attempts are generally made to dig them out or kill them in other ways. Many never think of doing this, however, until they are in full bloom in the middle of the season, and by digging them out then holes and bare spots are left unsightly on the lawns. To avoid this, now is the time to dig out all such. After doing so, level the holes up firmly with some good soil, and sow a little of the seed advertised as "lawn mixture" over them. Where the grass is thin and poor-looking all over a little fine rich soil should be spread over it, and a thin sprinkling of seed should be sown over that. By May the new soil will have become thoroughly incorporated with the old grass, and the plants from the new seed will soon combine with the old to make a charming lawn. Where Moss has taken possession of most of the grass a thin sprinkling of lime should be spread over it, and soot used in the same way has the power of giving the grass a rich pleasing deep green shade. Wood-ashes, too, may be used in the same way with much advantage. All these are better applied separately, as lime robs soot, etc., of its goodness. Lawns which want no fresh turf or seed should be brushed over firmly with a good broom, to clear off all worm casts and such like; then roll them over two or three times to make them firm and smooth for the mowing machine. A wet day, or when the ground is very moist, is the best time to roll, as the ground can be worked down more smoothly then. Verges or edges of grass should not be cut every year, as this soon widens the walks, and a deep raw edge looks unsightly. Cut them once straight, then keep them so by merely straightening the bulged-out parts afterwards. C.

The pure white Trumpet Narcissus Beersheba, which gained a First Class Certificate at Vincent Square on March 23rd

Arabis albida fl.-pl.

Of the many things used in the flower garden for spring flowering this ranks as one of the best, for it can be used in so many different ways. It goes well with Tulips and Hyacinths in many shades, with members of the Narcissus family that are contemporaries in flowering, and with dark Wallflowers, but best of all I like it with a strain of choice dark Polyanthus seedlings from a previous spring sowing. If these have been well done they will throw up tall stout stalks and fine flower-heads, which, if planted thinly with the Arabis, will make a most attractive display. If the beds are large the Polyanthus can be planted in small clumps and the intervening spaces filled in with the Arabis. As in the case of the Polyanthus, much finer spikes are obtainable from one-year plants than from old clumps, and as the former attai siderable height it is well not to cro in too closely to the Polyanthus. very useful feature of this Arabis is as a groundwork in the making of crosses, and other emblems when flowers are not obtainable. Lar grown spikes well arranged look lik of miniature Stocks, and with the few bits of some scented flower a light foliage very good results are o

Hardwick. E. B

A great white Daffod

THERE was abundant evidenc earliness of the Daffodil seaso R.H.S. fortnightly show on Tu Wednesday, March 23rd and 24th were six or seven big trade groups, standing among these, two magni hibits of superbly-grown flowers fron these latter all cut from the open.

Quite a number of fine varieties mitted to the Narcissus Comm awards. Several gained the Award and two the First-class Certificate, the highest commendation that car ferred, and is only granted to new outstanding and unquestionable One of these, Beersheba, illustra with, which received the same hig tion from the Midland Daffodil So year, was, in the opinion of many, most beautiful Daffodil in the sho a pure white trumpet, far in adva predecessors in this class, a big flow a magnificent perianth composed of broad, beautifully clean-cut, poi ments that stand flat and at right the slender and graceful trumpet carried on a tall and strong stem. I white, pure and silvery, with just sional gleam of lovely cool green through at the base of the perianth in certain lights; a serene an aristocrat whose gracious lovelines unqualified homage. In addition t passing beauty it is a plant of quite ally vigorous growth and free incr its flowers are of very durable te abling them to last long in conditio a really great Daffodil, and one that to stay.

The other flower which gained th award was named Glorious, and is ficent Poetaz variety bearing trusses three blooms on tall stems; the blooms are as large as those of Poet a pure white perianth and a brill red cup. Its great merit and value ket flower were very evident from it and brilliant effectiveness in the b is certainly the finest of its class yet is said to be a very vigorous and pro so in time it is sure to be much those interested in the cut-flower t

Border Carnations

THE last few years have s changes in the Carnation fa the introduction of the vario forms. The season of blooming i prolonged, but little can be said provement in the form of these n Perpetual Carnations are well a greenhouse culture, and are certa able for cutting, but can they com the true Border varieties that, wi attention, adorn the beds and bord the summer? Border Carnations fectly hardy and can be grown to that is not waterlogged during the the same manner as the old Clove grown in our forefathers' days. last 10 years several of our leading growers have made giant strides ducing the old-fashioned Clove

of the new varieties without the loss of At the same time improvement has ade in strength of stem.

ould be understood that Carnations, other grey-leaved plants, are lovers of , so should be grown in an open place. il that will grow vegetables will grow Carnations well, and where this is be had good fibrous loam should be ced, adding to this a little well-rotted anure, a good supply of wood-ashes, mortar-rubble. This makes a splen- ting medium for the plants, and with of 9 inches to 1 foot they can be to perfection. Beds made up 5 feet ill take three rows of plants comfort- nd if the site is at all liable to become gged during the winter it is advisable the bed 6 inches above the level by an alley, as is the case with an

plants the foliage and soil should be made as obnoxious as possible. Spraying with paraffin emulsion once or twice a week and dusting the ground between the plants with soot will make it distasteful to the fly. Once the egg is laid it is farewell to the plant, and the trouble cannot be discerned until the damage is done. Very often in ground freshly taken in, as well as imported loam, wire-worm is very injurious to the roots. The best way to get rid of these is to lay traps several inches below the surface. Pieces of Potato, Beet, or Carrot secured at the end of a skewer answer admirably for this purpose. They should be examined every other day and dipped in boiling water. Other underground pests that in some cases cause great damage to the roots and stems are the bulb mite and eelworms. The best remedy I find for these is a solution of nitrate of soda,

NEW AND NOTEWORTHY DAFFODILS
1, Nevis 2, Tenedos 3, Everest

gus-bed. These 5 feet beds are an ge as they give the grower a chance ing round the plants when layering forth without having to tread amongst

TING.—There is no better time in the r planting the layers than the latter September or during October, but in stances it is not always possible to do the next best time is during March. season it is advisable to depend on that have been wintered in small pots, is much more certainty with these at ne of year than in the case of those rom the open that often are sent out ry few roots and take some time be- ey get established, while those from art straight away. Carnations require ound, and will not succeed otherwise. the plants are turned out of the pots the roots should be disturbed as little as possible, and the two bottom leaves should be level with the ground when planted, making the soil firm around the collar. Water should be given to settle the soil around them, and if the soil is slug-infested a ring of soot should be placed around each plant.

AFTER-TREATMENT. — When growth commences the flower-stems appear, and these should be supported while in their young stages as the wind will cause much damage. The growth should be tied lightly on either side of the stake so as to allow the stems to grow freely. Worsted is the best for this purpose.

ENEMIES. — Perhaps the worst is the maggot that attacks the stem. This maggot is caused by a fly that very much resembles a small house fly and commences laying its eggs in April. To prevent this attacking the made by dissolving $1\frac{1}{2}$ ozs. to each gallon of water. The ground should be well soaked at weekly intervals until the insects have been got rid of. Froghoppers are troublesome insects that attack the flowering stems. Luckily they can be quickly noticed by the frothy substance that surrounds the little green insect. No amount of spraying will rid the plants of these, and the only safe cure is rubbing the stems through the fingers, or aphis brushes which have been dipped in soapy water. Aphides usually put in an appearance as soon as young growth commences in early summer, and these must be kept in check by spraying the plants with some good insecticide. "Abol" is reliable and simple to use. This will also ward off thrips, which are sometimes liable to attack the plants.

Red-spider is a bad pest, and this usually

appears when the weather is hot and dry. It is wise to spray the plants each evening after hot, sunny days, as prevention is better than cure in the case of these small insects. Earwigs play havoc with the buds if allowed to have their fling, and are always on the look-out for somewhere to hide during the day. Pieces of Broad Bean stems make admirable traps for catching the miscreants. These should be hung amongst the plants and examined each day. Some use flower-pots inverted on stakes after being filled with Moss. The forementioned are the worst living enemies that I know that attack the plants. It is well to mention that there are several kinds of fungi that can be seen in some stocks of Carnations. Possibly the one known as Rust is the worst. This is more prevalent where the soil is in too wet a condition and during a rainy season. This shows itself in orange patches beneath the leaves, and the best cure I find is spraying the plants with potassium permanganate, but a good preventive is to spray with Bordeaux mixture. The other most important f is known as spot. Fortunately, it is no harmful on well-grown plants that are ing under ideal conditions. It mak attack during winter, and is liable to some varieties more than others. The usually grow out of this during the su The worst of the bottom leaves may moved and the plants sprayed several with Bordeaux mixture if the fungus i conspicuous. W. E. Wri

Stockton House Gardens, near Rugb

REMINDERS FOR THE WEEK

Southern and Midland

Asparagus

Where it is intended to raise home-grown Asparagus, now is the best time to sow the seeds. These should be sown in drills 2 inches deep and 1 foot apart on a well-prepared bed. Sow the seed thinly, and when the plants are 6 inches high thin to 9 inches apart.

Carrots

About the middle of April is the time to sow the main crop of Carrots in soil that is of a cold and heavy nature, but where the soil is light and sandy they may now be sown in drills 1 inch deep and 15 inches apart. Soot and wood-ashes are beneficial to the Carrot crop if worked lightly into the surface soil previous to sowing.

Cabbage

It is surprising how the growth of these plants is encouraged by the constant use of the Dutch hoe amongst the plants. Where a pinch of nitrate of soda or sulphate of ammonia has not been given, this should be done at once where rapid growth is required.

Tomatoes

Pot up or transfer the seedlings to boxes as they become large enough to handle, using soil that contains no animal manure. In early houses where the plants are commencing to bloom they should be fertilised with the aid of a rabbit's tail fixed on the end of a Bamboo cane, tapping each flower about midday.

Melons

In heated houses the plants are growing fast now that the sun is getting stronger, and it is easier to maintain a suitable temperature. Frequent syringing must be resorted to to keep a moist atmosphere. This also keeps down red-spider, which quickly puts in an appearance if the house is allowed to become hot and dry.

Peaches

This is a trying time in the Peach-house, as the trees mostly are in bloom. As syringing cannot be done, a sharp look-out must be kept for insects. The latest trees should be disbudded when necessary and the atmosphere kept as healthy as possible.

Black Currants

In gardens where big bud is troublesome it is a good plan to go over each bush individually and pick off all affected buds. A mixture of sulphur and lime dusted over them is a useful deterrent when done at this season.

Fruit Trees

Wherever possible the ground around the stems of all fruit-trees should be kept free from grass and weeds, and now is a good time to do such work. Lime, which is beneficial to all fruit, may also be given, forking lightly into the surface soil around the roots.

Strawberries

These are now making headway and should have the soil stirred around them with the hoe, but not dug, as Strawberries, being surface-rooting, much damage will be done. A dusting of superphosphate given now is beneficial to the crop.

Lawns

Seed may now be sown where new lawns are contemplated. A calm day should be chosen for the work when the soil is in a dry condition. One lb. of seed to each 16 square yards is a suitable amount to sow; this should be lightly covered and protected from birds. Rolling and mowing should be continued, as much depends on the welfare of the lawns during summer by the work spent during the next few weeks.

Pinks

In many gardens Mrs. Sinkins and other varieties are used largely for edging, and where these are not divided occasionally they are apt to become straggly and out of bounds. In such cases it is advisable to draw the shoots together a little and top-dress the centre of the plants with some fine sandy compost. Any cuttings rooted in autumn may now be planted out. W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Zonal Pelargoniums

Plants of these for a summer display in greenhouses will now be ready for transferring to their flowering pots. Good specimens can be grown in 7-inch pots. Anything larger is, for all purposes, unnecessary. The chief staple in the compost for Zonals is good turfy loam, well decayed, with a liberal amount of leaf-mould and plenty of sharp sand. I add a little soot and a small allowance of bone-meal, but these are by no means necessary. A house which is not too warm suits these plants well, and the flower-buds ought, for a time, to be picked off.

Hydrangeas

There are many fine things among the modern Hydrangeas, and plants which are now showing flower ought to be treated very liberally. Plenty of moisture is absolutely necessary, and the plants ought to be looked over twice a day when the sun is at all bright. Rather gross feeders, plenty of stimulants should be given to Hydrangeas, a good chemical manure in solution being alternated with soot-water. The latter gives a fine deep green to the leaves and makes them contrast well with the trusses. If Hydrangeas be not well fed it is almost a certainty that the foliage will drop, and leafless plants are far from being ornamental.

Begonias

Seedlings from an early sowing in January should now be ready for pricking off into boxes. Although the seedlings may be small, give them plenty of room, and let the soil into which they are pricked off contain plenty of leaf-mould. Tubers of previous years, now well started, may be put into pots commensurate with their size. Except for "show" specimens 8-inch pots are, rule, large enough for tuberous Beg Begonia Weltoniensis is a useful au flowering variety, and cuttings taken stock plants will root easily now, g trifle of bottom heat. Begonia metalli others of that type can be increased *ad* this season.

Caladiums

This very fine family, if started in will be ready for potting off. I have that a compost consisting of good loam and roughly-sifted leaf-mould, little sharp sand, gives excellent r Never over-pot Caladiums. C. argyrit its best in 4-inch pots—the larger so not fail the grower in pots at the 7 inches in diameter. Give them a moist atmosphere.

Eucharis amazonica

Those who must have supplies customary Easter blooms cannot aff overlook the Eucharis Lilies. They ar means difficult if the ordinary rou adhered to. Plants which have bee rested, top-dressed, and put into a brisk heat—65 degs. to 70 degs.—wi good returns. It is customary to Eucharis Lilies, but I can say, fro experience of these plants, that plun not absolutely necessary. Let st growing pieces have abundance of m Any neglect in this respect may resul attack of that obscure mite which, at destroys even old-established plants amazonica.

Fernery

Let the roof and sides of the fer shaded now without delay. The growths are easily scorched, and piece have been checked in this way are neve wards satisfactory. A thin dressing preparation known as "Summer Clo perhaps, the most satisfactory thing f whose fernery is not fitted with the blinds which can be manipulated as requires. Finish any repotting an Adiantums, and if A. Farleyense sh quire attention give the plants pu without any addition whatever. A scutum and A. Henslovianum should larly treated. Davallias are impat drought—plants may safely be water daily.

Vegetable garden

Broccoli turning in ought to be and hung, head downwards, in a c until required. Prick off Lettuces i frames, sow Carrots and Radishes o hotbed, and cover a breadth of Seak weathered ashes. A little nitrate sprinkled among autumn-planted C will give them a fillip. Sow succ lines of Peas. It is wise to sow t simultaneously, using, of course, sorts. For instance, I find that if and Alderman be sown on the same under similar conditions, a perfect su is secured. Arrears of digging must promptly made good. W. McG

Mabie Gardens, Kirkcudbrightshire

One of the magnificent hybrid Clivias (Imantophyllum) shown by Sir George Holford at the last meeting of the Royal Horticultural Society

)OOR PLANTS

Clivias

value of the Clivia as a greenhouse t is not so fully recognised as it ld be, particularly by the amateur one greenhouse, for it is very easily nd even when not in flower is very the long strap-shaped leaves of a n, and when well overtopped by a head of blossoms—well shown in the e give to-day—a most imposing The Clivia also makes a good win- it, and may be kept in health for a e in a dwelling-house. March and the two months in which Clivias, as e at their best.

livia was introduced from Natal in l has been greatly improved in recent ome of the newer forms, such as own at the recent meeting of the Royal Horticultural Society on March 23rd, with their large heads and massive rounded flowers, are quite different from those with starry flowers of bygone days. In the hybridising of the flowers there is but little doubt that the distinct variety C. miniata citrina was used. This has flowers of a pale cream tint with a tinge of orange at the base. We can call to mind the variety Martha Reimers, which was first shown by the late Mr. John Laing, of Begonia fame, and, if we remember rightly, was given an Award of Merit. This was the first break, and since that time some very handsome varieties have been raised and put into commerce.

How to grow Chinese Primulas

Primula sinensis belongs to one of the most popular groups of winter and early spring flowering plants that we possess; and from the ease and freedom with which it can be cultivated and increased, combined with the great variety, richness, and purity displayed by its flowers, which are produced in the greatest profusion, it is alike suitable for the conservatory, greenhouse, or sitting-room; and, moreover, it may, with ordinary care, be grown by all possessing a few square feet of glass. This Primula may be readily increased by means of cuttings made of the side shoots, or by division; but, except in the case of double varieties and scarce and novel types, these modes of increase are but seldom resorted to, as, by taking ordinary care to prevent promiscuous fertilisation (which generally results from the action of bees), it reproduces itself true from seed, which should be sown annually. It, therefore, becomes important to secure seed from the very purest strains, or disappointment may possibly be the result.

SEED-SOWING.—The time for sowing should be regulated according to the period at which it is desirable to have the plants in bloom.

For autumn and winter flowering, where the object is to have as large plants as possible, the seed should be sown at the end of February, or not later than the first week in March. Equal parts of sandy loam, peat, leaf-mould, and sand passed through a ¼-inch sieve will be found a suitable compost, and the seed pots or pans should be amply drained. At this dull period about one-half of the depth should be filled with crocks, which may be covered with a layer of the siftings, filling in the compost to within ½ inch of the top, pressing it moderately firm, and leaving the surface perfectly smooth. Presuming the soil has been used in a healthy state as regards moisture, a slight watering from a fine rose will be sufficient; then allow the pots to stand until the soil has become somewhat dry before the seed is sown, and cover it slightly with compost put through a fine sieve; merely cover, in short, sufficiently to hide the seed, settling it down by means of a gentle watering. Afterwards plunge the pots in a slight hotbed, and shade from the sun, when the seeds will quickly germinate.

TREATMENT OF THE YOUNG PLANTS.—These must have prompt attention immediately they push through the soil, removing them to a position near the glass, free from stagnant air, to prevent damping off, and to promote a sturdy habit, being careful in watering to wet the tender leaves as little as possible. As soon as the plants get sufficiently strong to handle nicely, if convenient space is at command, they should be potted off singly into the smallest-sized pots, and, failing these, pricked out into seed-pans, using the same compost as recommended for the seed. Place them in a pit or frame with a genial temperature and they will make rapid progress, admitting air in proportion to the strength of the plants, which must be screened from bright sunshine. When the pots have become filled with roots progressive shifts may be given. For ordinary purposes 6-inch or 7-inch pots will be sufficiently large, using more loam in a rougher state as the plants get stronger. If the soil is not in sufficiently good heart it will be necessary to enrich it with thoroughly rotten manure which has been dried and freed from worms. A free system of drainage must at all times be secured, as Primulas of this class are impatient of stagnant water.

Fuchsias: how to rejuvenate old plants

Fuchsias that have been kept a number of years, possibly without a shift, are often dispensed with in spring, after cuttings have been taken, as being unfit for further use. There is a better way of dealing with, apparently, worn-out and worthless plants. This is to turn them carefully out of pots and plant them in the borders, working into the soil a little old manure or bone-meal. This respite is nearly always followed by a rejuvenation brought about by the change to fresh air and greater root freedom. More than once I have found, after old Fuchsias have been thus dealt with at the end of May they soon commence to bloom, and the quality and quantity of flowers they yield are remarkable. LEAHURST.

Seasonable hints on Camellias

When we take into consideration not only the great beauty, but also the pecuniary value of a fine Camellia bloom during the dull months of winter, I think it may be safely asserted that there is not an amateur in possession of a Camellia who would not do his best to secure good blooms did he only know the proper way to go about it. Let a Camellia have proper attention during the growing period and we shall have fewer complaints about buds dropping off at the time they are expected to expand; and let it also be borne in mind that one of those lovely flowers is worth twice as much at Christmas as it is two months later, and it will be readily granted that a little time and trouble spent on them now will not be labour lost. Immediately the plants begin to push out fresh growths they must have an increase of temperature and moisture. A vinery at work is a very good place to put them for the next two or three months. Let them have plenty of water at the roots, and if they are drained as Camellias ought to be drained there is little danger of over-watering. If the drainage is bad see to it at once. Plants that do not require repotting this year will be greatly benefited by a slight top-dressing of soot at the beginning of the growing period secure success they must be kept thoro clean. When they have completed growth and formed their buds they m gradually exposed to more air and receiv water at the roots, never, however, them become dry. About the middle o they may be turned out of doors for a of months. In cutting the blooms care be taken to leave at least one or two eyes of the previous season's wood, bu very small plants the less wood that with the flowers the better, otherwise plants will never be obtained. At the time I usually secure one leaf with the

Tomatoes Without Manure

MANY of us, I think, use too much manure in the case of Tomatoes, and even Vegetable Marrows. In years gone by almost everyone who had anything to say on the culture of these recommended at least one part of the compost to be manure from the stable or cowshed, and plenty of plants and fruit too were produced under this treatment, but it must be owned that there was also a great deal of superfluous wood, and in the case of Tomatoes the fruits in many instances were neither so perfect in form, large in size, nor so numerous as they might have been. Three parts of the time spent in cultivating Tomatoes were devoted to cutting back and thinning out the shoots, work which surely could not be over and above good for the plants. The majority of Tomatoes make a great deal of unnecessary wood before any fruits are formed, and many of them grow so freely that they do not fruit until their feeding supplies have become somewhat exhausted. My idea of a good bearing Tomato plant is one which begins to fruit about 10 inches from the ground, and continues to bear closely as far up as the cultivator chooses to lead the main stems. The fruits should be numerous with the superfluous growths in no way predominating. It is, however, a difficult matter to have Tomatoes in this condition where much manure is used, as the manure has a tendency to induce the plants to make wood rather than fruit. For some years I have been using less and less manure in Tomato-growing, and last season in several instances I dispensed with it altogether, and found the crops to be altogether more satisfactory than hitherto. The growths were short and robust, and the fruit formed in large quantities, swelled off and coloured beautifully; indeed, I never had Tomatoes so fine when manure mixtures were employed, and this year again I do not intend using any manure for them. The autumn cuttings, now being potted off into 6-inch pots, have nothing but pure loam on which to exist, and in this I know they will succeed admirably. Early in summer I am in the habit of planting a Tomato here and there along the walls wherever a vacancy occurs, and before planting I used to fork in a quantity of manure to assist them, but last spring no manure was employed, and the crop was never more satisfactory. The very poorest of soil without any manure might not answer, but ordinary potting turf will be found to grow them to the highest state of perfection.

The same remarks apply to Vegetable Marrows. As a rule, they are planted on the tops of manure heaps or in very rich soil, and the growths soon become an intricate mass, with fruits at long intervals apart. Fruits at every joint are seldom the rule, but they would be if the plants were grown only in pure loam, in which they only produce a reasonable amount of growth. The latter, too, are very hardy, short-jointed, and fruitful. It is all a mistake to suppose that the strong plants are the finer will be the fruits, out of every dozen blooms which ope fail to form a fruit, and those which not be extra good, as crowds of leav shade do not suit them. We all know well Melons succeed in pure loam I would give Tomatoes and Veg Marrows the self-same treatment. No is a saving effected by growing them out manure, but an advantage is gai every way thereby.

Cultivating Lettuce

Although Lettuce is the chief of sala yields an immense return to those w prepared to give it ground deeply dug, ously manured, and, above all, liberal between each plant when transplant has to be said that very many tak trouble with it. They sow seed in a bed three times too thickly, and if the bulk plants is transplanted at all it is ge after they have become weak through crowding. There is no comparison b plants so treated and those which are out clear of each other. From the la get good hearts, crisp, and always acc at the table. There is a difference, varieties. Some of the old sorts are hind modern varieties, and when one to consider the small amount of seed r by the average gardener only the bes should be selected. It is possible to grow superb Cos Lettuce that needs l any, tying up, and the term "self-fo is quite true of the speciality Lettuces principal firms. Successional sowing be practised, and this means a pinch every few weeks from April onwards. WOODBASTW

Rhubarb renewals

Few, I imagine, consider the grow Rhubarb from seed, thinking it a lo cess before any results are achieved, b my own experience of Glaskin's Perp can say that one may, if so desired mence to pull sticks within six mo sowing seed, and certainly pull in earl spring following sowing. Seed shoulc into pans of light soil about March anc with gentle warmth, pricking the s off into separate pots, and finally p out in good ground generously manur V

Sowing Beet

It is wise to refrain from sowin until May is well advanced, for then is warm, growth is rapid, and germin certain. Too often the unfortunate man has to bear the blame of supply seeds, in the case of Beet, when, as a of fact, the sower is entirely at fault. A SCOTTISH GARD

RUIT GARDEN

Shanked Grapes

roots of Vines are permitted to enter cold soil, shanking must follow. first symptoms noticed will pro- e long-jointed wood and loose g bunches, for the Vines do not suc- at once. Shanking may be staved ne extent for a time by taking extra get the wood ripe by the use of fire- this is only a temporary expedient ist in the end fail. The only remedy the roots and place them in good e or less fortified with bone-meal or manure with other opening and ig ingredients, such as wood-ashes, lust, and old plaster. The drainage t be seen to and put right. I have ne roots out of borders which had nvated from 3 feet to 4 feet deep. ıtural soil is of a damp and clayey such deep borders must go wrong later. March is a very suitable lifting the roots of late Vines, and r the work is done the better. The uld be shaded for a time after the done to let the buds break slowly pressure, and only a moderate crop taken this season, but this moderate be of more value than a badly- crop. Before the lifting is begun compost should be prepared in suffi- ıntity to make a new border. I start the Vines right, and if there is ulty in getting the maiden loam, e border enough to place the roots two years or so, more loam being m time to time as required. Person- ı much in favour of inside borders very early and very late Grapes. de borders, if the position is rightly there should be no shanking, and ogether inside will profitably utilise ficial food; in fact, they will need it, rovision for watering must be of the ect kind. I have never known any et of men who would give an inside ler enough water unless the person kept his eye on the work, or, better ormed the leading part in its distri- nself.

ıre two forms of shanking, or rather two main causes of shanking. ly, shanking arises from a stoppage ıpplies at a critical period of the f the Grapes, usually noticeable just last swelling begins, and it may he case of inside borders from dry- e roots. The symptoms in this case he same, as there is an absence of jointed wood and straggling, loose which may be seen in deep-rooting n naturally damp, retentive soil half rs should be made above the ground me of the best Grapes I have ever grown in a border that was carted aced wholly above the ground level. rders may be dressed with rich without the risk of making the soil it is in the sweet wholesome border best Grapes are grown. It is im- o feed Vines properly in a cold, wet

C. B.

to make Vines break their lower buds

forced Vines, especially pot Vines, ally disposed to break their top buds, ıtest formed ones, first. A sharp tightening the tissues and arresting ıt of the sap, will cause the lower break—at least, those immediately bend; but twisting the cane regu- vhole length checks the rush of sap the tissues more effectually, and causes all the buds to break. Another good plan is to keep the bottom part of the cane near the pipes and the top away from them, and comparatively cool. I have often adopted this plan with long Vine rods of one year's growth, and have always found it to be successful.

Raspberry stem bud caterpillar

This pest, known also as the red Raspberry grub, is now very busy leaving its winter quarters in the soil and crawling up the canes of the Raspberry. When it finds a likely bud it makes its way into the centre of it and feeds on the pith, causing the bud to wilt and die. The best method of control in small gardens is to pick off and destroy the affected buds. On a larger scale spraying with paraffin emulsion is very effective. When spraying, drive the spray well into the buds and also into the soil at the base of the canes, because many of the tiny caterpillars do not go up the canes, but attack the young suckers instead.

J.

Lime for Peaches

All good growers of Peaches and kindred fruits agree that a good calcareous soil is more favourable to the production of good fruit than any other ingredient which can be used in their culture, but soil of a limy character cannot always be secured; and where it is thought that Peaches have failed through the want of this, the evil might be overcome if the roots were watered before the stoning period with lime water. A handful to every 4 gallons of water is none too much, or a dusting may be spread over the border and afterwards watered in.

M.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

VEGETABLES

Green manuring

Owing to the shortage of stable manure this subject is becoming of much importance in the garden. Your advice on the following points would be appreciated:—(1) What is the best seed mixture for the purpose? (2) When should it be sown? (3) Where can it be obtained?

DEVON.

[In these days when animal manures are becoming scarcer, and the need for them increases, it is a matter for surprise that many who garden, notably amateurs and cottagers, do not utilise green crops as manure dressings. It is well known that farmers do so largely, or else grow them as catch crops over which sheep are folded, these animals in feeding on the greenery well manuring the soil, thus rendering it fertile. Even in that case it may be a question whether the benefits of the green crop as a manure dressing be greater or less if ploughed in rather than be flock fed. That course, however, does not apply to gardens or allotments, although it may, in a less degree, to small holdings. However, it is from its gardening aspect the subject has most interest. Because of the comparatively rapid interchange of crops there is very often lying vacant for a time a breadth of ground. Even if in the summer a thick, dense sowing of Vetches, Rape, or Mustard be made, provided there be moisture in the soil to promote germination, the soil is soon covered with greenery, and when that is a few inches in height and dense it may be dug in as manure, and any crop following of a more permanent nature speedily utilises it and absorbs it, as decomposition is rapid.

Such a manure dressing, secured at such trifling cost, will be as beneficial to the ground as will one of average animal manure, as that too often is half exhausted ere it is utilised. The best time to employ a green crop is in the winter. When maincrop Potatoes are lifted in September there is often a large breadth of ground which it is purposed to lie fallow for the winter. The soil is generally left somewhat rough and uneven, and is all the better if lightly forked over and levelled. Then at once the seeds of the green crop should be sown, and be well raked and rolled in. Because of the great value the leguminous plants have of utilising the nitrogen of the air and converting it through the action of bacteria, which exist in the nodules always found on the roots of the pod-bearing tribe, that nitrogen, so valuable an ingredient in plant growth and production, is converted into an active crop food. For that reason there are no better seeds to sow for manurial purposes than are those of Tares. A good covering of leaf and stem growth to the soil soon follows after the sowing. It is sometimes advised to mix a few Oats with the Vetch seeds, as those in growth help to give body to the green crop.

A valuable feature of green manuring is the addition to the soil of humus, in the form of vegetable matter. Mineral manures help nothing in that direction, yet humus plays a very important part in growth, especially in furnishing fibre to the soil, keeping it open and cool, and helping to retain moisture, which, in its decomposition, it emits. Rape and Mustard sown thickly give good carpets of leafage, and also furnish humus and coolness, as well as moisture, but they do not create nitrogen as leguminous plants. Vetches in particular can abstract it from the air and convert it into active plant food in the soil. Such a power applies little to the green crop itself, but it does with great force to the crop which is to benefit from the green manure dressing.

If a sowing be made in October, and the green crop be dug in at the end of February, or early in March, the soil is thus profitably utilised, whereas if not so cropped it would be vacant. Ground carrying a green crop in this way is getting much more free aeration than is land that is quite fallow. Where the roots of the crop run there does the air go, and worms which, by their working, render soil such good service work all the more freely because of the green surface carpet. There are cases, though about once in three years is fairly often, when vacant ground has

to be trenched in the winter. That is important work, which may not be neglected, but where only digging is purposed then the green-crop manuring becomes an excellent way of helping soil to become fertile.]

Manure for Cucumbers

(M. C. C.).—Under certain circumstances nearly all kinds of manure may be used for Cucumbers when they require support. For heavy, retentive soils we should use horse-droppings that have been dried in a shed for two or three weeks, but for lighter, warmer soils cow or pig manure is better. Mellow cow manure is an excellent top-dressing for Cucumbers when exhausted from long bearing.

Sowing Beetroot

(S. T. R.).—The time for sowing varies from the beginning of April to the middle of May. In the majority of soils about April 20th will be found to be the best time; if sown too early, especially if the soil be rich, it is liable to run to seed, or the roots to grow too large, medium-sized roots being always most highly valued, more particularly for salading. The seed should be sown in drills 15 inches asunder and 1½ inches deep.

TREES AND SHRUBS

Cytisus racemosus losing its bloom buds

(C. B.).—Probably the Cytisus is suffering from dryness at the roots or in the air of the greenhouse. It requires when in active growth plenty of water at the root, and a rather moist atmosphere. Shade a little from very bright sunshine, and give a moderate amount of air, but avoid cold draughts.

Herb Paris (Paris quadrifolia)

Can you tell me, through the medium of your "Answers to Correspondents" column, if it is possible for me to get a plant or shrub called Paris, or Herb Paris, or True Love? If so, what seed or nursery man would be able to supply me with same? I am interested in this shrub or plant, although I have never seen one. It is described in a herb book I have, "The Universal Herbal or Botanical Dictionary of 1818," as a plant the leaves and berries of which partake of the properties of Opium, to be found in various parts of England, in Nottingham, and in Newbattle, Scotland, in the wild state. Once very common, although, as the years pass, getting rare. T. H.

[This is the name of the plant you are seeking. It is herbaceous, belonging to the Trilliaceæ, and native of moist, shady woods in many parts of Britain. The leaves and stems were formerly used in medicine, and the juice of the berry, though considered poisonous, has been employed in curing inflammation in the eyes. We cannot find it listed by any nurseryman, but you might try Messrs. Ryder and Sons, St. Albans, or Messrs. Thompson and Morgan, seedsmen, Ipswich.]

Clematises on a trellis

(B. B.).—The Clematises would do quite well in the position you propose. Some of them, however, are rather strong growers and would be more satisfactory where more head room could be given; say, 12 feet to 15 feet. If your trellis is of that height then you may employ any of them. If not more than 7 feet or 8 feet, then I suggest the following as most desirable:—Clematis chrysocoma, C. Armandi, C. alpina, C. calycina, C. coccinea (this dies to the ground each year, but its summer growth reaches from 6 feet to 7 feet), C. Flammula, C. campaniflora, C. tanghutica, and, for the draughty end, C. Jouiniana, which you would probably obtain under its old name of C. grata. E. M.

GREENHOUSE

Culture of Bougainvillea glabra

(B. C. D.).—This plant requires liberal treatment during the summer—plenty of heat, light, and moisture, and a season of rest in a comparatively low temperature. Prune back early in the year, and place in a temperature of 55 degs. to 60 degs., and when growth commences shift into a compost of good loam and peat, well sanded. Water liberally when in full growth, and well expose in early autumn to light and air to ripen up the wood. Winter in an intermediate-house, giving just enough water to keep the wood from shrivelling and the roots from suffering.

Green fly on Chrysanthemums

(C.).—Tobacco powder is the best material to use for ridding the leaves and the points of the growths of green-fly. Dust the parts affected in the evening, and the following morning vigorously syringe the shoots with clean water, which should not only remove the powder, but wash the shoots clean of fly also.

"Amaryllis" blooms damping-off

("F.R.H.S.," Co. Donegal).—From poor specimen sent it was impossible to identify the plant, but we do not think it can be an Amaryllis as stated in your letter. In all probability the plant, for some reason, has been excited into premature growth, and, consequently, the weather is responsible for the failure of the flower-spikes to develop. The top-dressing of manure may also have been a contributory cause. A fully-developed spike and foliage would be of interest later on.

MISCELLANEOUS

The Vine weevil

(H. W. Kolle).—The pest attacking your Cyclamens and other plants is the black vine weevil (Otiorrynchus sulcatus). It feeds on the leaves and young shoots of various plants, Vines, and Maidenhair Ferns, while the grubs are equally injurious to the roots of Ferns, Cyclamens, Primulas, Strawberries, and many other plants. No insecticide can be used against the weevils, and all you can do is to search for the beetles. You might lay small bundles of Moss or Hay about so that the beetles might creep into them for shelter during the day. These traps should be examined every morning. Plants in pots might be shaken over a white sheet after dark. The beetles lay their eggs at the roots of the plants, the grubs from these eggs feeding on the roots and eventually becoming chrysalides from which the weevils emerge in due course. The only way to destroy the grubs is to pick them from among the roots.

Management of a Fern-case

(Flora).—Keep the plants free from all dead fronds and decaying matter generally; wash the glass of the case when necessary, to keep it clean and bright. Plants growing in a tight-fitting case will not require much water, as the evaporation condenses on the glass, and runs down to the roots again. For most kinds of Ferns a little ventilation, by tilting up the glass or otherwise for an hour in the morning, is sometimes beneficial.

Making a hot-bed

(C. B.).—Get a quantity of fresh stable manure with the straw in it, and mix with it a good portion of leaves, if you have them. Turn the heap over several times, and if dry, throw plenty of water on it. After a few days the rank steam will be out, when you may make the bed. Mark out a square 3 feet wider all round than the frame you are going to put on the bed. Then commence to build the manure all round with a fork, always keeping the middle hollow, and treading the whole firmly as the work proceeds. about 4 feet high put on your frame an all round it till the manure is on a lev the top. Then put in your soil, and i days after the bed has settled down y plant in it what is required.

Cesspool contents in a garden

(G. H. S.).—In summer such c Cauliflowers, Cabbages, Peas, Scarlet Runners, old Asparagus-beds, berry, Black Currant, and Raspberr ters will imbibe a good deal of diluted with advantage. Strawberry-beds, to have a supply from about the end month onwards, until the fruit be colour, and in winter, or when it ca profitably used elsewhere, pour it o roots of fruit-trees in orchards, &c.

Report on condition of horticu crops on the 27th March,

Beans and Peas (Long pods), autum —Beans are making good growth a well; Peas are somewhat backward, o hard winter.

Cabbage (autumn-planted).—Cro suffered damage by wet during winter made but slow progress during Marc is expected to be rather late and le average, except in Lincoln, where i ported to be above average.

Cucumbers (under glass).—Conditi satisfactory and point to a good averag good supplies from clean, healthy pla available.

French Beans (forced).—Early pic good quality are being made.

Lettuce (frame).—Plants have through the winter in fair conditio planted out require mild weather and

Lettuce (outdoor).—Has wintered looks promising.

Parsley.—Plants have wintered are making satisfactory growth in Mi elsewhere reports less favourable.

Rhubarb (natural).—Crop is promi

Seakale (natural).—Heavy cuttings ing made.

Spinach.—Has wintered fairly spring picking has commenced.

Spring Onions.—Excellent growt made in Lincoln; elsewhere plants a ward and have suffered from frost.

Tomatoes (under glass).—Plants l proved recently and present condit satisfactory.

Anemones.—In Scilly, A. fulgens to flower freely and St. Brigid has i considerably.

Arum Lilies.—Where plants are good flowers are expected; disease stroyed plants in some places.

Carnations, Perpetual (under Growth and flowering satisfactory.

Daffodils and Narcissi.—A mo average crop of good flowers.

Roses (under glass).—Up to averag ally.

Wallflowers.—A good crop pro Middlesex; plants are improving, b ing slowly in Hertford.

Horticultural Societies'

Reading and District Gardeners' Improvement Association

The fortnightly meeting was hel Abbey Hall on Monday evening, Ma The subject for discussion was throughout the year," and was intro a most interesting, instructive, and lecture by Mr. H. Prince, of formerly head gardener at Polesd Dorking. In his opening remarks turer said that the subject of salads

Abol

lorticultural Fertilizer

eds your Plants, ensures lovely gardens d fine vegetables

intain the fertility of any garden or allotment ecessary to keep the soil suppli d with the al elements—nitrogen, phosphates and pot- lended in their proper proportions. ertilizers can be relied upon to give the best with economy. For full particulars with s, please

Write for Descriptive Folders.

ackages, 10d., 1/3, 2/-; 7 lbs., 3/-; 4 lbs., 5/-; 28 lbs., 8/-; 56 lbs., 14/-; 112 lbs., 25/-. Postage extra.

rom all Nurserymen, Seedsmen, Iron- ongers, Chemists, and Stores. If any difficulty write to—

Abol Limited, Beltring, Paddock Wood, Kent

rite for guide to Garden Pests; gratis and post free.

SEEDSMEN BY APPOINTMENT

GRASS SEED

ALL lawns should be reconditioned immediately if the turf and surface are to be in good condition for the coming season, consequently preparations should be made in advance, and all the required materials—Grass Seed, Fertiliser, Worm Killer, etc., assembled. For particulars how to renovate your lawn, make a new lawn, diagrams and instructions, write to-day for Carters Booklet on "Lawns and Sports Grounds," post free on application. Fill in Coupon below.

PLEASE SEND POST FREE, BOOKLET "LAWNS & SPORTS GROUNDS"

M.....

.....

G. I. .....

SERVICE AND ADVICE

Carters will answer any question in regard to the improvement or up-keep of your turf

Carters TESTED SEEDS

Grass Seed and Turf Specialists

RAYNES PARK, LONDON, S.W. 20

ECKFORD'S

GIANT FRILLED

WEET PEAS

FOR 1926

These frilly monsters are recognised.

rld's Most Charming Sweet Peas

S FLOWERS. MAGNIFICENT STEMS

R A WEALTH OF CUT FLOWERS. FOR GARDEN DECORATION. FOR EXHIBITION.

upply Collections of the Finest Giant Sweet Peas to Suit every Garden.

SE COLLECTIONS go to every of the world, and give universal sure The range of colour is rb, every seed is hand picked so may be relied upon.

owing are specially chosen collections of Sweet 26:

eur's Collection contains 50 exquisite var- seeds of each for	22/6
"A" Collection contains 40 exquisite 30 seeds of each for	17/6
"B" Collection contains 30 exquisite 30 seeds of each for	12/6
"C" Collection contains 24 exquisite 30 seeds of each for	10/-
"D" Collection contains 18 exquisite 30 seeds of each for	8/-
"E" Collection contains 12 exquisite 30 seeds of each for	5/6
"F" Collection contains 12 exquisite 15 seeds of each for	3/-

Each kind is separate and named.

have a Booklet on Culture, Free, kindly include it in your Order.

for Free Catalogue of all the finest Sweet Peas year. Also the finest Vegetables and choicest s. This Catalogue will interest every Gardener, ur or Professional, and is free for the asking. It will pay you to buy direct.

RY ECKFORD, F.R.H.S.

01) Headquarters for Sweet Peas, WEM, Shropshire

FOOD FOR YOUR GARDEN

Growing Plants need Nourishment

Your flowers and vegetables will handsomely repay you for occasional "top-dressings" of "NORCO" whilst they are in active growth.

PRICES (Bags Free and Carriage Paid):—

	7 lbs.	14 lbs.	28 lbs.	56 lbs.	112 lbs.
"NORCO" Complete Garden Fertiliser (For Flowers, Fruit and Vegetables)	2/6	4/3	7/3	12/6	23/-
"NORCO" Complete Lawn & Turf Fertiliser	2/4	4/-	6/9	11/9	22/-
"NORCO" Complete Potato Fertiliser	2/6	4/3	7/3	12/6	23/-

Send for free Booklet on the use of Lime, Stable Manure and Chemical Fertilisers

"NORCO" (Regd.) is obtainable only direct from the Sole Manufacturers:—

CHARLES NORRINGTON & CO., LTD.

Cattedown, PLYMOUTH

Makers of High Grade Fertilisers since 1846. No. 8

cult to define, as one could not exactly say what came under the category of salads. Our ancestors in England many years ago used an enormous amount of salads, but not the mixtures of to-day. They confined themselves chiefly to different varieties of herbs, and ate them practically from a medicinal point of view. The enormous range of herbs grown in those days gave them a good choice, and the spring of the year was the chief period for this salad consumption. In the salads of to-day we find quite different ingredients used, the chief of which are Lettuce, Endive, Chicory, Corn Salad, Mustard, Cress, Watercress, Tomatoes, Cucumbers, Beetroot, Celery, Dandelion, young Onions, Chives, Chervil, etc. Each of the kinds mentioned was separately dealt with, and much useful advice was given not only as regards their culture, but as to their uses and the time at which they should be brought to maturity so as to be able to keep up a supply throughout the year. An interesting discussion followed, at the close of which Mr. A. H. Fulker proposed, and Mr. F. Townsend seconded, that a hearty vote of thanks be tendered to Mr. Prince for bringing such an interesting and instructive subject before them. There was only one exhibit staged, and that was by Mr. C. J. Howlett, The Yews, Earley, who received an Award of Merit for a large and well-flowered plant of Cypripedium insigne.

British Carnation Society

We are asked to state that the 31st floral meeting of this Society will be held on Thursday, April 15th, at the Royal Horticultural Society's Hall, Vincent Square, from 12 noon to 6 p.m. We learn that the prizes have been greatly increased, while there is a new postal class. Schedules on application from the Secretary, P. F. Bunyard, 57, Kidderminster Road, Croydon.

NAMES OF PLANTS

H. D. Smith.—Regret we fail to name the Rhododendron you send.

E. F. F., Billingshurst. — Skimmia japonica. This is the staminate plant sometimes known as S. fragrans and S. fragrantissima.

CATALOGUE RECEIVED

H. Swan, 32, Dovercourt Road, Rotherham.—Seed list, spring, 1926.

LATE NOTES

The Rhododendron Society's First Show

Great interest is being taken in the forthcoming Rhododendron Show to be held at the Royal Horticultural Hall, Vincent Square, on Tuesday, April 27th. In view of the earliness of the season a number of additional classes have been formed to include species in the following series:—arboreum, Falconeri, cinnabarinum, heliolepis, irroratum, neriiflorum, triflorum, and others. Intending exhibitors should apply to the Secretary, Royal Horticultural Society, Vincent Square, S.W. 1, for the schedule and for the additional classes that have recently been formed.

Sarcococca ruscifolia

Of special interest at the present time is this evergreen from Central China, which renews its growth by stems rising from the ground in the same manner as the valuable Danæ Laurus and Butcher's Broom. These slender growths are densely clothed with polished green, finely-pointed leaves. The fragrant, milk-white flowers appear at this season in the axils of the terminal leaves, several in each cluster. While the plants are still in bloom some of the branches are carrying quite a profusion of attractive and highly-polished purple berries about the size of Peas. These sprays of berries are very ornamental, and the leafy shoots desirable for cutting and mixing with flowers at all seasons. This shrub should find a greater welcome than hitherto in gardens if only for the reason that it will thrive in shady places or beneath trees which admit of light reaching the plants part of the year, but to secure the fruits—as on the spray before me—it would probably be necessary to grow the plants in exposed positions. I think this genus has been underrated, as hosts of positions arise in one's mind where such dwarf and charming evergreens might be used advantageously. In the matter of soil they are not at all particular, and their pleasing, neat, fresh green appearance at all seasons is rare among dwarf shrubs. M. S.

Corylopsis sinensis

Absolutely laden with drooping spikes of pale primrose-yellow flowers which are very fragrant is this Chinese shrub. It flowers slightly in advance of the old C. spicata, and a few weeks in advance of C. pauciflora, C. Veitchii, and others of more recent introduction. The shrub is about 6 feet in height and very ornamental. It is possibly the most effective of this choice and little-known genus.

CHRYSANTHEMUMS

Some desirable outdoor Chrysanthemums

THE time will soon be here again for planting out these popular autumn-flowering plants, and as, nowadays, it is almost impossible for the average grower to keep pace with the new introductions that flood the market annually, it may be of interest to some admirers of this fine subject to give a few notes on some of the best in a Scottish garden situated in a rather late upland district. Most of them I have grown for several years, so can speak from experience. It is rather unfortunate that so many of the newer introductions are so tall-growing, as this not only necessitates long stakes and more time spent in tying, but also exposes the plants unduly to the gales so prevalent in autumn. Anything over 3 feet is really too tall for any but the most sheltered gardens. I give the average heights as noted here. Dick Barnes (2½ feet) is a very free bloomer with a bushy, upright habit. The colour is a distinct reddish-wine colour. September White is, probably, the finest white variety yet raised, the flowers being larger, of excellent form, and pure white. It grows with me 5 feet high, and really should be disbudded to secure it at its best. William Ritchie (3 feet) is one of the sports from Framfield Early White and is a real beauty. Its blooms are very refined and freely produced. It is a creamy-yellow in colour with the stiff wiry stems of the parent. Lichfield Purple (4 feet) is one of the most desirable of recent introductions, its only fault being its height. Pluie d'Argent (18 inches) is one of the finest white bedders it is possible to secure. It is rather dwarf and stiff for cut-flower purposes, but for wreath work is ideal. Charles Blair (2½ feet) is a distinct improvement on Rabbie Burns, being a much better grower and with finer colour, which it also retains better. I regret that I had not the luck to raise this fine variety. It is, I believe, a sport from White Massé. Mrs. W. Sydenham (18 inches) is still one of the richest crimson varieties to date. It is of a stiff upright habit and the flowers withstand damp very much better than Goacher's Crimson. Elstob Yellow (2½ feet) is about the best of the Yellow Massé sports, and is, indeed, one of the most reliable and distinct of all yellow early-flowering Chrysanthemums. Walter Day (2½ feet) is better than Crimson Massé, retaining its colour better. White (2½ feet) is a most profuse bloom creamy-white flowers being very Belle Mauve (3½ feet) has pretty mauve flowers and is one of the la liable sorts we have. R. Pemberton with its wine-red medium-sized always calls for attention. It is grower and free flowerer, and its withstand frost, rain, and wind bett those of any other variety. C. I

Preston House, Linlithgow.

Early-flowering Chrysanthe

I was very much interested in the of "Yorkshire Reader" (p. 140) border Chrysanthemums, and as I Northumberland, where conditions anything, less favourable even than shire, I thought perhaps a few remar me would be of some assistance.

"Yorkshire Reader" makes no m the varieties he grows, and this has deal to do with the time of flowe grow only the Massé family, and have a profusion of flowers from early until the frost cuts them down. S the old stools are lifted in the autu placed in a Cucumber frame (which cleared of its crop). They are packe together in their varieties and enou soil worked among them to cover t One good watering is enough to la all the winter, and the only attention quire is an abundance of fresh air. even mat the frames in frosty weat always have plenty of cuttings in s

Perhaps I ought not to have said as about the middle of February I the stools out of the frame and care them to pieces, selecting the young which have a few roots attached. T dibbled into boxes about 2 inches then place the boxes in the early vi few weeks until growth has fai menced, and then gradually har I usually pinch twice, about the latt March and again early in May. This ensures early flowering but also k plants from growing too tall.

Treated in this way I always ha of Chrysanthemums from the n August until frost cuts them down. this last season they were well pa the frost came in November. The grown here are Horace Martin Curtis, Marie Massé, Bronze Ma an unknown Pompom; not a larg tion, but 50 plants produce an abu cut flowers over a considerable perio much appreciated.

Hexham.

New Rhododendron

CUNNINGHAM'
SULPHUR

A large stock of this rare vari
NOW READY for dispa

Grown on own roots, and qui hardy in any part of Britai Very free flowering — Colou Sulphur yellow, flowering April. Very valuable for Spri decoration, plants offered ave age 9 ins. high, 2-3 flower bud 6—9 shoots, 7 ins. diamete

Price **12/6** *each*
CARRIAGE EXTRA.

FROM THE RAISERS—
CUNNINGHAM FRASER & CO
Comely Bank Nurseries, EDINBU

GARDENING ILLUSTRATED

3457—Vol. XLVIII. APRIL 10, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

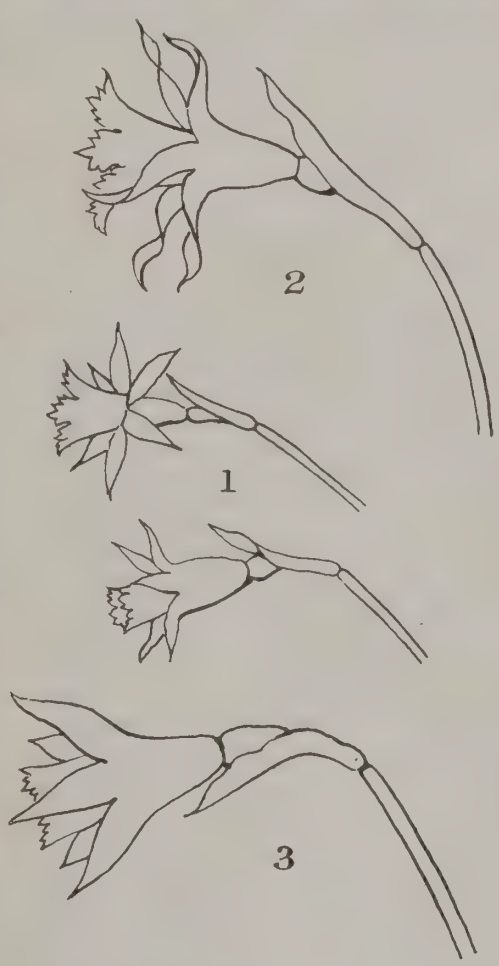
INDEX—Illustrations in Capitals

he best time ... 229
s plant- ... 235
... 234
, tuberous ... 232
ot (Sanguin-nadensis) ... 230
S, HERBA- ... 230
om South ... 237
ns, Border ... 231
Cucumbers, bottom-heat for ... 235
CYCLAMENS, PERSIAN ... 232
DAFFODILS, TRUMPET, THE LESSER 223
Eriogonum umbellatum ... 230
FLOWERS OF TIBET, SOME ... 226
Gardeners and their hours ... 224
Garden pests ... 236
Gardens, front, spring beauty in ... 224
Gladiolus, the pronunciation of ... 224
Gromwells (Lithospermum) ... 225
HELENIUM PUMILUM AND ITS COMPANIONS ... 231
Hepatica, the ... 229
Holmskioldia ... 237
Kales, the indispensable Curled ... 235
Lobelia Kathleen Mallard ... 224
Obituary: Mr. Wm. Allan ... 236
Parrotia persica ... 224
Philadelphus Virginal 224
Plant names, pronunciation of ... 224
Plumbagos, greenhouse ... 232
Potatoes in pots ... 236
Potato Golden Wonder ... 235
Potato wart disease ... 235
Primula obconica, re poisonous properties of ... 225
Pycnostachys Dawei 237
Pyrus Malus floribunda ... 223
RHODODENDRON SPECIES, NOTEWORTHY ... 228
Roses ... 231
Roses in spring, planting ... 228
Saxifrages, the ... 227
Sedum cœruleum ... 231
"*Spring round the corner*" ... 234
Sweet Pea Annual, the ... 223
Sweet Williams failing ... 236
Tephrosia, raising and growing ... 237
Tomatoes: Notes and notions ... 236
Vines, mealy bug on ... 225

The Lesser Trumpet Daffodils

RE appears to be so much uncer-ıty about the identity of the small mpet Daffodils, *N. nanus, N. minor, minimus,* that a note on the subject helpful to those who are in doubt. *imus,* from its very small size, can be mistaken. It varies, to a certain both in form and colouring, but in ·an never be taken for anything but ·llest of the Trumpets. In the upper ı flower, recently supplied by Messrs. ·d Sons, the form inclines to slender, uth of the trumpet is distended and nged, and the colour is a clear, pale ·llow. A beautiful miniature flower. ower figure the body of the flower is and more urn-shaped, the mouth of npet is straighter and has a plainer e segments of the perianth are small, colour is an even yellow, rather dark ht. If one did not know that there ·tter forms one would not accord it ·aim to beauty. It is worth noticing stem is nearly circular in section, hat of other Daffodils, whose stems t I believe in botany would be called ; that is to say, partly flattened and lightly projecting rib on each edge of ger section. This rounded flower-weak and is not always able to bear ›loom, so accounting for Parkinson's ion that "his nose, for the most ·h lye or touch the ground."

ind friend the late Mr. Peter Barr ıe pains to explain to me the different rs of *N. nanus* and *N. minor,* and to at *N. minor* was much the better of A good form of *N. minor* has never y common in gardens, and Mr. Barr ch pleased when I took him some from a garden I knew well. It was an 40 years ago; the old friends who re long since dead, and I have now ıns of ascertaining whether the is still in it. Mr. Barr said it was *or* and a very good form. The main rs of *N. minor* are that the segments ·erianth are rather narrow and are and carried nearly straight out at a right angle with the trumpet; the mouth of the trumpet is widely distended and partly recurved, distinctly lobed, and the lobes rather deeply gashed. Looked at from the front it has a starry, almost twinkling appearance.



1. Two forms of Narcissus minimus
2. Narcissus minor
3. An ordinary form of Narcissus nanus

It is a beautiful, bright, lively-looking flower, usually a full, rather deep yellow all over.

N. nanus is much less interesting. The divisions of the perianth are wider and the trumpet is straighter and not much ornamented at the mouth. But it varies a good deal. I have a number of small Daffodils, some all yellow, some almost bicolor, some with the perianth segments outstanding, and others with them carried obliquely, all of which, I am told, may be considered within *nanus.*

G. J.

NOTES OF THE WEEK

The Sweet Pea Annual

THIS annual publication has just come to hand, and will be eagerly scanned by the devotees of this popular flower. During the last 25 years the Sweet Pea has undergone many changes and developments. The Annuals of bygone years and the one just to hand—the twenty-second—are valuable as containing the history of the Sweet Pea from its earliest days, when we had but few colours in the flowers and the style of cultivation was quite different from that in vogue with the enthusiasts of to-day. In years gone by there was no raising of the plants in pots and boxes, the seeds being sown in the open air like an ordinary annual. This has all been changed, and the acres of glass devoted to the culture of Sweet Peas would astonish the growers of those days. In the early days the Sweet Pea Annual was devoted to cultural hints, while to-day the number of pages dealing with the Society's work and the curtailment of the size, owing to lack of funds, are noticeable. In the case of the Eckford Memorial medals we find on scanning the account that there will be in days to come need of further donations, as unless this is done the fund will be insufficient to provide this medal. A very interesting article from Wm. Lumley Perrier, Victoria, B.C., shows the way in which the plants are grown in that far-off land, and is well worth reading. A detailed classification of Sweet Peas is given, and exhibitors should carefully read the same so as to prevent any heart breaking on the show day. Sweet Pea growers should procure a copy so as to learn of the new varieties that have been raised recently, and so keep themselves up to date.

Pyrus Malus floribunda

Among spring-flowering shrubs this stands out conspicuous; every branch and shoot becomes literally crowded with lovely pink-tinted blossoms, in shape and size much like those of the Cherry. The habit of the plant is naturally drooping, and when grown as standards on clear stems it forms a remark-

ably striking object on a lawn. It is equally valuable, too, for growing as a bush in the foreground of a shrubbery border, where it may be pruned in occasionally and kept to any size or shape that may be desired.

Spring beauty in front gardens

Not always was interest shown in the planting of front-door gardens. It was generally deferred until summer, but years bring change in ideas, and in many suburban localities a friendly rivalry exists. Bulbs are used to a greater extent than ever before, and if observation counts for anything they are mostly those which do not have to be taken up, but which can be left in the ground year after year. Crocuses and Snowdrops, Aconites and Scillas are favourites with many folk, as well as the old double Daffodils. One cannot have a more glorious show in spring than with Wallflowers. Brompton Stocks are coming once more into their own, and Forget-me-nots will bring in May masses of blue that will last for weeks.

MIDLANDER.

Parrotia persica

This small deciduous tree, a native of N. Persia, is valued for the brilliant colour of its leaves, which assume various shades of orange, yellow, and crimson during autumn. During February and March, when this tree is covered with its flower-buds and brown, hairy brackets, which contain numerous crimson-tipped stamens on its leafless branches, a very curious but pleasing effect is obtained in the sunlight. Many a casual observer would pass this tree in spring without observing its flowers. To get the best results it should be planted in a position where it gets the maximum amount of sunshine, in good, well-drained loamy soil. In the North it is often met with as a wall plant, but it is quite hardy.

R. FINDLAY.

Wisley.

Lobelia Kathleen Mallard

When grown in pots or, what is better, in pans, this Lobelia is not only handsome, but it gives that charming touch of blue which is always appreciated. Five plants in a 10-inch pan make a magnificent specimen, and if a plant of Eulalia japonica variegata be put in the centre at the time of planting, the effect is enhanced. A graceful piece of Cocos Weddeliana surrounded by Kathleen Mallard is also charming. Coleuses can be similarly employed, and other combinations will readily suggest themselves to interested growers of this fine Lobelia.

W. McG.

Philadelphus Virginal

This is one of the finest of the newer Philadelphuses, for which we have been indebted to MM. Lemoine et fils. It is of lovely arching habit, and has very large semi-double white blooms. Cut branches in flower arranged in large vases in a hall or good-sized room look passing beautiful. Virginal is as easily grown as any other Mock Orange, and is to be obtained from most British nurserymen who make a speciality of growing shrubs.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Gardeners and their hours

I HAVE been interested in the correspondence in your valuable paper *re* gardeners and their hours, and feel very grateful to Mr. Bruce Hewitt for the attitude he has adopted in his reply to "A Scottish Gardener." Like the latter, I underwent a long training, entailing the same long hours and inadequate pay, but it stands me in very good stead to-day. "Scottish Gardener's" reference to the census papers is interesting enough, and I should like to ask him, through your columns, how he becomes a professional gardener, or, to use his own words "we professional men," if gardening or horticulture is not a profession. The question of salary and status is, to my mind, beside the point. With regard to the domestic servant question, well, the law is sometimes an ass. If "Scottish Gardener" was employed by a public body, or even by the trade, by no stretch of the imagination can he be a domestic servant. If he still prefers to be classified as such I suggest he changes his dark apron for one with frills on. Like Mr. Bruce Hewitt, I take a delight in seeing the horticultural profession rise out of the dust, and agree with him that it has been raised by its merits. With regard to the slackers, there is only one remedy, eradicate them. They frequently spoil any privileges extended to other men. In conclusion, I must add that I find no trace of any sneer at the domestic servant in Mr. Bruce Hewitt's letter; it is straightforward and to the point.

JAMES D. WALSH.

The pronunciation of Gladiolus

The steam-roller of Dawlish Latinity has left me little better than a palpitating pulp, with just energy enough to hold a pen and ask a few questions—questions of the Rosa Dartle order, meant to elicit information, because I really want to know, you know. First, however, if I might be permitted, I should like to express my sympathy with your Monreith correspondent, who has had to go to school again to "Dawlish" and be re-taught his Latin prosody. I know what it is to forget Latin. The wear and tear of life has, I confess, left my Latin, like my hair, a trifle thin. It is conceivable that Sir Herbert Maxwell has by this time forgotten a good deal of his Eton grammar. I should not be surprised, indeed, if you told me that he had forgotten more Latin than "Dawlish" ever knew. But I am forgetting my questions—not many in number. "Dawlish," who is mighty strong in rules, states as Rule 1 that no Latin word can have the stress except where he puts it, not further back than the ante-penultimate; that is, the third syllable from the end. No doubt "Dawlish" is quoting from some text-book of Latin prosody. I do not mean to question the text-book or its teaching, but one would like to know on what ultimate authority its teaching rests. Quintilian's very possibly. My experience of the freakishness of human speech and accent has made me suspicious of all such sweeping generalisations—more especially in the case of words which, like "Gladiolus," have four successive short syllables. Latin accent can be ascertained only by induction; that is, by the study of Latin verse, to which words like "Gladiolus" are not amenable.

Question 2.—"And thus we get 'Glad-I-olus,'" concludes the triumphant "Dawlish." Not quite so fast, Sir, if you please, and not half so conclusively. One need not remind a learned savant that the English letter "i" is as different from the Latin "i" as "o" is different from "u," or, say, chalk from cheese. The English "i" a pure vowel like the Latin, but a dipl that is, two vowels pronounced in succession—"ah" rapidly followed by —"ah-ee," as in Isaiah; so that, as "Dawlish's" rule of stress, in order to his pronunciation of Gladiolus, it o spell "Glad-ai-olus," whereas it Glad-i-olus and should be pron Glad-ee-olus, which would bring it the pronunciation recommended by Maxwell, as I understand it. For r part, however, though this discussion certain academic interest, I do not doit whether our pronunciation of th squares with Latin quantity and ac does not. If it does not there is a s number of similarly offending words it in countenance. We do not sa andreia, do we? Personally, my obje Gladiolus is that it sounds, to r un-English and illiterate. But if the tive is the affected and erroneous Gla —thanks, no! I prefer the errone fairly established Gladi-O-lus.

Diffidence (my weak point) and di my own opinion led me to submit the to Joseph Scrubbs, my jobbing gar shrewd old chap, full of that un sense which we call common, but Lady Macbeth might say, too full vinegar of human obstinacy to be ea suaded. I tried to bring Joe roun Maxwell view, which is, in effect, r No use. Joe was adamant. His smile was enough, though he was n of speech. I do not in these lines pr report his very words, but merely t duce the gist of his philosophic v Orthoëpy. Said Joe:—

What's in a name? The flower's th
Kind Heaven sent it to console us.
Let pundits have their learned fling,
I stand by homely "Gladi-o-lus."

With babble of quantity and stress
Our wise quidnuncs would fain ca
But short or long, or more or less,
Give me the good old "Gladi-o-lus

One says Gladeye—the t'other Glad
Thinking by statute to control us
For me, I go by old Grand-daddy,
Who always called it "Gladi-o-lus

They talk and talk the Lord knows
Each with his nostrum or his bolu
It's Latin this and Sanscrit that—
What's wrong with good old "Glad

I care not, I, one farthing d—mn
If I stood against the wide-world s
Spite of all erudite flim-flam
I stand by Gaffer's Gladi-O-lus!

Pronunciation of plant na

Your correspondent, Col. A. H. Dod, is right (issue March 20th, pa and I readily agree he is so—in desc pronunciation "erIca" as indisput rect.

When, however, your correspon on to say that the pronunciation "A (with the ch soft, as in "church") his nerves, it seems to me that he go line which, if English scholars wish the imputation of pedantry, must somewhere or other in the English ciation of the names of plants. Aft far as Greek and Latin are concer are to us foreign languages, and, inc we derive many plant names fro But all modern languages except ou also foreign languages, and from t we derive many plant names. ground of consistency, therefore,

, in our English pronunciation of classi-
int names, we have to reproduce those
ar sounds which are not suggested to
the letters with which they are written,
ve should do precisely the same in the
f those plant names derived from other
n languages, which happen to be
n with letters having peculiar sounds
they do not bear in English.

, as far as my experience goes, no
h person who does not run the risk of
rightly considered pedantic gives to
names derived from modern foreign
ges those abnormal sounds which are
ggested by the letters as we pronounce
n English. In that respect we do just
people of other nationalities do when
ncing plant names. Take, for in-
, the plant name "Bejaria," called
he botanist Bejar. To pronounce this
name so as to give the "j" the very
ar sound which it has in the language
which it is derived, would, I am in-
l, be quite impossible for those who
not included Spanish in their list of
d languages, there being no similar
in English. Yet I venture to assert
y treating the letters as purely English
ve all pronounce the name uniformly.
whoever pronounces "Aubrietia" as
l of five syllables? And yet, to be quite
—not to say pedantic—we should, I
ormed, pronounce it "Au-bri-ay-ti-a"
he stress on the "ay," because by
g the "i" and "e" together into one
e (as in "believe") and pronouncing it
eetia" we proclaim our colossal
nce of the fact that the plant is named
Frenchman, Mons. Aubriet, in whose
n his native tongue, each vowel has its
t sound. During the war, at all
, no Englishman who wished to avoid
spicion of being considered a German
ould have referred to "the lady's ear-
" as "Fooxia," nor, as far as my ex-
e goes, does an Englishman ever do
et by reason of the derivation of
nsia," such pronunciation, I am in-
l, might be learnedly proved to be the
orrect one.

ink your readers will agree with me
ese examples, taken quite at random,
prove conclusively that by a thoroughly
shed English custom English people,
r pronunciation of plant names derived
modern foreign languages, do not re-
e those sounds which are peculiar and
adily suggested by the letters used in
mes. That point having been estab-
l argue thus. If we do not do this in
se of modern foreign languages, by
process of logic can we be called upon
it in the case of ancient ones? If
ia," then by all means "Ankusa,"
"Fewsha," then surely "Anchusa."

DAWLISH.

Gromwells (Lithospermum)

genus Lithospermum cannot be classed
st the easiest of alpines for the rock
, especially Lithospermum prostratum
s variety Heavenly Blue. Both are
r and an acquisition to the rockery.
plants have been a centre of con-
y as to the advisability of planting
n soils where lime is present or where
k garden is composed of limestone
ent in any shape or form for the roots
plants to come into contact with it.
ing to my observations the essential
s the position. They prefer a nook
the west, where the sun's rays will not
hem till after noon. They like to keep
rning dew on their foliage as long as
e. It acts as a natural syringing to
nts, and helps to keep the foliage soft
een. If the plants are occupying a
position the foliage and stems will soon
dry up, and they never seem to recover, no matter what treatment they receive afterwards. The compost they seem to revel in is one with a good percentage of leaf-mould, and the plants should not be planted too firmly, just sufficient to hold them in position.

R. C. JOLLIFFE.

Mealy bug on vines

I am gratified to find my paragraph on this has elicited considerable comment. It is noticeable that whilst this enemy to the Grape Vine still stalks the land old and proved obsolete remedies are still persisted in, including so-called antidotes, chiefly a mixture of soft-soap and sulphur, that was ever more of a deterrent to red-spider than mealy bug, whilst an up-to-date unfailing remedy is at hand. Among the several remedies advanced appear two new schools of thought, "Scrap 'em" and "Hose 'em." The former may be more or less expensive, inconvenient, and entailing loss of fruit for a period, and even then may not always fulfil the desired result, viz., freedom from mealy bug. I heard of a trade grower scrapping fine-bearing Vines prior to the war on the plea that English Grapes would never pay to grow again. He has since regretted it. Hosing, though excellent for keeping green-fly off rambler Roses outside, would not destroy mealy bug, which, falling on borders or other convenient surfaces, would breed again and come up in its thousands.

The hydrocyanic gas seems to have made a clean sweep after several attempts, but is dangerous to human life, whilst coal tar in the hands of experienced men resulted in successful extermination. Inexpensive and easy, both to mix and apply, is Richards' XL All Nicotine Insecticide. Perhaps a detailed after-history of the Vines I freed from mealy bug might be instructive, and enable readers to judge for themselves. These Vines filled two long, wide, rather lofty, spacious houses, each Vine filling its own rather large space, yielding heavy crops of fruit annually. It was a pity to scrap such without ample justification. Moreover, it would have entailed considerable expense, inconvenience, and loss. The tar remedy, practised for two years, made the young shoots brittle when the sun shone on the tarred rods. Still, from such large Vines I secured a crop. After the second season, Richards' XL All Nicotine Insecticide coming under my notice and neighbours using it with such convincing results, I annually dressed these Vines with it, both as a deterrent to bug and red-spider, and never saw the bug on them again, though in my charge 22 years subsequently. Being freed from the insect the Vines soon began to make over-abundant growth and foliage, and I had to deprive them of usual farmyard mulchings and restrict them to Thomson's Vine and plant manure, which balanced them. They included Black Hambro', Madresfield Court, Alicante, Gros Guillaume, Gros Maroc, Gros Colman, etc., and I usually had Grapes from June till April. These Vines were still yielding good crops a few years after I left them, and during the war provided fruit for our wounded soldiers in local and London hospitals, and, for all I know, may be still carrying good crops.

S. P.

58, Blandford Road, Beckenham.

Re Poisonous properties of Primula obconica

In the last few issues of your paper, of which I am an old reader, I have been interested in the articles under the above heading. I am very fond of this beautiful greenhouse plant, but am afraid I shall have to cease growing it, as it causes me agonising pain and irritation through coming into contact with it. When potting the plants I wear gloves, but if, when watering a collection of mixed plants my hand or arm comes into contact with Primula obconica, then I must suffer. This year I am growing the Eureka hybrid Primula, and was pleased to see Mr. W. E. Wright's note (page 161) that this variety, in his experience, is free from offence, and thanking him for his hint *re* smearing the hands and arms with soft soap. Am hoping, with this new variety, that my experience may be the same as his has been. In addition to my hands and arms itching and burning painfully, my eyes are always much swollen, too, and I always suffer most at night-time. At one place, while a journeyman, I was off work three weeks suffering from this rash and irritation. Those who are not affected could hardly believe how painful this can be. I see in this week's issue of GARDENING ILLUSTRATED (page 193) Mr. W. McG. is asking if those who are interested in the discussion would forward instances of those who handle this plant being affected. Information so obtained would help greatly in settling the matter, so am giving my own personal experience extending over some years.

F. RIDSDALE.

Wetherby, Yorks.

—— Being a regular reader of GARDENING ILLUSTRATED I have read with interest the discussion as to the alleged poisonous properties of Primula obconica. I myself have suffered from handling it, and had to go to a doctor. The head gardener I was under for 30 years was affected when handling the plants; also a young lady, the daughter of our then employer. Moreover, it always affects me. However, I am growing it for my present employer, but now, after potting them up, I rub an eczema ointment well over my hands and put a pair of woollen gloves on for the night, which gives relief and clears in about three days, but I always take care not to touch the foliage after potting, and take all old flowers off with a pair of scissors, as I think one cannot be too careful.

AN ENGLISH GARDENER.

—— I have been interested in the discussion *re* the poisonous properties of Primula obconica. Twenty-four years ago I was so severely attacked by this poisonous plant that I was attended by a doctor. He did not know what it was, neither did I, as I had not long started gardening. More than this, the attack went through my family, and it took me 15 years to get rid of its effect. I have not grown it since, except by special request. Another gardener told me it had no affect on him.

A. M'D.

Tobermory, Arg.

—— I have been much interested reading the recent remarks anent this useful flowering plant. As I have grown it more or less almost since it was introduced, perhaps I may be allowed to add my experiences regarding its alleged harmful qualities. My first acquaintance with Primula obconica was about 1884 or 1885, and it was a poor thing compared with the fine stocks now obtainable. During all the years I have handled it I have never had the least ill-effects from it, but an old friend, a gardener, could not touch it without paying the penalty of severe suffering. Even anyone shaking hands with him, if he had been handling plants, conveyed the irritation to him. Another instance was that of a gentleman by whom I was employed for some years. We had a nice batch of the Primula in the conservatory, and, of course, in the front of the stage. One day he inadvertently brushed some of the plants with his hand in passing, and next day was suffering badly, and told me to destroy them all. His lady, however, was particularly fond of them, and asked me to spare them and put them back from the front. I did so, and all went well for a few weeks, when, unfor-

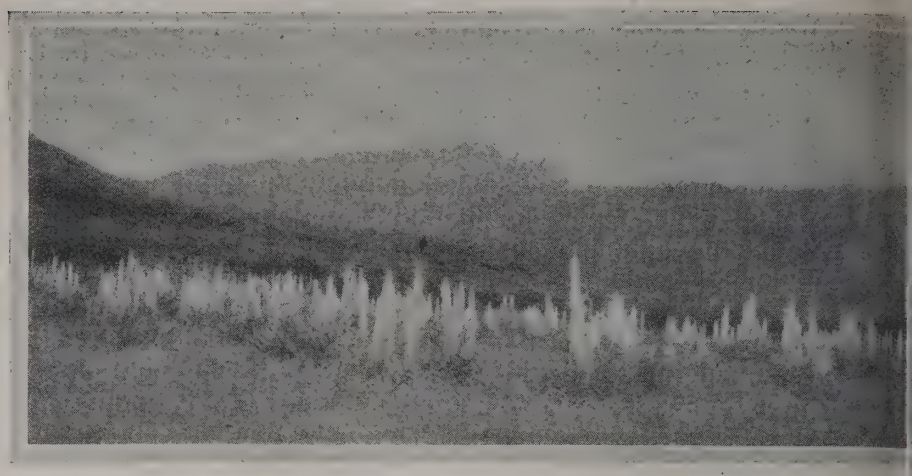
tunately, the gentleman accidentally touched them again. He told me that years before he had been working with some plants. It was a hot day and he had passed his hand through his hair, and also touched other parts of his body, and the agony he endured afterwards was terrible. These are the only two instances in my experience in which any harmful effects have been produced by contact with this useful plant. W. L.

Upperby Nurseries, Carlisle.

—— In response to Mr. McGuffog's request for data (issue March 27th, page 193) regarding the poisonous properties of Primula obconica, I will quote my own experience. In the spring of 1913 I went as a journeyman to a large estate in Yorkshire. In the greenhouse portion of the conservatory was a batch of P. obconica, and within a month, through merely handling them to clean the stages over and shift them about, I had an irritating rash covering both arms. Knowing at once the cause of this, I lost no time in visiting the local doctor, who, it appeared, had had similar cases before from the same gardens, and he gave me treatment which soon cleared the rash away. Although the later strains are supposed to be immune from this defect, ever since then I have been shy of this Primula, and only within the last two years, while in my present place, have I risked handling it again. Although at this later period I cannot say that I have suffered any ill-effect from it, I have now discarded it as being too risky.

Another gardener I know, who suffered through contact with it, had the rash not only upon the arms, but spread over the body, too. It is said that anyone in good general health is not affected in any way by this plant; it is certain that some can handle it with impunity, but when one finds by experience that a certain thing, be it food, drink, or a plant, does one a decided injury, it is a wise policy to leave it alone.

It is a great pity that such a plant should have this stigma attached to it, for the habit and free-flowering propensities leave nothing to be desired. It will be very interesting to hear the experiences of others on this question. G. H. M.



Rheum Alexandræ in Tibet

Some Flowers of Tibet

V.

(Continued from page 147.)

By F. Kingdon Ward

Capt. F. Kingdon Ward, who is writing this series of articles while travelling, left London on February 18th, for Burma, whence he will commence his ninth plant-hunting expedition in Asia. He proposes to explore a practically unknown part of Tibet, and at one period of his travels expects to be entirely out of touch with civilisation for a period of three or four months.

ONE of the most charming plants found in the dry region, and that at no great altitude, seeing that it generally flourished in the river gravel, was an Onosma. It had pale sky-blue flowers, translucent as stained glass, hanging like temple bells from the hoary stems, and with the light shining through them they looked perfectly delicious, the contrast between their frail beauty and the rather coarse, bristly stems and leaves being quaint. This plant grows in the poorest, driest, most barren soil imaginable, sometimes on the rocky slopes, with Thorn scrub, sometimes in har by the river, or even in pure sand at tude of 9,000 feet to 10,000 feet. Pr would not thank anybody for wat certainly not in the winter, though get rained on to some extent in the Drought and wind worry it not at flowers in July, and the seeds were the end of August, and the plants sl though I collected seed as late as week in November also. This Tibetan Onosma, growing erect, r paniculatum, from Western China, is a much bigger plant and it has red

On the gravelly flats where the grew amongst bushes of H Elæagnus, Tamarisk, and other shri several Boraginaceæ, such as Cynd amabile, with bright turquoise-blue and another larger and coarser s Onosma with purplish-violet flowers than either of these was a tiny Ery with flowers not much larger than head, but of a lovely pale enamel lected into a tight head and therefo visible. The plant grew only an inc high, just a wiry stem surmounted b blue powder-puff, but in such numbe carpet the brown soil. The rath leaves, covered with a delicate spid of white hair, lie flat on the ground two—the blue Onosma and t Erytrichium, the one with glassy flo the other with porcelain discs—are q class rock plants if only we can k dry at the roots. The rest of the either case, can look after itself, b supplied with hair to turn aside th raindrops.

In these same dry valleys amongs bushes and Borage blueness grow other notable plants. There is, for a large pink-flowered Androsace, r one rather of A. spinulifera, but much larger than that Chinese speci a Pineapple rosette of leaves sp several stems, sometimes as many dozen, each culminating in a mop flowers, some shade of pink, with

A field of Lilium hyacinthinum

eye. This eye is the least pleasant of the flower, which otherwise, in its st forms at any rate, is not a bad colour.

ugh growing in the shrub belt of the gion, this Androsace keeps entirely to ieltered slopes, where there are shade ver from Rhododendrons, Birches, and bushes. It has an immensely long, tap root, which plunges down into the arid, gravelly soil like an attenuated ; but, even so, it will not grow on the er windswept slopes, nor will it grow below 10,000 feet. It flowers in June, ight be recommended for the more un- ir nooks in the rock garden, being a showy thing with flower-stems some- 18 inches long.

wing with this last, but equally strictly d to the more open rocky slopes, which ed with a small pallid Iris, was a large a. Though growing only a foot high, and prickly were its Thistle-like leaves was quite impossible to pluck it with- earing leather gloves! Unfortunately, not see this plant in flower, as it ver, and indeed in fruit, by the time I ble to get back to it, but I gathered a seed, though most of the seed had y been jerked out of the stiff prickly s by the wind gusts and scattered l. The habit and size of the species st the pink-flowered M. Wallichiana Himalaya, which is in cultivation.

tly there was the big Incarvillea of the cky slopes, though this kept to rather elevations in the valleys, not appear- uch below 11,000 feet, and probably ling to 12,000 feet. The plant itself about 3 feet to 4 feet high, just one tall culm bearing a spire of blooms. But lant also I missed in flower, though I across it in fruit both in spring and m, the long stems fairly bristling with rrow beaked capsules which never open ently to discharge all the seeds. Can e I. lutea, a big species of Western , with rather muddy-yellow flowers ed with brown? Let us hope not. I. is a big, bad, bold-as-brass yahoo of a which refuses to flower in this country, ould not be worth growing if it did. curious, by the way, that while the looking I. Delavayi and I. brevipes, may be found in company with I. lutea hina way, flower freely under cultiva- I. lutea, though it grows robustly, re- to flower. As it is, it does not much , but a good yellow-flowered Incarvillea be a splendid prize. I have always ted that I did not get seed of my white- ed Incarvillea, of which I came across gle specimen. Let us pray that the Tibetan Incarvillea may turn out to be ellow, or white, and that it will flower.

llected seed of another Incarvillea on iteau at an altitude of 14,000 feet. This did not see in flower, but it looked like I. brevipes. Both species appear ver in July, or possibly as early as mid- depending on when the rainy season ences.

genus Polygonum has furnished several garden plants, and, of course, one met number of species in temperate Tibet. saw nothing particularly striking or there, and, consequently, brought back ed, being opposed to the principle of ng back seed of everything, good, bad, ifferent, hardy or soft, new or old.

ifrages, however, are another story. I ots, most of them in the alpine region, cks, naturally, and many of them so pecies already in cultivation that one not tell them apart. But there were species whose appearance was so un- that, despite the huge number of Saxifrages in commission, I felt justified in adding to their number.

Both belong, I think, to the section dactyloides (Mossy Saxifrages), the foliage forming more or less of a mat from which spring the short flower-stalks, each ending in a single nodding flower, but the flower-stems are leafy all the way up, and being very short—only about an inch high in the golden-yellow species—the effect is beautiful. The flowers are particularly large for the size of the plant in this one, and although it does not, in Nature, form large masses, there is no reason why it should not do so under cultivation. It likes shade—not heavy, but such as is afforded by a bank or the shadow of a bush, growing amongst the dwarf Rhododendron at 13,000 feet to 14,000 feet, sometimes in a rather gravelly soil with an admixture of loam or peat. The number is K.W. 5,979, and the species flowers in July.

The other is rather different, and, in fact, not very like a Mossy. The leafy stems are rather longer, quite 2 inches high, and the plants grow in little tufts rather than mats, and sometimes are even solitary. But the unique point about this species is the colour of the flower, which is not white or yellow, but purple, as in the section Bergenia (S. purpurascens, etc.). The small colonies of little leafy stems, with their nodding purple flowers, coyly drooping, are very charming, and the species sometimes grows with its blonde cousin. Elsewhere it may grow under rocks at a very considerable altitude, but it, too, requires shade. Like the last, it flowers in July, and its number is K.W. 5,912. Most of the Saxifrages are confined to the drier ranges, where there is plenty of openings for them. On the snow-bound ranges they are almost completely wanting, thanks to the overwhelming profusion of woody plants.

A wonderful rock plant which has rarely been seen in this country is Isopyrum grandiflorum, a mauve-flowered Ranunculaceous plant from rather lofty heights. Time and again seed has been sent to England, plants have been raised, have flowered, and have died. Once more the experiment is being made, this time with the first seed ever sent from Tibet at any rate, and there is a number of seedling plants in the country whose fate is still undecided. Isopyrum grandiflorum forms fluffy cushions of pale green Parsley-like foliage from amongst which spring the large mauve flowers, each on a trembling stalk. The whole usually hangs head downwards from a crack in the cliff, and is often impossible to reach. These plants, whose thick roots penetrate far into the cliff, must be of great age, and a big hanging bunch of this sort is certainly very beautiful, but I fear it is the kind of plant which will prove difficult in Britain—as it always has hitherto.

A violet-flowered plant of some merit which is, possibly, already in cultivation is Dracocephalum tanguticum. Like the last, it grows on gneiss cliffs on the Tibetan plateau, flowering during those two or three brief months when the plateau is not a howling wilderness, and even the desert is blossoming like the Rose. Another Labiate of the harsh, dry country, but found in the gravelly valleys rather than on the cliff lining, is a species of Salvia with large pale violet flowers.

No account of the Tibetan flora would be complete without some reference to the pink Martagon Lily. This grows in the Pine woods of the wetter river valleys, at altitudes below 10,000 feet, usually selecting some steep Bracken-clad slope, where, in the shade and warmth and moisture of August, it flowers gloriously. Some plants grow 4 feet high, carrying as many as 20 great big fragrant pink blooms, but the stems are unable to stand erect under this weight and lean down or loll against a bush. Finally, there is

Rheum nobile—a young plant

the giant Sorel (Rheum nobile), which grows scattered over the misty Rhododendron moorland, appearing above ground in June as soon as the snow has melted, and growing at such a prodigious rate that by August it stands 7 feet high sometimes, looking like a pale yellow Chinese pagoda. Unlike the Chinese R. Alexandræ, it does not grow in large colonies, but it is a bigger plant, and it looms through the smoking rain-cloud like a distant lighthouse. Perhaps this giant vegetable, like Gunnera, is more quaint and weird-looking than beautiful, but a garden with no queer thing in it would be oddly dull.

The Saxifrages

It does not fall to the lot of the majority of cottage gardeners to grow many of the Saxifrages, especially the newer kinds, but all are delicately beautiful, and one has to find an occasional bit of room, although some of them ramp away and encroach on other things. I have a stretch of S. Wallacei round one of my borders some 30 feet long that is a mass of green all through the year, except when it is a sheet of white. It makes a charming edging plant and will stand for years, and can be kept in its place by occasional trimming. I am rather bothered at times with ants, and the measures taken to get rid of them cause brown patches for a time, but a bit of fresh soil and pegging in from the sides soon fill the gaps. The most popular of all, so far as cottage gardens are concerned, is doubtless S. umbrosa, the old London Pride. It is nice in occasional clumps or as an edging, but is never seen to better advantage than among the hardy Ferns. When cut it stands well in water and is effective in dark vases associated with a bit of fine foliage.

E. B.

Planting Roses in Spring

ACCORDING to our experience it is quite as safe to plant Roses in spring as in autumn. If in autumn we could look forward to a mild winter, then I would plant early in November, but whether we plant in autumn or spring, there is always a certain amount of risk. If we plant in autumn, a severe winter may follow and injure the growth; and should a cold dry time immediately follow spring planting, a serious check will be experienced. The only point in favour of spring planting is that, if an unfavourable time should occur, the results are not likely to be so disastrous as a severe winter frost following autumn planting. If I had a choice of plants not in pots I should prefer spring planting—plants that had been lifted in November and carefully laid in by their heels in some sheltered corner all winter. Such plants would be better planted in the first or second week in April than at any time in March, and any pruning required should be done a fortnight before planting time. I have practised this plan more than once, both in the case of standards and dwarfs, and have proved the correctness of the statement, that root disturbance promotes root formation. If the plants are lifted in autumn and their roots well cared for it will be found in spring that they have been in an active state all winter, and will be furnished with many young fibres, and at the extremities newly-made white fleshy additions, which, if carefully preserved, will enable the plants, when planted, to start quickly into active growth. In dealing with such tender roots the work of planting must be done with care. The positions should be ready to receive them, and some finely-sifted soil must be ready to go both over and under them, when no fear of the result need be entertained. This plan seems to be the only one likely to lessen the risk of loss, either through severe winter frost or cold piercing March winds. The details to the inexperienced may appear to be rather troublesome, but in practice they are not so. The only addition to the labour is that of laying in the plants in November and preparing a bit of fine soil to go round the roots at planting time. Roses planted in the second week in April will not flower so early as established plants, but they will not be far behind those planted in winter. In regard to soil and position for standards especially, the best I ever saw were grown by the side of a main walk in a kitchen garden, the soil of which was deep and kept well manured. A quarter of a century ago it was a common practice to grow standard Roses in such positions. At that time cultivators appeared to recognise the principle that Roses required pure air and plenty of light, but it is too much the practice now to plant them in shrubbery and other borders, and to require the same soil to sustain an annual crop of other flowers at the same time, with the result that neither the Roses nor the flowers thrive in a satisfactory manner. It is a misfortune for standard Roses that their heads are so far their roots. The head in most cases a to monopolise all the care and attention, the roots are left to do the best they can is a natural outcome of the way in whi plant is grown. A dwarf Rose, on th trary, naturally protects its own roo branches being nearer the ground, and, fore, it is not possible to plant anythir near them, as is the case with st plants.

In all cases where the planting of grown in the open ground has been dela the present time great care is necess getting the roots out of the ground w little injury as possible, and also to s they are quickly replanted. It is alwa to plant when the ground is rather dr wet; when dry it can be trodden firmly the roots without danger of its being into a paste. Planting of Roses out that have been kept in pits or frames a ter or in any other glass structure sh deferred until the middle of May. Mea let the plants have all the air possible, they are not exposed to frost or cold winds. If planted out before that ti all probability the young and tender g will get injured by ungenial weather.

Noteworthy Rhododendron Speci

VISITORS to the recent fortnightly meetings of the Royal Horticultural Society have had the rare opportunity of seeing a number of Rhododendron species of exceptional interest and of great beauty. Some species from China have this year been shown in full flower for the first time in this country, and unusually high awards and honours have been bestowed upon them. Hitherto some of the Rhododendrons have been known to many only by name, and we owe a debt of gratitude to those who bring new and rare species to the notice public.

R. lacteum

On March 23rd this rare and exce handsome species was shown by Mr. Williams, Werrington Park, Laun Cornwall, when it received the high of First-class Certificate. We say, qualification, that this is the most b yellow-flowered Rhododendron we ha seen. It bears large shapely trus lemon-yellow flowers of luminous qu lieved by chocolate-coloured anthers large-flowered species was first discov Abbe Delavay in the Tali Range at tude of 12,000 feet and introduced in Forrest. The species is said to make some bush about 20 feet in height, spite the altitude we doubt if it is reall outside Devon, Cornwall, and other f places. The large leathery leaves green on the upper surface with grey coloured felt on the under side.

R. Sutchuenense

This is one of the best of the Rhododendrons, and it is doing well i gardens in this country, where Rhodo species are cherished. The illu shows a portion of a very fine group species, shown by Sir John Rams Bulstrode Park, Bucks, at Vincent on March 9th. It was a well-arran lection, in which the following Rh drons were conspicuous:—Thomso batum, and a vivid scarlet hybrid these two species, campanulatu Campbelli, Hodgsoni, R. Campbelli batum, and R. ciliatum. The cross R. Thomsoni and barbatum was ex ally fine. It was, we believe, the cross which gave the well-kno Shilsoni.

R. sino-grande

On March 9th Mr. G. H. Jol Trewithon, Probus, Cornwall, showe of this species, when it received t honour of a First-class Certificate. I bably the most magnificent of all dendron species. The truss we figu with carried over 50 blooms. R. sin has a tremendous inflorescence of w shaped flowers somewhat resembl flowers of R. grande, but much large ing from white to pale yellow, with

Rhododendron lacteum

The handsome species with lemon yellow flowers which gained the First Class Certificate when shown by Mr. A. M. Williams, Launceston, on March 23rd

Rhododendron sino-grande
Class Certificate. Shown by Mr. H. Johnstone, Probus, Cornwall

Rhododendron Sutchuenense
Shown in profusion by Sir John Ramsden, Bulstrode Park, Bucks

rimson-lake blotch which shows the corolla. In foliage R. sino- far excels any other Rhododendron o me. The very handsome and enor- ves seen surrounding the truss in the nying illustration were from 18 o 2 feet in length and 7 inches in though we are under the impression basal leaves are very much larger. es are of a bright dark green with ous white mid-rib on the upper sur- d it is well worth growing for its e foliage alone. The discovery of nificent species is to the credit of the , Forrest, who first found it in 1912 hewelli-Salween divide, Yunnan. In e habitat it makes a tree of about n height.

HERBERT COWLEY.

ALPINES

best time to plant Alpines

HOUGH planting time is associated stly with autumn, it is obvious that nting of the majority of alpines should until the early spring. There are reasons which substantiate this fact. od many cases once the rock garden eived its share of fresh plants and overhauling in the autumn it will not my further attention until the follow- ng, and in the meantime the action and rain has hoisted a good many of hly-planted inhabitants out of their positions, which has resulted in a large number of casualties. Also if the planting is left till late in the autumn the plants have not sufficient time to settle down in their new quarters before the bad weather is upon them, and they are literally washed to pieces. It matters not how firm they may have been planted. It will also be noticed that alpine plants do not increase in size until the following season, their growth being from May to August, some before and some after flowering, so that by planting in the early spring it is quite certain that the plants are alive and will grow away just as quickly, giving the same percentage of flowers with a minimum of risk in losing the plants, as the rockery is a source of interest in the spring, and many visits are made during a week, so that if a plant is in distress it will quickly receive attention. There are a few exceptions where it is essential for autumn planting, such as Arabis and Aubrietias and any other very early-flowering subjects, but as these are very hardy there is not much to fear.

R. C. JOLLIFFE.

The Hepatica

This delightful flower seems neglected in my garden, as it does not lend itself to the herbaceous border colour scheme that is in glory in autumn, and yet it is so long-suffering and hardy that I remember how gardeners would generally crop off all its leaves in autumn. They considered them "untidy," and still they bloomed at their accustomed season. In the open border the leaves do turn rusty in late winters I will own, but the remedy is to plant your Hepaticas in shade or on perpendicular banks as you would a Ramondia or prized Primula. Hepaticas are not natives in England, and so gardeners in general have no idea of the conditions where they grow wild. If they did they never could possibly plant them on a flat open border in the kitchen garden as they generally do. The Hepatica delights in growing and sowing itself on perpendicular banks; in short, in valleys where Hazel or Oak scrub thrive. Calcareous rocks or glacial drift that has consolidated into the consistency of soft rock are its chosen haunts, and never is it found in the open. The steeper the bank or the cliff the more does it luxuriate, and its beautifully-marked leaves are always ornamental. It would, I think, be a relief to a good many gardeners to make a rock garden of hardy plants that can take care of themselves and give a harvest of bloom in due season. Well, then, make a low wall of rough stone in some shady place, preferably a retaining wall that holds up a bank that is fairly moist, though the Hepatica endures drought in summer with equanimity provided it is in shade, and plant Hepaticas as you would Ramondias or other rock-plants. Once established they will take care of themselves. I should be interested to know if Hepaticas sow themselves under such conditions in England. I should imagine they would sow themselves as freely as they do in their native woods.

It is curious how they vary in colour. You may plant a bank with the wild blue Hepaticas and the seedlings will often turn out bright rose, purple, or white, but I never knew a white Hepatica seedling prove blue, while the pink or the blue are so variously tinted; but no doubt soil has much to do with variation in colour.

E. H. WOODALL.

Herbaceous Borders

WITH the wide choice of hardy herbaceous perennials available for our gardens to-day it is not surprising that the cult of herbaceous plants is an ever-growing one, and that this phase of modern gardening attracts a continuously widening circle of adherents. Not only does it enable the expense of artificial heating and other essentials in the growing of bedding plants to be dispensed with, but the results are also more pleasing, for even the gorgeous colouring and cleverly-arranged effects of the average bedding-out become monotonous in their uniformity, and cease to attract after the first flush of enthusiasm has worn off, whereas the greater variety, softer beauties, and graceful forms of the occupants of the herbaceous border provide a more interesting and lasting allurement.

By making a wise selection of plants and giving careful attention to grouping and combinations beautiful living pictures can be fashioned from comparatively little material where space is limited; and where ample space is available the scope offered in arrangement is very wide, for one can specialise in mixed borders, colour-scheme borders, either the blending or contrasting of colours, one-colour borders, or seasonal borders. In large gardens the latter scheme has much to recommend it, for it enables one to have a border at its best at varying seasons in which the plants can be left when on the wane, to be succeeded by some other border.

To plant and maintain in beauty a border with a good scheme of colour is by no means an easy task, and the devoting of certain borders to certain times of the year is a surer way of gaining success.

One-colour borders are a speciality of present-day gardening, and are very beautiful. What could be more charming than the blue border at the height of its season? If one enters the golden garden, even on a dull day, one gets the impression of going into sunshine. The grey garden on a summer evening is the acme of restfulness, while the scarlet garden is unique in its dazzling brightness. Much has been written on the relative merits of mixed borders and colour-scheme borders, and while each system has its adherents it is not wise to dogmatise on this point, for both serve their purpose in decorative gardening, and both are subject to a wide range of individual taste. A successful colour-scheme border ranks high in outdoor decorative art, and given all the necessary attributes, that is, ample space, boldness of design, skill in arrangement, wise choice of plants, and good cultivation, the creation of the most charming and beautiful pictures is possible. More experience and skill are necessary, however, to produce a colour-scheme border than a mixed border, and partial failure in the colour-scheme border is much more disappointing than in the mixed border; therefore it is obvious that the colour-scheme border should not be attempted unless the necessary attributes to success are there. The width of a border is an important factor in its effectiveness, particularly if a colour-scheme border is decided on. For a mixed border of miscellaneous plants a width of 6 feet or 8 feet may be practicable and give good results, but where a colour scheme is to be carried out a width of at least 12 feet is desirable if its full purpose is to be achieved.

It should be borne in mind that in arranging plants to create a definite colour display, one colour running into the other on more or less definite lines, it is the distant view that is the most effective, hence it is essential that ample width should be available to enable the planter to arrange his subjects in massive groups so that they carry their effect to the distance required. The groups should run rather lengthwise in the border than in round clumps or square blocks, as this planting system is much more effective. Moreover, when the border is getting past its best the appearance from the distant view is less broken when this kind of drift-planting is practised than it is when block-plan adopted. Care should be exercised t abrupt lines in the division of colours, effect is much more pleasing when an one colour is allowed to run well i main arrangement of the next colou planting of subjects on rigid lines ac to their heights should also be Plants of medium height should be well towards the front of the bo intervals, while moderately dwarf should be taken well back in other po The material available for colour-planting is ample for the production borders to suit every possible taste every range of colour. W. A

Pyrford Court, Woking.

The hardy flower border at Brackley Castle, Ballater, Scotland

Eriogonum umbellatum

There are several species, but, so am aware, the only one generally ob is E. umbellatum. It is one of the c tively few umbelliferous plants wort ing in the rock garden, where it soo masses of oval, downy, thick, gre with heads of yellow flowers. By i not of striking effect, but it may sociated with other subjects. I rec ing in a famous rock garden a ma umbellatum trailing down a promin of rockwork with, as its companions tia Dr. Mules and Alyssum saxatile June is given as the "book" tin umbellatum flowering, but it com in a sunny, warm place, and there flowers before the others go out c Other combinations will readily those who have gardens and who ha which would associate with this yellow-flowered plant.

Blood root (Sanguinaria cana

This is a distinct and beautiful pl ing in early spring solitary handso flowers on stems 4 inches to 6 inc It thrives in moist places in sand some shady nook associated wi dwarf-growing plants. H. S

Helenium pumilum and Its Companions

VERS of strong yellow colouring, pt with quite special manipulation, ot show well in photography, so that n planting of Helenium, below the ınd white Dahlias, does not have ect in the picture. It may be useful on some plants in the front edge that ood use in the regions of the border hite and yellow flowers predominate. the spike of Snapdragon at the f the picture is the variegated Mint, of the native, pleasantly-scented M. lia. The leaves have a wide, irregu- ıg of yellowish-white; in some cases nearly all yellowish-white. With well-known Golden-feathered Fever- ıe of it showing its white bloom with den centres, and some that have had ers cut away, displaying yellowish- ıves only. It is a good mixture, and r in the border the opposite side (out icture), where the same plants have ouring reinforced by the pure pale f Calceolaria amplexicaulis and the white-striped form of Glyceria , a much better striped grass than formerly common in gardens. Such ıg, with the larger yellow-flowered lants in good masses, prepares the the fullest enjoyment of the tender of the little bushes of Sea Lavender ely follow, and the other plants of r and cool purple colourings that are

Helenium pumilum and its companions

m. The second picture is of the rder some 10 yards further back, uch the same yellow colouring is re- Here some of the end plants of the rass are shown. On the left is a f the primrose-coloured African —not the kind sold as Lemon, but pale primrose colour. The bush on side of the picture is a golden ıs, as valuable for bright colour as in the border. These yellows are by the deep orange of the tall Marigold and the mahogany and gold h Marigolds both tall and dwarf. After these comes a delightful assemblage of the darkish coppery-pink Dahlia, Oban—always most precious, but, I believe, now discarded by nurseries—with Eupatorium purpureum and the reddish Atriplex hortensis, with, at the back, a tall old Dahlia of deepest claret colour; a mixture that delights all trained colour eyes. G. J.

Yellow in the flower border

Border Carnations

So many new varieties of the above have appeared during the last few years that, I suppose, sorts familiar to the older growers are now well-nigh forgotten, but we derived much pleasure from them, and many were really very shapely flowers, the plants of robust stocky habit and free-flowering. Mrs. Eric Hambro, Miss Audrey Campbell, Britannia, Cassandra, Carolus Duran, and Raby Castle were a few of the favourites, the last being tolerated on account of the wonderful freedom with which the flowers were produced, although at times it was a sad splitter. The old crimson and white Cloves were also favourites, and, once planted in suitable soil, were allowed to remain for years, the only after-treatment being an annual top-dressing and an occasional nipping in of straggling shoots. A great wealth of flower was obtained from these clumps, although individual blooms were, of course, hardly so large as from one-year-old plants.

The compost recommended in a recent article for layering is doubtless very suitable, but I found it a good plan to substitute spent Mushroom manure thoroughly broken up for leaf-soil. Given a thorough dressing of this it was surprising how long the moisture was retained—a great advantage in hot, dry seasons. There is no better compost than two parts friable loam and one of the Mushroom manure with a good dash of sand. Great care is necessary in lifting layers for planting. The young roots are very tender, and anything in the way of rough handling is apt to bruise and break them, and prevent plants from coming away kindly. E. Burrell.

Sedum cœruleum

The notice of lovers of rock gardens is drawn to the merits of the little Sedum cœruleum, an exquisite little annual with pale blue or light violet flowers. It should preferably be sown thinly where it is to bloom about April and will flower the same year. It blooms when only an inch or two above the ground, but increases slightly in height as the flowers develop. It is never more than a few inches high, and is a lovely successor to some of the early bulbs.

Roses

Any planting that has been delayed should be done in the next week or so, and when set they may be cut down to within two buds of the ground. The hardier kinds, such as climbers, Hybrid Teas, and Perpetuals, may now be pruned. Do not be afraid to cut them well back, and remove all weakly growth to the base.

Persian Cyclamens

VERY few pot plants give such a generous yield and so lengthy a display of bloom as greenhouse Cyclamens. I suppose Primula obconica and P. malacoides run them pretty close, and that is why these plants are so suitable for people who have only a limited area of glass. I think the secret of the successful culture of Cyclamen persicum is to grow the plants without artificial heat right from the birth of the seedling to the flowering stage. Any attempt to hasten germination or to coddle the seedlings generally ends in disaster. Of course, frost must be excluded from the house in which Cyclamens are growing, but the temperature need never be more than about 45 to 50 degs. F. Normally, the seeds take about five weeks to germinate, and if you have sown good seeds and are possessed of a reasonable amount of patience you may expect to see the seedlings emerge about that time.

A good time to sow Cyclamen persicum is during July and August. Successional sowings made in these two months will give plants to flower from about November onwards the year following. August-sown seeds should give nice-flowering plants to bring into the house for Christmas. The seeds are best sown in shallow pans in a compost of two parts sandy loam to one of leaf-mould. The pans must be well drained and the soil nicely firmed. They should be covered with glass, shaded from the light, and the soil kept uniformly moist. When the seedlings have made two or three seed leaves they will be large enough for pricking off. They may be put again into pans, or, if preferred, into 5-inch pots, using a similar compost to that in which the seeds were sown. The next shift may be made into 3-inch pots, and this time a larger proportion of loam should be used. Wooden meat-skewers are very handy for pricking off the seedlings, and when performing this operation care must be taken not to bury the tiny corms in the soil. The final shift should be into 5-inch pots. A good mixture for this purpose may be made up of two parts strong fibrous loam and one part each of leaf-mould, decayed manure, and coarse sand. When I have got a really good fat loam I usually omit the manure. Growers on a large scale generally do the same. At the final potting the corms should just rest in a slight declivity on the surface of the soil. The plants like plenty of air at all times, and if they are syringed in the evenings during hot weather the foliage will remain healthy and free from the attacks of insect pests. H. GREAVES.

A Cyclamen of the Caledonia strain

This variety named Fuchsia is a rich red-purple. Note the sturdy habit of the plant and the self-supporting flowers

Tuberous Begonias

The seeds of these and Gloxinias are almost as small as grains of dust, yet in the course of six months from the date of sowing the seeds plants 1 foot high and nearly as wide, bearing large handsome flowers, may be obtained. The plants are useful for furnishing the greenhouse as well as for filling flower-beds.

There should not be any loss of valuable time at this stage of the plant's growth. Pots or pans should be employed in preference to boxes, as the moisture surrounding the seedlings in them is more constant than in dry boxes. The pans and crocks should be washed and dried. An ideal compost for an amateur to use is one of good fibrous loam and leaf-soil in equal proportions, with a small quantity of coarse silver sand. I do not use peat as it gets very dry suddenly, sometimes, and then the seedlings die off wholesale.

Three-parts fill the pan with the compost, level and firm it, then apply wa hour afterwards scatter a thin laye sand on the surface. This will e cultivator to see the dust-like se gently shakes them from the pack on the surface.

More water is not required at t as the moistness of the bulk of permeate the sand and seeds, too. sheet of glass on the pan and so paper. A shelf or front stage in house will be a suitable position fo If the soil in it is becoming dry g merse it in tepid water long enou rising water to darken the surfa soil, then as gently lift out the pa water in this way as long as the seedlings are kept in the pan.

Fill other pans or boxes now in way and transplant the seedling apart on the surface of the damp s more transplant before the seedling overcrowded, and then pot them s or, if intended for the flower gar fully transplant them 3 inches a prepared bed in a frame.

While young, some shading fro sunshine is very beneficial. The success lies in keeping the plants steadily to the flowering stage.

GEO. C

Greenhouse Plumbago

PLUMBAGO ROSEA, with it coloured spikes of flowers, is v ing during winter. To sec examples for winter flowering it i raise a stock annually from cutting strike readily enough in the ordinary is best to put them in before th March. They should be nice bu plants, and ready to shift on into 6-inch pots early in the summer. give them more than two shifts, from the cutting pot into small si from these into their flowering po cuttings, after having been potted put back into the propagating ho warm, moist pit. They soon mak and after they have made 6 inches o are pinched back. The buds soon p when they are removed to a shelf glass, where, with increased light the growth is sturdy, the plants req further stopping. Although a stove an early start is made as advise during summer do well in a pit, ing the sun's heat by shutting up ea afternoon. Plants grown in that w shorter, sturdier growth than thos entirely in the stove, and the chances insects will be less likely to give tro housing in the autumn. A point o ance is that the same plants will giv successive crops of flowers if the spi nearly over are cut off. In a week fresh crop of flower-spikes is prod second crop often proving better first, the spikes not only bein numerous but denser. The chief co in the compost should be loam, avo peat. The next Plumbago is the we light blue-flowered

P. CAPENSIS. Provided frost is ex is perfectly at home in the greenho it does well as a stove plant, and planted out in the open in summer if prepared, where it gives a very choi colour. The stock should be renew cuttings annually. Select stubby sid and then deal with them in exa same manner as for Verbenas and p a like character. The shoots should without being hard, for when too s quickly decay. Instead of allowing remain in the cutting pots all the wi them off singly into 3-inch pots whe

in a warm greenhouse where they full exposure to light, combined derate amount of air without being o cold draughts. As soon as the ell established in the small pots nip oints of the shoots and place on a the glass in a greenhouse or pit enial growing temperature such as to Primulas, Cyclamens, etc., is d. Early in March shift on the k, the weakest plants into pots one the strongest into two sizes larger, in a warm corner of the green- On bright days syringe the plants and afternoon, and if grown in a up early to "bottle up" as much sun-heat as possible. During the day admit an abundant circulation of air to ensure a sturdy, well-matured growth.

About a month after the spring shift pinch the tops of all free-growing shoots, which is all the stopping they will require. Each shoot will soon produce several breaks, and as they progress must be tied out regularly, so that each may have its share of light and air. After the middle of May the plants can be either grown in a cool greenhouse or in a frame, and the lights drawn off during the day in warm weather. A compost I find that suits them remarkably well consists of good turfy loam, with a moderate proportion of peat, rotten dung, and silver sand. As soon as the flowering pots are full of roots weak liquid manure is substituted for clear water. Plants managed as I have advised will make handsome specimens 2 feet in diameter by July, when they will commence to flower and be extremely useful for conservatory decoration. The value of the plant is by no means confined to pots, as it flowers well in the open air in summer provided the plants are properly hardened off before planting out the first week in June.

The only other species worth noting for indoor work is P. zeylanica. It is an East Indian species, and like P. rosea it requires warm treatment. It is, however, valuable on account of its flowers being white. F. H.

REMINDERS FOR THE WEEK

hern and Midland

an exceedingly useful vegetable at s of the year, and if a drill or so of -seeded is sown at intervals during er a succession of succulent leaves pt up. It is useful as a catchcrop the rows of Runner Beans, tall- eas, or on the ridges of the Celery

g of Turnip-rooted Beet made now de nice roots for autumn and early se. The maincrop should not be il the latter part of the month, as are liable to become too large for use. Beet should not be sown on anured ground.

sowing should be made about this e a succession of pods is to be main- A good variety for this sowing is Pea that never fails on ground that Peas at all. Thin sowing at this ongly advocated, as where the seed in anyhow the plants become over- and not strong and productive. es to 3 inches from seed to seed is tance.

le Marrow

o early to attempt to sow the seeds en yet, but where there is a warm e or frame to hand a few seeds may in pots or boxes for planting out at f May. These will provide plants give an early crop.

lanted fruit trees

the best time to prune the trees that ted during the autumn and winter. s now commencing, and it is easy to that are alive and those that are ny leave their newly-planted trees the first season, with disastrous re- ut them back to at least half-way of th made last season, and mulch the round them.

and Nectarines

m southern walls the trees are now oung growth, so disbudding should e at an early stage. The first to be are all those that are growing to- e wall. This work should not be l at once, but spread over several It is well to keep the covering over them at night until all danger frosts is over.

ns

auty of these is over, and there is no hy the corms should not be grown ve a fine display again in the coming The plants should be grown on a f in the greenhouse, watering for eeks, when they should be given a rest, gradually reducing the water supply as the foliage changes colour.

Liliums

Those who started the bulbs in the greenhouse during February should now remove them to a cold frame for several weeks, after which they may be plunged in a bed of ashes in a sheltered spot, where they may be grown during the summer.

Roses

All pruning should now be completed as soon as possible and the beds given their general forking and tidying up. Many are unaware of the value of a dressing of soot and bone-meal given to the beds at this date. It is a welcome change to the constant dressings of farmyard manure.

Bulbs after forcing

In many cases, once the flowers are over, no more is thought of them, whereas if they are gradually ripened off and planted out there is every chance of them flowering again in future seasons. This particularly applies to the various Daffodils. W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Fruit houses

Figs, now growing rapidly, must be well treated, and moisture must not be lacking. Stop the shoots when the fourth or fifth leaf has been made in order that the embryo fruits which form the second crop may be developed. Occasional watering with a weak solution of nitrate of soda will be found beneficial. There must be no neglect of detail in the Peach-houses. The young growths should be kept thin and regularly and neatly tied in, arranging the branches so that the fruits may receive the maximum amount of sun. Syringe freely, otherwise not only aphis but, what is worse, red-spider will speedily obtain a footing. See that the borders do not become too dry. As soon as Grape-thinning is completed in the early house some good fertiliser ought to be given. This may be worked in with a rake, after which a thorough soaking with tepid water should be applied. Ventilate with judgment, and damp the fire down on bright days.

Tomatoes

After the first truss of fruit is set a top-dressing may safely be given to plants in pots or in boxes. This ought to carry them along until the desired number of bunches has been secured. After the plants are stopped it is time enough to think of liquid-manure or of chemical aids. Overfed plants are very apt to produce cracked fruits. Keep all axillary growth rigidly suppressed, and use every endeavour to get rid of white fly, or to keep that pest within bounds where it exists.

Rock garden

The rock garden now grows attractive. The hoe cannot, as a rule, be put to work in the rock garden, but if it be at all possible to spare the time a good hand-weeding will keep things right for quite a considerable time.

Herbaceous borders

Now that growth is well advanced the borders may safely be broken down with the hoe. Prior to this, however, the needful supports for the plants should be placed in position. It is folly to wait, before staking, till such plants as, for instance, Delphiniums, have been blown over and twisted. After this takes place it is hopeless to expect that a neat job can be made. Vacant places may be marked for Dahlias and other seasonal plants, and good colonies of hardy annuals are always effective in herbaceous borders, especially near the front.

Herbs

If the herb border has not yet been attended to, the work must not be longer delayed. Old and worn-out plants should be rooted out and replaced by younger and more vigorous pieces. Cuttings of Sage, Mint, and Tarragon root freely at this season, and seeds of Lavender, Thyme, Rosemary, Basil, Marjoram, and Summer Savory, if sown in a little heat, will provide plenty of plants for putting out after danger from frost has gone.

Sweet Peas

It is yet too soon to think of planting out Sweet Peas which have been raised in pots or in boxes. They ought, however, to be undergoing a thorough hardening off in cold frames from which, except when frost threatens, the sashes are removed. Do not let the young plants feel, at any time, the want of water, and, if it be necessary, place a few small, spriggy stakes, such as may be got from an old Birch-broom, round the seedlings in order that they may be kept erect.

Seeds and seedlings

It is almost unnecessary to say that sowing and pricking off must be timeously attended to. In the case of seedlings which, owing to thick sowing, are crowded, damping is certain to occur unless pricking off is promptly attended to. I incline to think that if the soil in seed-pans be kept at a uniform state of moisture there will be little or no damping—which is, of course, a contagious fungus. Seed pans and boxes, therefore, may be sprinkled with a fine rose twice daily—sprinkled, as distinct from watering.

Kitchen garden

Successional sowings of all kinds of vegetable seeds will, of course, receive attention. No one has ever too many Peas. To do them well, nothing is better than sowing in trenches previously prepared, late and early varieties alike. Catch crops of Spinach may be sown between the lines. Prick off Celery, remembering that, from seed-pan to trench, no scarcity of moisture is permissible.

W. McGuffog.

Mabie Gardens, Kirkcudbrightshire.

"Spring Round the Corner"

By Lady Byng of Vimy, Government House, Ottawa

THE late March days are long-drawn-out in Eastern Canada now, and creeping springwards, all too slowly for my mood. There is nothing so trying in the long Canadian winter as these days with a hot, brilliant sun, cloudless skies, and long opalescent evenings. At home one can, at this time of year, slip out into the garden for half an hour or so and see blossoms pushing through the ground; indeed, the earliest Crocuses and Daffodils will be blooming in favoured spots and Primroses dappling the ditches. Here it is still necessary to "dress" for going out, which means adding anything from 10 lbs. to 15 lbs. extra weight of thick clothing and overshoes, and who can or will do that when it is still too cold to potter about, and if you potter there is nothing to see but a landscape—lovely, indeed—and buried under snow? Still, even so, one is beginning to sense that spring, somehow, somewhere, is getting within hail, for the buds on the Maple-trees are fattening, there is a gilding of the Willow-stems, despite the fact that the last days of February and the first few of March brought an added 30 inches of snow to that which the winter had already provided. With all this, spring is within measurable distance, and one begins to fret for the sight and sound of birds, for the flash of the blue jay, jewel of the woods, the mewing of cat-birds in the bushes, the arrogant strut of American robins on the lawn, the animated conversazione of migrating wild canaries, pausing on the Elm outside my window at Government House. They mean so much in themselves and still more as the harbingers of that floral festival that satisfies even horticultural gluttons like myself!

In the days that will come before long the Gatineau Hills, now tinted every shade from deepest indigo to warm purple in the sun, will deck themselves with a satisfying glory of bloom. Blue, mauve, pink, and white Hepaticas will fill stretches of sparse woodland, and Epigæa repens trail its fragrant trusses of waxen blooms over damp ground, though, alas! in the vicinity of towns the depredations of flower-sellers have exterminated it. Bloodroot, golden-anthered, snowy-flowered, its grey-green foliage gradually unfurling, will circle the striated limestone rocks of the Laurentians, Uvularias, frail, golden-belled, will nod in the breeze, and Erythronium Americanum rise from a carpet of leaves spotted like a leopard, while the rich cream of Dutchman's Breeches (Dicentra Cucullaria) will peep from rocky crevices incapable, one would think, of holding enough soil for their luxuriant growth or, for that, of the nodding gold and crimson bells of its neighbour, Aquilegia canadensis.

Far and wide, throughout the broken shade of the still, leafless woodlands, will come drifts of Trillium (grandiflorum, undulatum, cernuum), the last rank-smelling but handsome in its wine-coloured garb that accentuates the spotless purity of its neighbours or the tender rose-pink that spreads over them as they blush at the first touch of death. No other flower that I can think of is enhanced by death as the Trillium is.

In wet corners the purple-red streaked cups of the Skunk Cabbage (Symplocarpus fœtidus) will uprear themselves beside their tightly-folded guard of foliage that, with summer days, will expand to huge leaves measuring up to 2 feet or even 3 feet in length, while Jack-in-the-Pulpit (Arisœma triphyllum) is another inhabitant of wet ground.

Wild Ginger (Asarum canadense), quaint brownish-purple, sac-shaped blooms, will smile from the ground itself; Spring Beauty (Claytonia Virginica), incredibly frail-looking, braves the chill of Canadian April; Thalictrums (dioicum and thalictroides), sway beside streams; while such shrub-like plants as Solomon's Seal (Polygonatum biflorum), Blue Cohosh (Caulophyllum thalictroides), and Bane-berries (Actea alba) stand forth with their spire-like foliage. Mayapple (Podophyllum peltatum) stretching far and wide in open woodlands and every bank tangled by Tiarellas or Mitreworts, with Saxifrages and Cresses among bare-looking rocks, and Dentaria diphylla nestling in more sheltered crevices. These are but a few of the beauties which the next six weeks will bring, as through the woods comes the pæan of little streams released from the frozen bondage of icy winter, and running through banks fringed by tightly-curled fronds of Adiantum pedatum, Aspidiums, Osmundas, and heaven knows how many other Ferns and deep carpets of Mosses, some reminding one of miniature Christmas-trees, others, like the familiar Stagshorn, flinging yard-long trails over the ground, from which, in a short time, will arise a glory of Violets in every conceivable shade of lilac, blue, purple, and white, as well as the downy, yellow pubescens, which spins out the Violet season into early July, when the Lady's Slipper Orchids, or "Sabots de la Vierge" as the "habitant" calls them, begin to bloom in remote corners beside little lakes tucked away in deep Hemlock forests. There many other varieties of Orchids delight the heart, though they are hard to find, and long hours have I tramped and hunted in vain, to enjoy all the more the delight of a discovery of these adorable plants beside some silent pool-haunt of loons and wild duck, where beavers and squirrels reign supreme, deer come to drink, and a stealthy fox slinks away through the underbush. But you need time for all this, time to hunt for plants, time to lie up and wait for the wild creatures, because they are timid these denizens of the forests, and I, in an official and strenuous life, get all too little leisure for these trips far from human habitation.

By mid-June the Eastern woods grow too dense for bloom, so the prairies and open spaces of moor and swamp begin to spin the floral chain with wild Roses, Loniceras, Kalmia angustifolia, Ledums, Vacciniums, Sarracenias, Canada Lilies, and all manner of other beauties. The Rockies deck themselves with Saxifrages, Drabas, Phloxes, Gaultheria, Pentstemons in marvellous colours, Arnicas, Valerians, Cypripedium montanum, Passerinum, gorgeous Oxytropes and Vetches, besides hundreds of other things that would far outrun the space the Editor could allow me!

But all that is away ahead—in summer—and my pen has bolted from the snow outside, and the strong sun throwing gorgeous blue shadows on the white ground. It is still winter, though my mind, like a restless gull, keeps wheeling round the promise of spring. Spring tucked away round the corner of tomorrow, with armfuls of blossom that will burst on one's astonished sight with a speed so unlike our sober English spring when, with due deliberation, Snowdrops, Aconites, Daffodils, Primroses, and Anemones come into bloom sedately, as become the flowers of an old land. Here in a young, virile land Nature bursts into a reckless florescence, rushing into bloom in the orgy of a short and almost tropical summer, during which plants must mature, increase, and multiply before the premature frosts of a flamboyant autumn nips their beauty. But why t autumn when spring is still hiding rou corner? When will it burst upon us? will it step forth loaded with all its That is the engrossing question to-da the snow still deep on the ground a trees gaunt and leafless in the Maple

BEES

OUT-OF-DOOR work in the apia mences, as a rule, about the mi April. On the first warm day af middle of this month the bee-keeper make a thorough examination of his c The condition of his stocks will probab considerably. Much will have depend the quality of the queens. It does the ordinary bee-keeper to tinker wit lots, those in which the bees are not c five combs are best joined up. We mu strong colonies to take advantage honey-flow, and it is very importa colonies should be as strong as possi at the time when the flow commences will vary in different localities, an bee-keeper should make a study of the producing flowers in his district (bee in a radius of about 2 miles), and man apiary accordingly.

In the case of weak stocks, the s way of uniting is by what is known brown-paper method. The two hive joined up must first of all be brou gether and placed side by side. Bee position and not their individual hi these must be moved gradually, no than 3 feet at a time, and only in th ings of days on which the bees hav flying, otherwise a number of bees lost. It is best to allow the hives to stationary for two consecutive days. brought the hives into position select queen and destroy the other, then sheet of thin brown-paper above the chamber of the queenless lot, havi made about half-a-dozen small holes ⅛ inch in diameter, in the paper, an account must the holes be large eno the bees to get through. The brood-c containing the bees with queen is ther above the perforated paper, the quilts and the hive closed down and left al four or five days.

The above operation should always formed in the evening after the bee ceased flying, and with as little dist as possible. Use little or no smok one colony should have been de-quee previous day.

The bees in the two brood-chambe in the course of two or three days, h larged the holes in the brown-pape ciently for them to pass freely up an and as by this time they will have each other's scent no fighting will tal and they will unite amicably.

After the fifth day the upper brood-c and paper can be removed and the b combs crowded into the lower compa

It is very important never to distu too early in the year when the weathe suitable. A hive manipulated on a c in April often causes the bees to their queen. A number will cluste her in a tight ball, and unless rescue suffocated. If this should happen t thing the bee-keeper can do to save he to drop the cluster of bees into a b tepid water; the bees will immediately out on the surface, and if one is qu queen can be picked out. She must replaced on a comb, the hive closed once, and the bees not disturbed ag several days.

If on the first examination of your

that any of the combs contain much tores it will stimulate the bees if slightly bruised or scratched. It s happens, though not often, that n is hampered in the late spring, a shortage of empty cells in which The bruising of the sealed comb will bees to empty these cells and hence queen more room.

the beginning of May every hive ave had its spring-cleaning. The he frames must be scraped and all nb and propolis removed, the floor-leaned, and, where necessary, the ewed.

this properly a spare empty hive is essary. The frames, when cleaned, moved into the fresh hive, which, of s placed on the original stand, and in which the bees have wintered can ughly cleaned up and used for the ny, and so on throughout the apiary. ould be painted every second year, then last a lifetime.

sure that your frames and division boards can be moved easily. A little vaseline rubbed down the sides of the division boards and along the metal runners below the lugs of the frames facilitates matters; in fact, a pot of vaseline should always be handy in every apiary; its use around the edges of queen excluders, division boards, super-clearers, etc., makes manipulation easy, and means less disturbance to the bees and, incidentally, saves the bee-keeper many stings.

Owing to the reckless importation of Italian queens by some unscrupulous dealers the disease known as Foul Brood has become prevalent in some districts again. If, upon spring examination of the brood-chamber, the novice is at all doubtful as to the health of his colony, an expert should be called in at once. This disease is very infectious, and one diseased stock may, in the course of the season, infect the whole apiary. No hive that has contained diseased bees should be used again until it has been properly sterilised.

L. Bigg-Witiher.

Wells.

Bottom-heat for Cucumbers

purely artificial character of the ate produced in forcing houses by s of fire-heat and consequent need of t supply of atmospheric moisture to its arid tendencies in order to en-ething like natural conditions is, apt to be overlooked. All who have such houses know that close atten-what is called damping down, or g periodically paths and surfaces in uses with water, contributes in no ree to the health and cleanliness of own in them, and no plant is more by that attention than the Cucum-e none will sooner suffer from any l neglect of this particular item of n. Drought, either at the roots or r, and too high night temperatures wo chief predisposing causes which e Cucumber an easy prey to its most me and mischievous insect enemy, . We used to find it difficult, even ful attention, to escape red-spider in here Cucumbers were grown con-ill means were taken to increase and regular supply of moisture at all the air. One side of the house is ated by means of a cemented slate mber, through which passes a flow n 4½-inch hot-water pipe, the heat gulated at will by a valve. Over led in the covering slates of this tank rain-pipes are fixed vertically at these being cemented against the igh retaining wall for the soil bed, built on the top of the tank. Under agement there is a constant escape of pour off the gently-heated water ne of these pipes, the number of s been increased with advantage. have practised the plan of replenish-underneath tank partly with liquid-as well as keeping the movable cast-orating troughs placed on the pipes dy of the house always filled with , there has been complete immunity -spider. Now that is a point worth and something to be thankful for. ure-water used is that made from sheep's droppings, of which a con-supply is always kept brewing for other watering purposes, and no e Cucumbers derive invigorating om its effects. There is thus main-necessary degree of humidity in the rresponding with the amount of heat es; excessive transpiration at night weakening results are avoided; besides, the nutritive properties of the stimulating liquid gradually evaporating into the air of the house present an ever-present element of atmospheric food which I believe the Cucumber capable of absorbing by means of its leaves. Experience leads me to think that the method of bottom heating here described is the best for all-the-year-round Cucumbers in houses; the expense of first construction is heavy, but the after advantages with a minimum of trouble are many. A moist, genial, steady heat, alterable by the touch of a valve, can at all times be assured, while the employment of liquid-manure in moderation compensates for the advantages arising from fermenting material often renewed, with its attendant litter and inconvenience.

M.

Asparagus planting

At this season when ground is being prepared or is already prepared for Asparagus I should like to give a word of warning and say do not be in a hurry to plant. Rather wait until the middle or end of April for the shoots to get well advanced—12 inches to 18 inches high—thus ensuring finer weather and more warmth in the ground. It will be a surprise to many who have not tried this plan how the young plants will grow away without a check. Planting may be continued up till midsummer if there are vacancies to fill in old beds and provided there is a supply of good home-grown plants to draw from. Staking, watering, and mulching will be necessary for this late planting. I always sow two packets of Argenteuil seed each year, believing it to be a better strain than home-grown seed. Having paid considerable attention to the cultivation of Asparagus now for a good many years, I must confess that the last two or three years have quite convinced me that early planting is a mistake, *i.e.*, as soon as the shoots begin to start, which sometimes takes place at the end of a fine February. If plants are put out thus early, should March and the early part of April prove wet and cold, the broken roots inevitably decay, and the ground instead of being filled with flourishing plants the first season will have to be replanted the following spring, thus losing a year through one's impatience to plant before the season was advanced enough.

Another point I would call attention to. It has gradually dawned on me that, as a rule, planters do not know what kind of plant they are planting, whether it is one that is going to bear a heavy crop of useless seed or seedless stems. Look over an Asparagus-bed in the autumn and note the most vigorous plants with the greatest number of shoots; they will be found in every case without a seed. Some of those laden with seed will have strong stems, but very few in number. The plants that have produced shoots so freely after cutting was over must have in store more buds for the next season's yield. The system in future I have marked out is to transplant my yearling plants into rows 18 inches apart, and during the second year's growth to mark the plants which are bearing seed and those not. I am certain that these heavy crops of useless seed are very exhausting to the plants and seriously detract from the number of heads cut the following season, and the surer the way we have of excluding these seed-producing plants from our plantations so much the better for the chances of large and succulent heads, and plenty of them. The French method of growing the Asparagus in single rows in shallow trenches is much the most conducive to good cultivation and the production of fine Asparagus. But after standing several years the plants spread over so much ground that it is better to make new plantations from time to time.

W. A.

The indispensable Curled Kales

The winter of 1925-6, with its spells of sharp frost and snowstorms in November, January, and part of February, has proved again the value of the hardier Kales, especially the Curled. All the Broccolis, including the early-sprouting, were killed; at least, there hardly remains 5 per cent. of the plants, and many of the later sorts are rather badly nipped. As a compensation for this slaughter it is gratifying to find the small quarter devoted to hardy Kales looking fresh and green, and I am able to pick a nice tender dish of sprouts when required, although the biting winds lately experienced (March 23rd) have greatly checked growth. Of the many different types I like a good strain of Green Curled best of all, not the tallest, which is apt to be knocked about by strong winds in exposed situations, or the dwarfest, but a strain of medium height, sturdy, and compact, averaging about 30 inches. During the many years this has been grown I never remember its loss or partial loss except on two occasions, when the glass went down to zero for two or three nights following a heavy fall of snow. The broad-leaved types, as represented by the Asparagus Kale, are very satisfactory from a quality standpoint, but do not stand over-well on some soils, and are apt to collapse unexpectedly after forming bushy heads.

E. Burrell.

Potato Golden Wonder

A dish of Golden Wonder Potatoes staged at an exhibition lately excited some comment owing to their peculiar colour. It is an old sort, and, in the matter of size, falls short in comparison to many others, but it has other qualities which ought not to be lost sight of. It is a good cropper, especially on sandy soil, a splendid keeper, and is at its best from Christmas onwards. As a general rule, it is not subject to disease, and as a family Potato is one worth growing.

Midlander.

Potato wart disease

The Minister of Agriculture has approved as immune from wart disease of Potatoes (Synchytrium endobioticum) for the purposes of the Wart Disease of Potatoes Order, 1923, the following additional varieties of Potatoes:—Celurca, Dunaverney, Grannispud, The Mac, Main's Triumph, Response, and Wonderful. Details of the characteristics of these varieties are given in the Ministry's

"Journal" for March, 1926. A complete list of the names of the varieties of Potatoes officially approved as immune from wart disease may be obtained on application to the Offices of the Ministry of Agriculture, 10, Whitehall Place, S.W.

Potatoes in pots

It is doubtful if Potatoes in pots are, strictly speaking, a profitable crop, but that they can be hurried along for use at any given date is certainly a point in their favour. Growth now being well advanced, the pots must be top-dressed to within an inch of the top with good, light soil, to which I like to add a suspicion (no more) of soot and a little of a fertiliser rich in potash. A cool house or corridor is now the best place for Potatoes in pots. M.

Tomatoes: Notes and notions

It is generally recognised amongst growers of Tomatoes that, in giving them their final shift under glass, it is better, if manure is used at all, to do so very sparingly, and not to overburden plants at the outset with a quantity of soil. It is immaterial whether, in the last removal, pots or boxes are used so long as they are sufficiently drained. The compost I have found the best is one confined to partly-decayed fibrous loam and sand, with the addition of a little superphosphate.

So far as regards the culture of Tomatoes in the first lap of the final stage, experience has long since proved that plain living invariably gives the best results, and that it is better to eliminate manure entirely until after the first truss of fruit has set. Anxious to promote rapid growth, one sometimes meets with those who use manure in some form in finally potting their plants, but such a practice is not calculated to yield so large a quantity of fruit, and I am convinced that the best results are to be had after the first truss has set. Then one may apply it in the form of a top-dressing, pieces of turf chopped up with diluted cow or sheep droppings, alternated, after a week, with guano, Clay's or some other approved fertiliser, for Tomatoes respond to a change of food.

The advantage in giving plants just enough compost for present requirements, instead of filling up the pot, will be apparent to those who follow the method of feeding as and when the roots begin to appear on the surface. "Little and often" is a maxim worth bearing in mind by those who would have the best crops.

The long rod system is the one most generally followed, and, obviously, it means unremitting attention throughout the season in keeping every plant free from side shoots. With the sun's power increasing every day, and more especially where artificial heat is maintained, the question of watering the plants must receive special attention. From my own experience I am of opinion that Tomatoes will stand dryness much better than a superabundance of moisture at the roots. In dull, sunless weather one has, perforce, to be sparing in the use of water, but under no circumstances should it be given in any other than a luke-warm state. I have seen very serious results follow when cold water has been given to Tomatoes under glass. Nothing is more calculated to bring about a check than this unwise practice. When it is necessary to water it should be done thoroughly so that roots may receive full benefit, avoiding wetting the foliage.

One occasionally meets with those who, having housed more Tomatoes than they can conveniently attend to, are faced with the problem of loss of light through overcrowding, and begin to cut away leaves while in a green state. In my judgment this is a barbarous practice which bleeds the plants and stops the swelling of fruit. The better way is to tie back leaves which exclude light and air from the trusses, slightly twisting them, which will aid in their natural decay without any loss of power to the plant. This is a method I have long followed and it has never failed.

As the season advances more air can be afforded, and the top sashes will scarcely need to be entirely closed even at night. To hasten the ripening of fruit, applying heat at night should never be at the expense of ventilation. Air is most essential at this stage.

W. F.

Garden Pests

KINDLY tell me the garden pests to which the enclosed grubs belong.

[The box of creatures you sent in to us arrived in rather a bad condition, and most of them were dead. We are not sure that some of the insects you might have sent us did not escape in the post. However, when we got the packet it contained: Wireworm, two specimens; Millepede, one specimen; Ground Beetle larvæ, two specimens; larvæ of the Large Ghost Swift Moth, one specimen (the only one alive). If you send insects again you should send them packed in a tin box with some damp soil in the box so that the creatures might reach us alive. Also it would be better if each different sort were packed separately and numbered, and a like specimen kept at home and numbered, then when you got our reply you would know to which we referred. As it is we are afraid the list above will not help you very much. The reason we ask you to pack each sort separately is because certain larvæ are carnivorous, *e.g.*, the ground beetles you sent are capable of eating any of the other specimens, except the large Ghost Swift Caterpillar. There is much confusion between some of the insects you send.

WIREWORM.—We received two specimens, each of which belonged to a different species, both pale straw in colour, about half an inch in length, with a very tough skin. Wireworms have a small but very powerful mouth, and three legs on either side on the head end. There is also a fleshy swelling on the rear segment.

MILLEPEDES.—There was one complete specimen of this pest and a broken piece of another. Millepedes, which are not true insects at all, are often confused with wireworm. The specimen you sent was black in colour. When you disturb them in the soil they always curl up like a watch-spring. Millepedes have two pairs of legs on each segment of their bodies. The specimen you sent was Julus sp. (the snake millepede), and is a serious garden pest, feeding as it does on the underground portions of most plants. You should be also careful to distinguish between millepedes and centipedes, because the latter are carnivorous, and should, therefore, not be killed. The best way of telling the difference between millepedes and centipedes is that the former, the garden pest, is lazy in habit and curls up when found, and pretends to be dead; the latter, the gardener's friend, is very active and runs away very quickly when found in the soil.

GROUND BEETLE LARVÆ.—These are often confused with wireworm. They are to be found in large numbers when digging the soil at this time of the year. They are rather longer than wireworm, much more fleshy, the head is much larger than the head of a wireworm, the head and first segment only is hard, and there are two horns like appendages on the last segment. Most of the ground beetles are beneficial, because they feed upon other insects in the soil. Compared with wireworm this grub is active, but wireworms can get away out of sigl quickly.

THE GHOST SWIFT CATERPILLAR caterpillar of this is large, and, when (as was your specimen), is nearly 1½ i length. When put on the soil and tou the head it wriggles backward. A g insecticide would be the best me control.

If you are still not clear as to w which you must send us some mo mens, separately and numbered.—J.

Sweet Williams failing

(F. J. J.).—Your Sweet Williams h attacked by a fungus (Puccinia Aren by no means uncommon pest. You h take off as many of the infested leave can without depriving the plant of t leaves, and burn them, washing or the remainder with a 3 per cent. sol copper sulphate (blue-stone) or a sol potassium permanganate, of a colour. The plants will in all probabi grow the disease if treated as sugge

Obituary

MR. WM. ALLAN.

IT is with the deepest regret I le one of the gardeners of the old sc passed away. I have known Mr. A 50 years, and it was a pleasure to true gardener and one whose work at where he had been for 60 years, sho innate love he had for the garden i pleasure to visit. I had the pleasu few years ago of spending a day at and shall never forget the many in things I then saw in all departments. both indoors and out, more especi his hobby, and the heavily-laden tree day of my visit testified to the care them. I shall never forget the h fruits of Cox's Orange growing on h cordons by the sides of the walks kitchen garden, while the heavily-lad of Norfolk Beauty, a seedling raised Allan by crossing Warner's Ki Waltham Abbey Seedling, proved t of this Apple, which will keep his green.

Most interesting of all was the flo den, in which annuals played a pr part. I have never seen such a di bloom, which showed clearly the out value of annuals when well gro planted with judgment.

As a token of regard most of th bouring gardeners were at the funer showing the respect in which he was the district. W.

Although in his 85th year, Willia was, to all appearances, hale and he about his duties up to March 22nd, passed away peacefully in his sleep morning of March 25th. Few m better known in the world of hortic East Anglia than he was. As a c of Grapes, Apples, and Pears he st eminent, as was witnessed by his s at the R.H.S. many years ago Norwich Show right up to Novem In the vegetable world Allan's Onion will stand as his memori served under three Lord Suffiel brought the place to such perfectio became one of the recognised Meccas who made Cromer and Sheringha holiday haunts. William Allan was happy with visitors, his genial man an outstanding feature; indeed, h seemed cross with anyone. Whilst t were singing their spring songs shrubs bursting forth into flower an his remains were laid to rest in the yard adjacent to the gardens he loved

Answers to Queries

ns—*Queries and answers are inserted in* ILLUSTRATED *free of charge if corre- follow these rules: All communications clearly written on one side of the paper addressed to the* EDITOR *of* GARDENING D, 8, *Bouverie Street, London, E.C.* 4. *business should be sent to the* PUB- *he name and address of the sender are n addition to any designation he may be used in the paper. When more than is sent each should be on a separate per, the name and address being added As* GARDENING ILLUSTRATED *has to be sent ome days in advance of date, queries ways be replied to in the issue immedi- ving their receipt. We do not reply to post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

GREENHOUSE

and growing Tephrosia

J.).—Tephrosia candida is a native and has been known to cultivation ears, but seems never to have taken ar as we know this has always been a stove shrub, and is quite readily d from seeds and cuttings. We vise you to sow your seeds in heat prick out the resulting seedlings as large enough to handle, potting into small pots as soon as a second ms necessary. With good cultiva- may find that even a third move on h pots will be necessary before the and in those pots they should be being potted on into flowering pots wth becomes active next spring. we should advise is one-half good oam, one-quarter leaf-mould, and er old decayed hotbed manure and d. Peat may take the place of the d. The culture in other respects differ from that given to the ordi- of warm greenhouse plants, and it possible for you to try some of your the open in the summer of next year avoured county.

oldia

J.).—Holmskioldia sanguinea is, as ise, a native of India, and was in- as long ago as 1796. It is also s known as Hastingia, and be- the natural order Verbenaceæ. In n with us it needs the protection of use; indeed, it is generally treated heat, and forms there a bush some igh, the whole plant downy with rs. If sound seeds are available no difficulty in raising these in a mperature and bringing the young ng. It is a stove evergreen with owers, and is increased from the oots just getting firm in sandy eat. It does best in a mixture of it and light fibrous loam.

chys Dawei

Constant Reader).—This is a strong- rather coarse-looking plant in ppearance, not unlike a species of The upright stems, which are ith long-toothed leaves, will attain of 3 feet to 8 feet. The flowers are densely-packed heads at the points ots, a succession being kept up from or cluster for a considerable time. the flowers are of a deep rich blue is at all seasons much admired in nhouse. This Pycnostachys is of agation and culture if treated much -flowering Salvias. It is a native of whence seeds were first sent to Kew, the greenhouse, it has formed a winter feature. We are not aware m at present be obtained from the de sources, but no doubt it will be- as it can be so readily increased. It is strange that another blue, winter-flowered plant should also be a native of Uganda. We refer to Coleus thyrsoideus, which, also originally introduced through Kew, has now found its way into almost every garden.

Bulbs from South Africa

(A. M. C., Weymouth).—The bulbs received from South Africa under the name of "Chinks" are doubtless those of Ornithogalum lacteum, the Chincherinchee of South Africa, on which we have had many notes in recent issues. This is a very beautiful plant for the cool greenhouse, bearing elegant racemes of satiny-white flowers, which remain fresh when cut for many weeks. We do not know the bulbs called "Painted Ladies," but suggest they should be given pot treatment, as with the Chincherinchees.

Boronia megastigma

(J. B., Constant Reader).—After flowering, you should have cut down your plants to within a couple of inches of the base and kept in the greenhouse. As soon as the young shoots made their appearance you should have repotted the plant in good sandy peat which must be pressed down very firmly, returning to the greenhouse, and during the latter half of summer stood out of doors, taking particular care that the plants are not allowed to get dry.

FLOWER GARDEN

Perpetual-flowering Border Carnations

I got some of these the other day, and as I have not had any previous experience of them I would feel much obliged if you could give me some information regarding their culture.

SCOT.

[In common with all flowering plants, they flourish best in an open position which has a direct light and is not overshadowed by trees or buildings; in fact, they will flourish anywhere except in complete shade. It is not wise to set the young plants closer together than 6 inches, or further apart than 18 inches. In the case of very light, sandy soil, which, as a rule, is poor and lacks plant food, autumn and early spring planting are advisable. Hoeing the surface of the soil once each week in bright, dry weather will help the roots to keep cool and moist. Heavy clay soil is best deeply dug or bastard-trenched in the early autumn and left as rough as possible, so that the winter frosts can pulverise it and help to break the soil down. Old yard manure or other enriching medium is best added when the surface of the soil is lightly forked in the early spring. In the heavy soil all seasons are favourable for planting, with the exception of late autumn and winter.

It is advisable to cut the flowers with long stems, because, not only are the blooms themselves able to display their natural beauty, but it is beneficial to the plants, keeping them short and bushy, also inducing them to produce more bloom. Disbudding is purely a matter of taste. In the case of the Perpetual Border Carnation disbud to a single crown bud. The flowers, if cut young, will last a considerable time in water. Perhaps one of the greatest charms of this Carnation is its perfume.

Carnations root so easily from cuttings and pipings in the usual way of propagating Pansies, Pinks, and Calceolarias that few will meet with any difficulty. The best periods to root the cuttings are during June, July, and August. These must be protected from strong sun and kept moist while rooting, also after the cuttings are rooted. In about four weeks they should be potted into small pots or planted in the garden, and after they have become established the tops should be broken off at the sixth pair of leaves above the soil.

After the young plants have been stopped they naturally produce side breaks. These plants, when established in the garden, should have one or two of the leading growths again stopped. Not only does this strengthen and build up the plants, but greatly increases the supply of bloom over an extended period.]

Treatment of Lilium regale seedlings

(J. V. Hopkins).—(1) These should have been taken from the seed-pan and transferred to boxes of sandy and leafy soil before starting into growth, planting the little bulbs 3 inches apart. You may, nevertheless, transplant them now, as otherwise little or no development of the bulbs will take place this year. Use well-drained boxes and free, open soil as above. Lift the plants with great care, and, after transplanting, keep them for a week or 10 days in a cool, closed frame, shading them from bright sunshine and dewing them lightly overhead each afternoon. About the end of April stand them in the open. (2) In two years from now. (3) Yes, for although it is late for this species, it is better than leaving them in the seed-pan another year. The bulbs should be planted in the open next season.

Pruning Tea Roses

I planted some bush Tea Rose-trees last autumn in a sheltered place facing S.W. I have always understood that one should not prune Teas until April, but these have for a month past been growing, especially Lady Pirrie, Hadley, and Golden Emblem. Under the circumstances should I have pruned them earlier, and will they suffer now? Before frost came they were earthed up and the centre protected with loose straw, and they have not suffered from frost.

MENDIP.

[All the kinds you mention should have been pruned about the second week in March, but although they have made considerable growth you would be quite safe to prune them now. This, however, must be done without delay, and you had better shorten back all the hard growths in order to get an even break lower down, otherwise any long new shoots left would grow away and prevent the lower and more dormant buds from breaking.]

Exhausted Daffodils

(Coker Court).—This frequently occurs where Daffodils have occupied the same spot for a number of years, and your best course would be to lift the bulbs immediately the leaves have turned yellow, and transplant them to a fresh position, following which they should regain their former constitution. This, in the end, would prove more satisfactory than surface manuring. But if the removal of the bulbs is not possible apply a good top-dressing of fresh soil and decayed leaves, and follow this with a dressing of basic slag at the rate of 7½ ozs. to the square

yard. Dissolved bones used at the rate of 2 ozs. to each square yard are also beneficial, and could be applied at the present time. The above dressing would be better applied in September.

SHORT REPLIES

T. H. D., Enfield.—You should consult a general paving contractor. Try Messrs. Constable, Hart, and Co., 108a, Cannon Street, E.C., asphalt and tarmacadam contractors.

E. L. C. Eden.—No; on the contrary lime is relished by Carnations. Old lime-rubble is indispensable in the culture of Carnations.

F. M. Wilson.—We have never found the remedy we gave fail. We should advise you to have the tree grubbed, which will be the quickest and the best way.

NAMES OF PLANTS

Scot.—1, Ruscus aculeatus, or Butcher's Broom; 2, Helleborus fœtidus (Fetid Hellebore or Bear's-foot); 3, Daphne Laureola (Spurge Laurel).

Langholm.—16,220, Daphne Laureola, the Spurge Laurel.

Ulsterunde.—1, Pteris cretica; 2, Pteris cretica albo lineata; 3, Pteris serrulata cristata; 4, Prunus Pissardi; 5, Prunus persica.

R. N. I., Auchlochan. — Streptosolen Jamesoni.

Alpine.—1, Skimmia japonica; 2, Epimedium Musschianum. For Primula see next week.

CHRYSANTHEMUMS

Outdoor Chrysanthemums

DESERVEDLY popular is the outdoor Chrysanthemum, as it can be grown successfully by anyone with a patch of garden. It is as suitable for the cottager as it is to grace the flower borders of the wealthy; alike useful as well as profitable to grow by the acre for market, and showy in the more humble clump. Perhaps the more early-flowering of the type are not exploited as they should be for bedding or massing. At any rate, these start to bloom in August, and are followed by a wealth of sorts that go on through September, and, in fact, a month later when frost does not injure them.

Not particular as to soil, these early sorts are free-branching and give a quantity of bloom if in an open position where the land does not dry out quickly. The ground, however, may easily be made too rich, in which case the foliage becomes over-luxuriant.

It is not safe to plant in the open before early May. Meantime, either root small cuttings or procure the plants already rooted from the advertisers in these pages. I would point out, however, that where plants are so obtained before the time of planting it is well to either put them singly in small pots or give them a little fresh soil in shallow boxes, and place under glass in a cool structure; thus enhanced size of plant can be had, which is helpful as to the time this begins to bloom. It is essential to till the ground by deep digging, an operation advisable some time before planting is done, and if they have plantations to themselves these Chrysanthemums require some 18 inches between the plants as well as the rows. When in beds not so much space is needed, and if in clumps among other plants three or four pretty close together is a suitable way. See to it that each plant is well trodden in; put the hoe through the surface soil when finished, or, rather, after a stick has been placed to each. This may be small; just something to tie the plant to to prevent winds from doing damage, and later on a neat Bamboo cane 3 feet to 4 feet long would be desirable.

After-treatment is not exacting; just keep the soil clear of weeds, and water freely if the weather is dry. The leaves of the plants should never be allowed to flag through drought. A check is given by this which may take some time to recover from. The plant cannot extend itself. In the matter of training, again, there is little to do in the first place. Just let the plant go on of its own free will, so to speak.

Training comes in later if the grower resort to the popular method of producing specimen blooms, not giant ones as for show, certainly, but well-developed samples for the kind. These are obtained by restricting the number of side growths and rubbing away all bloom buds excepting the central one on each.

Two lists of sorts will be given below; the one of those that are the better not thinned, the other those which are amenable to the plan. It is the comparatively late-flowering ones, mostly, which are dealt with in the second instance, and these in most seasons require some kind of protection from rain or frost. The sprayed early and the disbudded early are terms applied to the two systems of culture, and it is well to keep them apart.

By the way, more attention than usual is now given to the sprayed early by the powers that be, inasmuch as three or four really excellent novelties were recognised in this direction last autumn. These are Cranford, a brilliant yellow; Phœnix, a rich bronzy-red; Cranford Cream, a choice thing; and Chancellor, golden-amber colour.

The first to flower, then, would be Abercorn Beauty, rich bronze; Bronze Goacher, good colour; Crimson Polly, very fine; Golden Polly, Goldfinder, a good yellow; Goacher's Crimson, Harvester, amber; Mrs. W. Sydenham, dark crimson; Normandie, light pink; Polly, bronzy-yellow; Roi des Blancs, good, but somewhat tall in growth; Wells' Scarlet, very bright.

For the disbudded style there are many to select from, and recent varieties are certainly promising. In this category I place Crimson Circle and Mayford White, an exceptionally fine pair; Almirante, crimson with gold points; Cranford Yellow, Early Buttercup, Bronze Early Buttercup, Framfield Early White, Framfield Early Yellow, a light shade; Golden Almirante, Le Pactole, rich bronze; Mrs. R. Hamilton, rich yellow; Pink Profusion, Pink Delight, Red Almirante, September White, large; Salmon Profusion, and Sanctity, a good white. H. S.

Trade Notes

A simple "greenhouse"

For simplicity of erection, usefulness, and cheapness we have not seen anything better than the pair of garden lights constructed by Mr. M. Gorton, of Longlevens, Gloucester. Two single lights measuring 6 feet by 11 inches are placed together in the form of an inverted V. They are simply fixed into the ground by protruding legs, and form a kind of cloche, which keeps the atmosphere inside healthily warm and ventilated. The two lights are easily closed or left open at the top as desired. By this contrivance crops such as Lettuce, Carrots, Peas, Beans, etc., can be secured about a month earlier than those grown in the open.

A new garden edging

Most edgings when put down come to be regarded as fixtures, which have their appointed place and can be adapted to no other without a general upheaval in paths and borders. The advantages of "Bordex," the new metal edging in interlocking and bendable sections, are that it forms a permanent edging if desired, but can be moved to a fresh site, adapted to any alignment, or shaped to any design, curved or otherwise, at w metal is painted dark green and is proof. The top edges are rounded t tiling effect and corrugated to facilita ing. Each strip is easily and firmly position by means of strong fluted s neatly interlocked. "Bordex" make practical edging to paths or surr flower-beds and lawns and is quite sive.

Potato trial

An interesting experiment has been out by the West Sussex County Co Potato crops manured respectivel standard "Adco" treated wheat "Adco accelerator" treated garden and untreated farmyard manure. sults are summarised below. Artific lisers in the form of superphosphate phate of ammonia and potash were at the same time.

YIELD.

Plot (A) "ADCO" Straw Manure.

	Ware. Lbs.	Seed and Chats. Lbs.	Total. Lbs.
"Up-to-Date" ..	178	49	227
"Irish Chieftain"	135	10	145
"Bishop"	97	35	132
	410	94	504 lbs. acre

Plot (B) "Farmyard Manure."

"Up-to-Date" ..	139	32	171
"Irish Chieftain"	84	33	117
"Bishop"	111	9	120
	334	74	408 lbs. 5 cw

Plot (C) "Garden Refuse."

"Up-to-Date" ..	114	38	153
"Irish Chieftain"	110	36	146
"Bishop"	98	38	136
	323	112	435 lbs. 15 cw

Average yield of potato crop for England and for 1925 — 6·6 tons per acre.

The trial was carried out under direction of Mr. F. W. Costin, Hort Superintendent of the West Sussex Council, and every facility for ensu success was given by the Director of ture, Mr. W. Lawson.

A fuller report will be sent free on tion to Adco, Ltd., 78, High Street, den, Herts., if this paper is mentione

Benn Brothers' Other Jou

The Cabinet Maker.—Special Issue: Round the Scottish Trad liminary Review of the Edinburgh Ex Kapok in Scotland.

The Chemical Age. — "Cataly Enzymes: Industrial Applications— Dr. J. B. Firth; Monthly Dyestuffs ment.

The Electrician.—"Notes on Matters," by L. B. Turner; "Natio tricity Supply," by Geo. Wilkinson on the Simplified Wiring Rules Que

The Fruit Grower.—"Farm Orch Cider Making," by H. W. Abbiss; Federation Conference.

The Gas World.—The Amalgam Gas Undertakings in Scotland; Ben Substitute for Motor Petrol; Develo Sales.

The forthcoming Rhododendron Society's Show

This event, which is assuming gre est, will take place at Vincent Sq Tuesday, April 27th (not April 26th in the R.H.S. Diary). Exhibitors note that Rhododendrons include Aza that there is a class for the best species, and also one for the bes hybrid. Azaleas may also be show Rhododendron groups, and in the gro there is no limitation as to their bein in the open.

GARDENING ILLUSTRATED

458—Vol. XLVIII. APRIL 17, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

s Nose ... 241
ks ... 250
s ... 243
rips on ... 252
n tubs ... 252
he culture of 249
rotecting ... 249
TION SIR SASSOON 245
s, Perpetual 244
LS OF THE ... 239
Trumpet, ... 240
Deutzia gracilis ... 252
Erythroniums' and their cultivation ... 240
Figs in pots ... 249
Flowers, annual ... 243
FLOWERS OF TIBET, SOME ... 246
GARDEN, A ROCK ... 242
Gardeners and their hours ... 241
Gladiolus, the pronunciation of ... 240
Greenhouse with oil lamp, heating a ... 252
Gypsophilas and lime, perennial ... 245
Heaths, the hardy ... 240
Hepatica, the ... 240
Iris reticulata major 245
Ivy, the Ground (Nepeta Glechoma) ... 252
Kohl Rabi ... 249
Lathyrus grandiflorus (large-flowered Perennial Pea) ... 243
Lavatera, Sutton's new annual ... 239
Lilies of the Valley ... 251
Myrtles ... 252
NARCISSUS FORTUNE AND ITS PROGENY ... 245
NARCISSUS MITYLENE, THE ORIGIN OF ... 241
"Painted Ladies" ... 240
Parsley, how to grow fine ... 249
Peaches and Nectarines in cold-house 252
Peach tree leaves failing ... 252
Petunias, double white ... 250
Plant houses ... 250
Plant names, the pronunciation of ... 240
PLANTS, INTERESTING, AT VINCENT SQUARE SEEN ON APRIL 7 AND 8 ... 251
Potatoes, early, planting ... 249
Primula obconica, the poisonous properties of ... 240
Primula viscosa ... 251
Pulmonarias ... 243
Rhododendron injury 252
Rhubarb renewals ... 241
Scilla autumnalis ... 241
Seakale in April and May ... 249
Streptocarpus ... 250
Tomatoes, outdoor ... 249
Vine in poor condition 252
Vine leaves, green spots on ... 252
Vines, planting dormant ... 250

Daffodils of the Year

Comments on new varieties, with special reference to the Gold Medal groups staged at Vincent Square on April 7th and 8th

weather conditions during the mn of 1925 and the winter and early g of 1926 were most favourable to vth of Daffodils, but, alas! when st required the rain during their growth there was a drought of five eks. Rain has come at last, but too benefit the majority of Daffodil The Royal Horticultural Society's incent Square, on April 7th has d such quality in Daffodils. Messrs. Bath, Ltd., of Wisbech, carried off honours, a gold medal and special lations of the Council, and well they it, for finer blooms have never been ich favourites as Lady Superior, of Hearts, Tenedos, Helen and were magnificently grown. This was rich in wonderful and new varieties far ssing old favourites. the varieties were Goblet, a deep yellow rumpet, the leader of its beautiful form and perfuring. J. 59 is a glori- stalline (Giant Leedsi). certainly is the finest rri of huge proportions, rl-white perianth of exhape, with a large brilninous, deep red frilled ower which must come p in future years.

Barr and Sons put up display, winning a gold Bernardino, Crœsus, f the North, Pedestal, ers have never been such perfection or such and refined shape and Among the new- hackleton (Giant Barri), eedsi), Miss Barkley, opeland, and Fiery were grand. The last pick of them all; white intense luminous red cup which seemed to perianth with its relour; a glorious bloom. ery notable seedlings nprised in this memorp.

Sutton and Sons filled e whole of one end of with Daffodils on ridges, nd dells covered comith vivid green Moss. The Poets were remarkable, especially those raised by Mr. Engleheart, and seedlings from them. Cassandra, Red Rim, Dinton Red, with Firetail, Mitylene, Lady Superior, and White Lady, were superbly grown.

Mr. J. W. Barr, of Wimborne, who has set up for himself now, had an interesting exhibit with Seedling 1940, a promising Poet, and 761, very good-shaped sulphur perianth with orange-cup disc deeply edged and rimmed red. He also showed Loch Fyne and White Pearl in excellent form.

The Welsh Bulb Farms had a fine exhibit, particularly noted for bright red cupped varieties, and a fine lot of triandrus Hybrids. Barri Precious and B. Owen were two remarkable flowers.

Mr. W. F. M. Copeland, of Southampton, the raiser of so many doubles, showed the cream of his creations, Mary Copeland, in exquisite form; and, indeed, this is acknowledged as the best of all double Daffodils. His new Oranges and Lemons is a striking decorative flower.

Seven Awards of Merit were given to Daffodils, all of which were really superb varieties, mostly shown by Mr. H. Chapman and Messrs. Bath, Ltd.

Last, but not least, J. R. Pearson and Son, Ltd., of Lowdham, put up the finest exhibit they have ever staged. The quality, culture, grand fettle, colour, and form could not be exceeded. They were superbly grown, magnificently staged with colours so fresh and altogether entrancing. Considering the long drought, without a drop of rain, this was a *tour de force*, showing remarkable skill and knowledge in culture. This exhibit, which contained the finest of the newer creations as well as older favourites representing all the Daffodil divisions, most meritoriously gained the gold medal, and right, well deserved it.

The Daffodils this year have been wonderful, but the Hall had the cream of them all on this occasion.

The pure white Eskimo, of beautiful outline, stands like a statue in frozen snow

The broad and massive trumpet is well portrayed in the above picture

Shown by the Donard Nursery Company

Notes of the Week

Sutton's new annual Lavatera

OF but recent introduction by Messrs. Sutton and Sons, L. Loveliness is a great advance on the old pink variety, the colour being deeper and brighter, while the habit of the plant is more compact and the flowers produced in greater profusion. Best results are had by sowing on rather poor soil, for when grown on rich ground the growths are apt to come soft and lanky, with but a sparse display of bloom. The seeds can be sown now on the spot where they are to flower, and should be scattered very thinly. Perhaps a better plan is to sow in boxes and treat in the same way as half-hardy annuals. By adopting this method the plants are dwarfer and begin to bloom earlier.

Whichever method is adopted, it is imperative that abundance of space be given the plants. About 15 inches each way will be found to give good results. C. BLAIR.

Preston House, Linlithgow.

The hardy Heaths

Generally speaking the various forms of Erica carnea and E. Mediterranea, including E. Darleyensis, are later in blooming this year than I have known them for several seasons, for on more than one occasion all the above have been very handsome by this date. At present, however, not one of them can be called really effective as regards flowers. In the case of E. lusitanica we have a very different state of affairs, the handsome feathery growths being laden with pink and white blooms. This is by far the most beautiful shrub in the garden at present, and has not suffered in the least from the severe weather experienced during the past weeks.

E. MARKHAM.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The lesser Trumpet Daffodils

IT is a pleasure to see the note on the above from the pen of your valued correspondent, "G. J.," issue April 10th, p. 223, and the sketches which accompany it, which should prove most useful to many. It must have been about 40 years since I first obtained Narcissus minimus from Messrs. Barr and Sons, and it has always appeared to me that the form sent out at that time was superior to the N. minimus at present on the market.

Later purchases have been more of the character shown in the lower sketch of N. minimus, and the plants were taller than those of the original, as well as of a less attractive form. In a few seedlings I raised from my first plants the form and size were the same as in the upper flower in the sketches. I have never been able to secure this superior form again, and, unfortunately, my bulbs had been left behind when removing to my present home.

Regarding N. minor and N. nanus, it is difficult to secure the true N. minor, and in many cases it is N. nanus which is sent in its stead. Your article should do much to make the supply of the true N. minor more reliable.

S. ARNOTT.

The pronunciation of Gladiolus

Classics at Eton were not my strong point, so I hesitated to make any comments upon the Rules of Pronunciation cited by "Dawlish," especially as I knew Sir Herbert Maxwell would be well able to take care of himself. I am, however, glad to see that Sir John Edwards-Moss calls attention to the repartee which had occurred to me that we have no certain evidence of the correct pronunciation of Latin by the Romans. We know from the Latin poets on which syllable the stress fell, but so far as my acquaintance with Latin verse is concerned I believe that words of four short syllables are inadmissible in any metre, so we get no help about them. How, therefore, can there be any rules for their pronunciation? Custom there may be, but even custom requires substantiation. It is more than likely that the majority of people say "GladiÓlus," but has this the support of good authority? "Dawlish" says that "every Latin scholar" places the stress on the antepenultimate in such words as "carminibus," but I think if I had been scanning the line of Horace in which the words "virginibus puerisque" appear, and had pronounced the first word "virgInibus," I should have been invited by my tutor to write out and translate my lesson for making a false quantity. Perhaps the last paragraph in Mr. Rogers's letter sums up the situation satisfactorily, but though it is difficult to insist upon correctness of pronunciation in horticulture, I think it is desirable to point out some of the worst faults.

A. H. WOLLEY-DOD.

—— The general pronunciation of the average gardener—amateur and professional—is likely to be unaltered by even the most authoritative Latin scholars, and will remain Gladi-o-lus, as Mr. Joseph Scrubbs has put it. I have seen, more than once, the amazement with which any other pronunciation was received by the growers of the flower as a whole, and I am certain that they would support Mr. Scrubbs and give his pronunciation an overwhelming majority were a plebiscite taken on the subject.

AN OLD LOVER OF THE GLADIOLUS.

—— In connection with the discussion as to the pronunciation of Gladiolus, I was taught that "custom maketh language."

If we British wish to pronounce Gladiolus with the stress on the "o" why shouldn't we? It seems unnecessary to cling slavishly to the pronunciation of the ancient Romans, and if anyone thinks the ordinary "Man in the Garden" is going to bother his head over how the word *ought* to be pronounced, I myself believe he is going to be disappointed.

All the ordinary man cares about is that his plants grow and thrive well.

GladiOlus will be GladiOlus to the end, in spite of all Latin rules to the contrary.

I am afraid "Erica" and "Veronica" will follow suit, even though some people's teeth are set on edge. E. G.

Kent.

[This correspondence must now cease.—ED.]

The poisonous properties of Primula obconica

It seems to me that Mr. McG. is still unconvinced of the poisonous effects of handling Primula obconica. As one who has suffered about the face, neck, and shoulders from the same, I can certify, to my cost, as to its poisonous effects. Not only so, but I have suffered to a slight extent from handling old plants of Polyanthus. Perhaps Mr. McG. is not aware there are over a dozen different plants that set up irritation or eczema in some people of delicate skins. C. ALLEGRO.

—— W. McG. asks for definite cases of the poisonous effects of this plant. I do not grow it myself, but my business and inclinations have, during the past 36 years, kept me in close touch with nurserymen and growers in this N.W. corner of England. I know several firms who have ceased to grow it altogether. You, however, want specific cases of poisoning; I can mention two which can be verified. The first is Mr. T. Hedley, the genial manager for Messrs. Herd Bros., of Penrith, the grower and shower of Sweet Peas. Some time ago he had a very bad time, his arms and hands being affected. The other case is that of a lady living in Middlesbrough, and is much more complicated, seeing that it took the doctor nearly two years to find out the cause, after intense suffering, and being rendered practically an invalid. She was sent to Harrogate and other places for treatment of, as the doctor thought, neuritis in neck and shoulders, and returned home much better, only to be again afflict if anything, worse than before. Th day the doctor noticed some plants obconica in the room (they grew man fond of them). He ordered them ou house. They were also cleared out greenhouses, and my friend spec covered. The strange part is that not attend to the plants, the doctor's being that the pollen affected his patie

Carnforth. T. O. W

The pronunciation of plant n

With reference to "Dawlish's" p. 224, it would, indeed, be pedanti mand that every plant name should nounced in exact accord with the w derived from. Many of the words English language are not so pronoun there would be difficulty in doing s case of plant names containing so sonant or vowel with a foreign pr tion not easily reproduced in English, no fault to find with the pronunci such words as Fuchsia, which, so know, has always been so pronounc out any variant. But when there ar more pronunciations of a name Anchusa one of them is more like correct than the others, and no more to pronounce. I was a botanist f years before I was a gardener, ar heard Anchusa pronounced in any with a hard ch, which, I maintain, is and that is why I said it grated on m to hear the ch pronounced soft. looked rapidly through a plant list ar find a single name with ch in it and know to be derived from the Greek, ever hear pronounced with the ch soft therefore, make an exception of Anc

A. H. WOLLE

The Hepatica

Mr. Woodall inquires (page 229) Anemone Hepatica ever seeds itsel country. Undoubtedly it does wher fair chance, but rabbits will clear lings as fast as they grow. Many y at Hartrigg, in Roxburghshire, I sa dance of single blue Hepatica self-so a steep bank overhanging the river, t or their seed having escaped from th above. It was, for me, a very tr sight, inasmuch as I have spent m and labour in trying to get th Anemone established in my garden in vain. The plants flower for a yea but invariably dwindle to extincti Woodall's observation that the "never is found in the open" doe cord with mine, for I have seen pl on the shadeless rocky ground i Agnese on the heights above Mentor

HERBERT MA

"Painted Ladies"

I think the "Painted Ladies" re in your "Answers to Queries" on p most probably Gladiolus blandus, found on Table Mountain and in t regions of South Africa. There is, no certainty about these popular names, but this, at least, was t usually given at Cape Town to blandus on account of the red mark the three lower perianth segments.

A. H. WOLLE

Erythroniums and their culti

The article on the abo "H. M. W. B.," in GARDENING ILLU April 3rd, interested me very much in these gardens I grow a fair n Erythroniums and find they pre shade. Being anxious to keep som Purdy's hybrids entirely by them was bold enough to plant them in

deep; this was done three years ago. present time this particular group is also stronger, than those planted in d in half-shade. Is this really a proof ese lovely flowers will at all times full sun, or is it only a "local con- ? I find Erythroniums pay for liberal on, and always annually top-dress f-soil to which has been added plenty meal. R. MOORE.

e Hall Gardens.

Gardeners and their hours

ider that 7 a.m. to 5 p.m. five days veek and from 7 a.m. to 1 p.m. on 's quite long enough for any gar- work. To-day, in these hours, with nodern improvements, as much work lone as was done in the old days or Should there be a necessity for ours to be worked the men should extra pay, so also should the time on Sundays be paid for. It would be or all concerned, not only in gar- but in all professions, if the slackers eeded out. The employer who ex- gardener, head or otherwise, to be at and call at all times is unreasonable no real sense of justice.

A HAMPSHIRE GARDENER.

was rather amused at Mr. Bruce contention that "gardening has sed by its merits from the occupation bourer to a fine art." By inference conclude that the gardeners of 50 or ago were mere slaves, and that their s of no account, and yet I have heard good men in these far-off days, men ames will long be remembered as in the profession. I have very vivid ons of Grapes, Peaches, Apples, and other fruits exhibited by these would astonish some of our modern The Rose, Dahlia, Gladiolus, Chrys- m, Phlox, and other floral exhibits old days would also compare very ly in quality with the best of those nodern shows. Mr. Hewitt also ex- to remember that gardening is a n, and then, presumably, advises s to adopt the common labourer's and only work a limited number of matter how urgent the matter may s is not how members of the other ns look on the matter of hours. Only I attended a lecture given by one oremost surgeons in the country. tely the lecture was finished this n entered a waiting motor-car and way to perform a serious operation. s professional man acted as Mr. considers the gardener should, a ife might very well have been lost, ny rate, much suffering would have He is a poor specimen of a gar- no grudges to put in an extra hour when necessity arises. These same r refuse the short hours of the win- m, nor do they forget to demand f holidays, and never refuse the uring these holidays.

ct is, most modern assistants have love for the profession, but have ds filled with thoughts of sport, to sion of the matters that really count. he seems to mean us to infer that ago he, as a journeyman, only re- s. per week. I was a journeyman a l earlier than that and I always had bly more, although, at the same agree that neither head nor under s were adequately remunerated for nsible work they were called on to I also never came across a place kitchen garden was trenched 3 feet least once a year" to quote "An nor did I ever hear of any practical gardener burying manure at the bottom of a 3 feet trench.

I am afraid "An E. G." is drawing on his imagination for his facts in these matters. I think that, in common fairness, no worker in a garden should object to put in a little extra time when the necessity arises. I do so myself even yet. ANOTHER SCOT.

The origin of Narcissus Mitylene

ON page 212 there is a little error. Narcissus Mitylene was raised by Mr. Engleheart, from whom Brodie of Brodie purchased the stock. I have grown Mitylene here for several seasons, and have that information from the Brodie himself.

F. HERBERT CHAPMAN.

Narcissus Mitylene, which recently received an Award of Merit for show purposes
The perianth is pure white

Rhubarb renewals

In your issue of GARDENING ILLUSTRATED dated April 3rd, page 218, appears a short note on the above subject, signed "W. F." The writer states that "within six months of sowing seed one can pull sticks, and certainly pull in earnest the spring following sowing." It would be interesting to know what the writer calls sticks. When Glaskin's Perpetual Rhubarb came first on the scene I had a good deal of experience with it, and grew it under the best of conditions, but failed either within six months or two years to obtain sticks much larger than a penholder. I agree Rhubarb can be easily grown from seed, and a good kind with fair treatment may be fit to pull within three years. The best Rhubarb that I know is The Sutton. My advice to readers is to purchase a few crowns rather than go to the trouble of raising Glaskin's Perpetual from seed, only to meet with disappointment. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

[The finest Rhubarb for colour and earliness is a variety of Hawke's Champagne, selected by Mr. Gilbert when gardener at Burghley. The sticks were far from being coarse, while the stalk was of a bright red right through.]

Apple Pig's Nose

In reply to the inquiry of Mr. Allen, in issue of March 27th, page 193, as to whether anyone had ever heard the name of "Pig's Nose" Apple before, I can tell him, Yes, I have. I have also seen it growing in a garden near Canterbury. It was called the "Pig's Snout" Apple there, but that was 60 years ago, and the tree has been destroyed many years now. That was the only tree I have ever seen or heard of. As regards the "Glass Apple," I grew it for many years in a garden near Penzance, and can endorse all that Mr. Allen says of it. It is a strong, upright grower and a very heavy bearer. In addition to its other good qualities it is very juicy and makes most excellent jelly. The tree was as vigorous as ever when I saw it a few years ago, and in all probability is there now. H. MOUNT.

Canterbury.

Scilla autumnalis

My friend Mr. S. Arnott and others interested will find this choice little bulb listed by Messrs. Maxwell and Beale, Broadstone, Devon. T. O. WALKER.

Moisture-loving plants in the rock garden

A Rock Garden

By PERCY S. CANE

There is something very delightful in the task of growing plants as far as possible under natural conditions, and a rock garden is essentially a place in which this may be done

TO have stretches of alpine Phlox, Dianthus, or Cistus clothing sunny slopes with colour, and mauve, red, and purple Aubrietias hanging like glowing curtains over miniature precipices, to have Iris and Spiræas and other moisture-loving plants thriving in low, damp places, as they will only when their constant desire for moisture is as constantly satisfied; in short, to have the plants in the garden in all their variety, showing that all their requirements are fulfilled, is the greatest charm of the rock garden.

Rock gardens are not for every garden, and they must fit happily and naturally into their setting if they are to be really pleasing. Some natural hollow on the borderland between gardens and woodland may often be brought into the scheme with comparatively little work and expense. If water is present or a streamlet and some pools with water falling from one to another can be introduced, a number of moisture-loving plants can be grown, and the garden, in consequence, be much more interesting than would otherwise be the case.

Two principal considerations should be kept in mind by the maker of the rock garden—it should have as interesting and well-grown a collection of plants as conditions will allow, and in its results the whole should be as beautiful as it is possible to make it.

Here, as everywhere else in the garden, good proportion is the foundation of beauty. The stones with which the garden is made must be proportional to the whole area of the ground to be treated, and throughout the planting, in all its different groups, this nicety of proportion must be felt. It is a common error to use too much stone; better to have too little than the reverse. The character of the site will largely determine the amount to be used; where the ground is comparatively flat or but slightly hollow less stone will be necessary than on steep slopes where the rock work must, to some extent, be built continuously from the bottom. Beautiful in its results as the proper use of stone may be, it is plants and flowers that make a garden, and stone should not be too aggressive.

As in every informal garden, no matter what its character, a certain harmony of line must be felt as a result of everything that is done. It must be considered in the placing of each separate block of stone, and again in the arrangement of every group of plants.

But, after all, the greatest charm in making any garden is the planting. To have, growing naturally, or as naturally as possible, the many plants that one may have now, or to reproduce on a tiny scale something one may have seen in the Alps or elsewhere in one's travels, and to touch it all with that sense of beauty that should be the hall-mark of man's work, is a source of unfailing pleasure.

The rock garden should not be a garden of flowers only; there must be in it groups of trees or shrubs proportional to the size of the garden and giving weight and light and shade to the whole. These principal or outstanding masses of planting must be carefully placed, and should include some dwarf conifers or other evergreen shrubs. The stronger of the prostrate-growing Junipers would be s especially on chalky soil. Pinus m with its dark greyish-green foliage a ously twisted habit of growth, is very when properly placed. It is also a plant with which to form backgrounds growing more than from 5 feet to 7 dwarf habit does not take up too mu in small gardens, and, moreover, it cut back if desired without, as is with many conifers, being spoiled by treated.

Juniperus tamariscifolia and J Pfitzeriana are two of the most usefu family of beautiful species, Juniperus prostrata is an almost prostrate fo Juniperus procumbens looks its best over some cliff-like rock surface.

There are a number of other decidu flowering shrubs that, given sufficie should be included singly or in grou many kinds of Berberis are useful their flowers and their beautiful hab are several good evergreen kinds, and the deciduous ones take on gorgeous colours.

It is a curious passion, this love o things, and with plants one can wo naturally than with most other n The design and planting of a garde separable; of course, the constructio rock garden must be done first, should always be conscious of the plants to be grown when one is plan garden.

Another of the charms of the roc is that there is colour in it so ear year. No sooner do the days lengthen than Hepaticas, Winter Snowdrops, Scillas, Iris, Primulas, a other alpine growths add their delica to this garden.

As I have already said, the stones the rock garden is built must be pro

size of the whole garden; that is, the xtensive the rock garden the larger in ust be the separate stones of which it t. Ground that is steeply sloping re- stones that are large and somewhat gular in shape, while thinner, flatter are usually more effective in the level of the garden. It is well to have a al way running through the garden and narrower intersecting paths from one can easily reach and tend the plants. rincipal way in larger gardens might e of mown turf, but the narrower should be of stone. Crazy paving in ieces is excellent for the purpose, or nes the stone of which the rock gar- made can often be used as stepping- The spaces between the paving should be filled with Thymes, Saxi- dwarf Heaths, or others of the many g plants. One of the joys of the rock is that every part of it, even the paths, planted, and from the nature of its on the needs of so many different f plants can be completely satisfied.

E FLOWER GARDEN

Annual flowers

E interesting notes appearing lately in RDENING ILLUSTRATED on the above uld give increased attention to the ion of the same and the beautifying of ver garden at a trifling cost. Besides soil, deep tilth, and thin planting, are essential to success, an important n securing a long-sustained flowering is the prompt removal of all decaying apparently rather a lengthy process, particularly so if taken in time. I ad to note the prominence given to ulas. They are very showy either in colours or as a mixture of deep orange non shades. They require special at- in the removal of bloom past its best. Nasturtiums are very useful for small An endeavour should be made to secure es that throw the flowers well above age or there will be little but leaves to , especially if the soil has been en- Occasional plants of Tropæolum nse on feathery twigs some 3 feet in elp to break the otherwise flat surface beds. This is better for the purpose e trailing varieties of Nasturtium, the of which is a bit heavy. Among the lowers of which fine varieties for the are now obtained from annual seed- may be enumerated Antirrhinums, is, Pentstemons, and Violas, and one inks regretfully of the many first-class hat may possibly have been cast away e seed-pan owing to lack of room to m. Besides seedlings planted in the garden, it is always advisable, when ws he has a good strain, to put out a f each in the reserve garden with the selecting anything specially good. Of the four things above named are *bonâ fide* annuals, but treated as they make a brave show in the sum- den and are more enduring than some ardier things.

of the most enduring annuals, re- ly, in the tall and dwarf sections are ateras and Tagetes signata pumila. mer make splendid clumps towards of borders. They should have a few boughs to each clump, not making all stiff or formal, but as a protection heavy rain and strong wind. The riety Loveliness will probably be as and taking in its beautiful shade as h Campbell Phlox or Major Horne . The little Tagetes is useful for fill- aps along the front of borders or as an to taller things. The seedlings of Tufted Pansies are useful if one wants a dwarf carpet, and is not particular as to colour, although they come fairly true from seed, the only drawback being that they are apt to vary considerably in habit. The William Niel type is the best for carpeting.

Hardwick. E. BURRELL.

Pulmonarias

There are three kinds of Lungwort that should be in every garden of good hardy plants. Strictly speaking, there are two only, for two of the three are only varieties of the same species. These are both Pulmonaria saccharata, with rough, bristly-feeling leaves more or less spotted with white. The two have quite different uses in the garden. One of the forms flowers early, from the end of February and into March. The flowers are large and the greater number of them pink on stems from 9 inches to a foot high. The other form of the same plant is for use; not for bloom, but for foliage. The small blue flowers are not of much importance, and should be cut out twice during March so as to throw all the strength of the plant into the handsome white-spotted leaves that are at their best in June.

The third good Lungwort is the best form of P. angustifolia, distinguished as P. angustifolia cœrulea. There is a rare British plant also known as P. angustifolia, but the one in question is not a native. There is a less good form in cultivation, but it is not nearly so desirable as the true plant. It comes into flower in March and goes on into May. The colour is a true and good blue, and the bloom is abundant. It is an easy plant to grow, soon forming strong tufts that should be divided every two years. G. J.

Lathyrus grandiflorus (Large-flowered Perennial Pea)

It is remarkable that, while certain annual species of Lathyrus—*e.g.*, L. odoratus, has given rise to colour varieties galore, to say nothing of developments in other directions, the majority of perennial kinds have done little or nothing in this respect, despite the fact that not a few of them have long been known to gardeners. That above named, a more than century-old introduction, is a case in point, and, so far as I am aware, no variety does or has ever existed. Should there be such a one I should be pleased to hear of it. Such matters apart, however, the species is good enough alone, though it is exceedingly doubtful whether a sufficiently free use is made of so excellent a subject or whether its good attributes are known to the majority of those who garden with the best hardy plants. It blooms earlier than the majority of perennial kinds, has a finer effect than the rest because of a denser habit than they, and the inclination to blossom from almost every leaf-axil.

In point of size, too, the flowers individually are not equalled by those of any other, while the bright rosy-crimson colour of an intenser hue in the upper part of the flower than elsewhere makes for good display. Three feet to 6 feet in height—the maximum very much a question of soil depth, position, and long tenure of the ground—the species is suited to trailing positions on banks, or it may be given high-up places in the bolder rock gardens, showing to great advantage in either. A decrepit or dead Portugal Laurel or shrub of like branching habit might be beautified by planting the Pea about its base, and other ways of using it will suggest themselves. It is not, however, a plant to be always meddling with, and, disliking frequent disturbance, is only seen at its best when thoroughly established and happy. As to soil, it is not fastidious, though best in a rather deep, cool loam. It may be increased by division any time from October to March, preferably, however, during the early autumn months. C. P.

In this small alpine garden the rocks are brought almost up to the house

Aubrietias

What a world of colour and of beauty there is about these lowly plants, and how soon they adapt themselves to their surroundings! I have some in a little rock garden that have taken possession of overhanging ledges, that in May last came in for a deal of admiration. One cannot go far wrong in selecting Aubrietias; they are very hardy, quick of growth, most profuse bloomers, and readily strike either by division of roots or, what I find best, taking cuttings after their flowering season and dibbling them into sandy soil.

W. F.

Perpetual Carnations

April enjoyment

THE result of a dose of some well-known fertiliser given a month ago can now be seen in the improved colour of the foliage and the increased vigour of the plant. This should be repeated with flowering plants which have not been potted on at intervals of three weeks at this season when growth is so rapid and assimilation active. Weak soot-water once a week, in addition, is good. Flowering plants in 5-inch or 6-inch pots which are intended to continue blooming during the summer would, however, be better potted on, and now, if not already done, is better than later when hot weather is trying to the plants. A pot only one size larger will do, using a coarse compost containing a sixth part of decayed manure and potting firmly. A 6-inch potful of coarse bone-meal to each barrowload of soil will add body to it. A feature with potted on flowering plants is the loss of some leaves at the base of the plant, the old foliage of which is prone to go yellow, especially if hot weather comes in before the plants get hold of the fresh compost. Amateurs are inclined to be alarmed at this phenomenon, but it is really less an error of cultivation than a natural sign that the plant is no longer young. A Carnation may be grown on for many years, but will not retain its old leaves indefinitely, shedding a certain number each year.

With many growers a change of opinion comes at this season of the year with their favourite colours. The scarlet, which was probably prime favourite at Christmas, is, perhaps, less attractive than a crimson Clove to a man or a pale pink to a lady who, perhaps, is more attracted also by a mauve or heliotrope at this date. For this reason a wide range of colours and shades is a wise method of procedure when selecting new stock, for not only is a mixed selection of colours more attractive in the house when seen growing, but these shades never clash when growing together.

Carnation Sir Philip Sassoon, which was well shown at the Carnation Show on April 15th

Flowers rich crimson with clove perfume

SELECTION OF VARIETIES.—From the foregoing remarks it will be seen that Carnations do not, as so many people think, "swear" at each other when growing in the house. Even a scarlet looks well with heliotropes, although an old hand would keep his cerises away from the scarlets. When arranged in vases, however, it is important to use judgment and taste if the arrangement is to be a mixed one. Carnations are, perhaps, effective when arranged separately to c especially scarlets and cerises, but mauv heliotrope form a good contrast to yello pale pinks arranged together. To fill with one's own-grown flowers is a pri and pleasure only known to Car growers. It requires more skill to grow than even the gorgeous Rose.

There is, of course, an art in arra Carnations in a vase. Many are pro leave the stems too long, which, unles hang over in a less attractive way than stems were shorter. Flowers should stems of varying length, a short stem r a longer stem, so that the vase, finished, presents an appearance formality and looseness. Lightne arrangement, that effect produced by av the bunching of the flowers together greatly to the charm and beauty of a v flowers.

It is not my purpose to give a list of ties that are recommended, for the ind has his own taste to please, and, as wit dening in general, there is probably n in which one can so fully gratify one's and fads, so profitably and satisfactorily no afterthought and regrets. It is plan, however, to try each season a few varieties, because each year has fre velopments in store for us. One's ov perience with an individual variety is valuable than any advice. For in White Enchantress is a fine white, but Pearl is larger and more sweetly scent some growers will get more flowers fr former and *vice versâ*. A grower's m vary and suit different varieties accord their requirements. If one does a certa well one naturally continues to grow variety. What are known as "good are best discovered by individual exper

I once knew a very successful gro Carnations who had a fad that his pla best in 5-inch pots. His success cor his fad, yet I should be sorry to reco the 5-inch pot as the best for flowering as such require more attention in w and feeding than the average amate give. The tendency to grow plants large pots is decreasing, and the 6-i 7-inch is large enough for one-year pla fact, best for most varieties, some, the old Britannia, Baroness de Brienc White Pearl, doing better in this t larger pots.

If April continues to be warm and plants will require more than as much again than they did two months ago. I would in no way suggest that they be kept wet at all times, during spells they will quickly suffer if ample is not available. The April days ofte an outbreak of fly, which must be i ately tackled or the ill-effects may manent. An insecticide kept ready t lightly sprayed on affected plants soon them, however, with a minimum of This is not to say that those careful who, knowing that prevention is bett cure, fumigate regularly every three w spring, do not have an advantage ove who do not.

The cuttings put in during March now be rooting freely, and after three in the sand a few should be gently lift when the roots are seen to be three-c of an inch long they should be pott 3-inch pots at this date. Such young must be kept shaded and sprayed over sunny days to prevent flagging. They either be kept in the propagating-hou week or 10 days after potting or plac house where they can be kept close period, as a cutting that has flagg

Narcissus Fortune
A giant incomparabilis with a clear yellow broad perianth and a crown of glowing coppery orange-red

Narcissus Fortunatus
A large Barri and the first of Fortune's progeny to appear at a London show

s hard, a fatal condition for young

the time when the final batch of may be put in. Such make useful ring plants, or, if all growths are back in August, such plants make material for planting outside the spring. LAURENCE J. COOK.

Hill Park.

ation Sir Philip Sassoon

variety, which has received the S. Award of Merit, was well shown e Carnation Show on the 15th inst. e appearance somewhat of a refined ith a similar Clove perfume, the rich shade being, if anything, a little The plants, however, are quite dis- he way they grow, for, whereas it some skill to grow Carola well, Sir assoon has an easy, quick, and rowth.

Iris reticulata major

the early flowers of spring few are ive as the Netted Iris, and none of ies are superior to I. reticulata The latter is much to be preferred to l form, and in comparison with I. r. the latter also suffers. The blooms and of a deep violet shade, with a ellow centre, while the perfume, identical with that of the Violet, tly to the attractiveness of the plant. rms do well if planted in a situation sed to the sun, and they also make l greenhouse subjects if planted ckly in shallow pans. They object, to forcing in the strict meaning of KIRK.

Narcissus Fortune and Its Progeny

By F. HERBERT CHAPMAN

THE progeny of Narcissus Fortune is bound to be of much interest to Daffodil lovers, because Fortune itself was such a big step in advance. Making its appearance only a very few years ago at the shows, it was at once recognised as a very outstanding thing, and has since been much sought after; so much so that, I believe, the price even now asked, *and given,* is about £35 per bulb.

The flower has size, shape, fine colour, and earliness, four points not to be despised, and it is of additional interest to the hybridist from the fact that the plant seeds, and still more from its potentialities as a pollen parent. Turning up a note on Fortune by my friend, Mr. Guy Wilson, whose intelligent and fascinating writings on the newer Daffodils I endeavour never to miss, I find he speaks of it as a giant Incomparabilis, with brilliant clear yellow broad perianth of splendid form, and large, long crown of glowing clear coppery orange-red. A fine length of stem and a vigorous constitution are further assets of this grand plant.

Of the origin and of the pedigree of Fortune I offer no particulars and no opinion, the reason being that I have been told totally different stories by different people, people I consider credible witnesses, so that the matter remains, to me, "wrapt in mystery."

I began to use the pollen of Fortune in 1920, and the bloom illustrated, Fortunatus, first flowered last year (1925); this year it shows great improvement. The seed-parent was poeticus Kestrel, rather a proof of the versatility of both parents, as the sections are far removed. Fortunatus is a large Barri, with broad perianth of deep primrose, approaching canary, with saucer-shaped crown and a broad and very distinctly clear-cut band or ribbon of rich brick-red.

The few experts who were round me when I unpacked it in its box at Vincent Square at a recent R.H.S. meeting almost cried out in astonishment at the brilliant show the flower made against its white tissue packing, and I have nothing to complain of at this, its first reception. I hope it will go on adding to its honours, as the plant is a very strong one and already indicates good and prolific increase.

Perennial Gypsophilas and lime

I listened a short time ago to a tale of failure with clumps of Gypsophilas, how every one, just as the flowering spikes gave promise of opening, drooped and eventually dwindled away. They had been planted in the same border several years, and an examination of the soil revealed the fact that it was lacking in lime—one of the chief constituents of these lime lovers. It is a common experience to find Gypsophilas will go for several years, and then when buds are forming suddenly fail. Few appreciate how important it is to provide them with lime in some form should the soil be deficient of it. I find that old mortar rubble forked in about the roots in autumn or spring generally puts matters right. I would warn anyone against attempting to shift old plants of Gypsophilas, thinking thereby to solve the difficulty, as it is well nigh impossible to lift them without severing the long, fleshy roots. That is why a place should be found for plants suitable as regards soil, and one where the sun can reach them, so as to avoid any further disturbance. WOODBASTWICK.

Some Flowers of Tibet

VI.

(Concluded from page 227)

By F. Kingdon Ward

Alpine Poppies

This is the concluding article by Capt. F. Kingdon Ward on his eighth expedition in Tibet. The author left London on February 18th, with the good wishes of a wide circle of friends, for Burma, whence he will commence his ninth plant-hunting expedition in Asia. He proposes to explore a practically unknown part of Tibet, and at one period of his travels expects to be entirely out of touch with civilisation for a period of three or four months. Happily we are now enjoying the fruits of his earlier travels, the lovely Meconopsis Baileyi, with clear sky-blue flowers, shown before the Royal Horticultural Society on April 7th and illustrated herewith, being a case in point.

No account of the Tibetan flora would be complete without some reference to the blue and yellow Poppies of the genus Meconopsis. These alpine flowers are not only amongst the most beautiful met with, but are abundant enough to form an important element in the vegetation and flower-scape at midsummer. Although most of them are true alpines, some even coming from the topmost limit of flowering plants, a few are wildlings of the woods from lower elevations, and as these latter promise to be the most useful garden plants, I will begin my brief account with them.

Let us, however, clear the ground a little first. Although Meconopsis has long been in cultivation, and although at one time or another a considerable number of species have been raised from seed (mostly in Botanic Gardens), few species are in cultivation to-day, still fewer are grown in any quantity even by the most devoted, while the trade seem unable to supply any at all. In other words, Meconopsis is not exactly a popular genus with the ordinary man. Beautiful as they are, they are rare, difficult to keep, and expensive to keep up, since, being mostly biennial, they may have to be raised afresh from seed under glass each year.

So much for the lovely sky-blue species—M. latifolia (the prickly blue Poppy of Kashmir), M. Pratti (the Chinese prickly Poppy), M. Wallichi (a tall leafy species enveloped in golden down with short axillary spires of blue flowers forming a pyramid), M. integrifolia and M. pseudo-integrifolia (the yellow lampshade Poppies of China), and M. paniculata of Sikkim, which is like a yellow-flowered Wallichi. These are all moderately common in gardens; at least, in certain parts of the country, and not difficult to grow; indeed, several of them come easily from self-sown seed, and so require no looking after. Subject to the above limitations they are first-rate garden plants, and in sheer beauty hold their own with almost anything in the same class. They do better in Scotland and Ireland, where there is ample summer rain, than in the south and east. Winter damp may kill them, but summer drought infallibly will. What they really need, of course, is perpetual summer wet and winter drought; but that we cannot supply to order. They must at all costs have ample water in the growing season, the more deep-seated the better. A heavy or caking soil spells death; they require a light porous soil, with a free admixture of gravel, with depth enough for the root to go down three clear feet or more if it wants to.

But there are also a few perennial species in cultivation, though oddly enough these are even less frequently seen than the more troublesome biennials. M. quintuplinervia, for example, is a Chinese plant met with in some gardens, and M. grandis is an even rarer Sikkim plant. Both are beautiful, but they rarely look their best in this country; either the blues degenerate into dingy purples or the plant itself grows scraggy and haggard-looking. More at home is the azure-blue M. simplicifolia, which, however, is not always perennial—nor azure.

What applies to these favourites applies equally to our new Tibetan species, are all more or less Tibetan plants, per cent. of known species coming fr great elevated region which stretch Kashmir to Central China and Upper

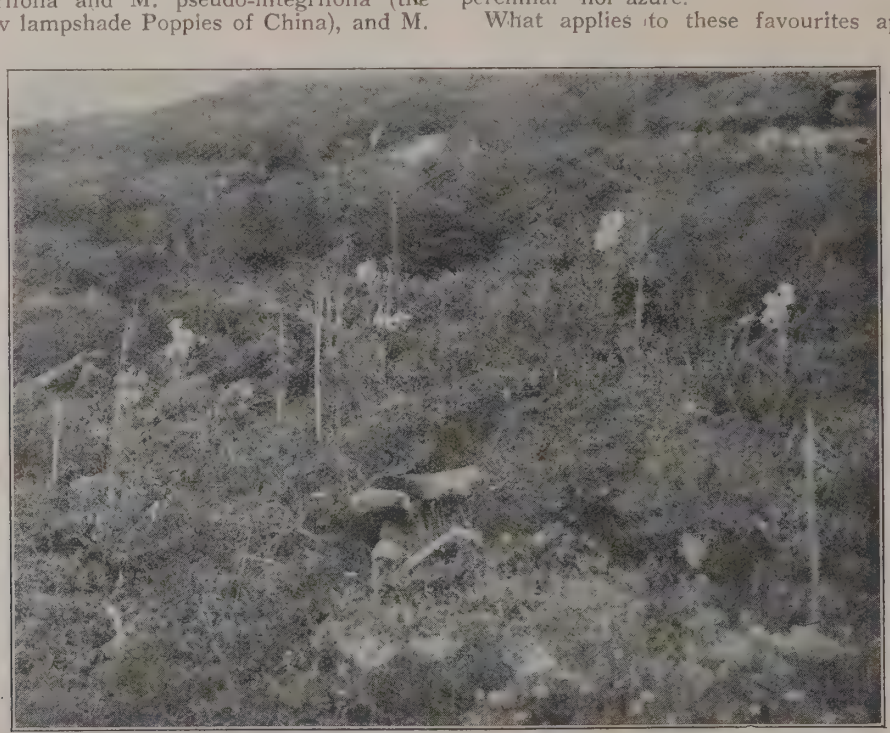
To take our Tibetan plants in flowering, then. The first to flower woodland blue Poppy, M. Baileyi, w sea-green leaves, the radical leaves stalks, the stem leaves sessile, turqu petals, and golden stamens. It grov high, flowering in early June under bushes lining the banks of streams. soil is a moist loam, rich and cool manured by yak and ponies grazin meadow, which come down to d flourishes best in rather deep shade, three or four years will form ma clumps. This species, unlike man high alpines, ought to be perfectly an English wood. M. Baileyi, by must not be confused with M. sim variety Baileyi, which is quite a plant. The former, hitherto kno from a fragment collected by Majo Bailey in 1913, has never been in cu

Flowering almost simultaneously Baileyi, in the alpine region, were th species, the sky-blue M. simplicifoli is deliciously fragrant, a yellow species like a large M. pseudo-int and the Ivory Poppy, which is like yellow or nearly white M. sim These are all found on the Rhod moorland.

M. simplicifolia sends up three separate stems, each about 18 incl and each ending in a single larg flattened flower of dazzling blue, wi stamens. It is worth noting that the flowers are not, as a rule, scented, the blue Poppies we find quite a n fragrant species, such as M. lati

The lovely sky-blue Poppy (Me Baileyi), which created great intere shown by Lady Aberconway at Square on April 7th and 8th, received an Award of Meri

It is an exceedingly beautiful perennial from China with golden anthers and fu with stem-clasping leaves, distinct fr others. In another illustration th Poppy is seen in its native habit



[Photograph by Lord Cawdor

Open alpine moorland, with yellow Meconopsis and Primulas

Photograph by Lord Cawdor

Meconopsis Baileyi

MECONOPSIS IN NATURE
Meconopsis Prainiana

The Ivory Poppy in Tibet

folia, the new M. Cawdoriana, and inese M. speciosa. The big yellow-l integrifolia type has a stout main em, bearing a dozen or more sulphur-floppy blooms on short axillary , and, whereas M. simplicifolia likes shade such as is afforded by a high he yellow moon flower plant grows the sodden moorland amongst the Rhododendron.

nore elusive was the Ivory Poppy, or simplicifolia, which was so rare that only seven specimens of it the whole were in Tibet. It may be a new or it may be a yellow form of M. folia, but if the latter it is unique, no species has hitherto been known n the flower colour varies from blue w. Albino flowers are not rare, and generate freely to purples, but yellows remain yellow, so far as we know at

ly three more species flowered on the endron moorland. First, M. impedita, Morsheadi, a jolly little navy blue l species (purple sometimes) of the urf slopes. The stamens, as usual, en, and there is no scent. The flowers ne each at the end of a single wiry stem, there being sometimes a dozen stems springing up from the leafy k which plunges far down into the The whole sheaf of threadlike stems, h its nodding terminal flower, spreads droops over to form a graceful ostrich M. impedita was extraordinarily t, though always scattered. Another of it occurs several hundred miles Western China.

a few fragrant sky-blue species after my companion, M. Cawdoriana. of the prickly Poppies, but it rarely al central stem, except in so far as rate flower-scapes, springing from the close to one another, grow up to-forming a compound or false stem, are able to separate again. M. ana grows on turf and earth slopes o feet. Though only 8 inches or 10 igh, the flowers are of so dazzling a t with the cloud of golden anthers in re and the halo of fragrance which surrounds them one becomes aware of them at a distance.

The last of this lot to flower, at the end of July, was another new species of prickly Poppy, M. Prainiana. It is not quite such a vivid blue as some of the others, rather pale and watery; but it is a fine upstanding plant, nevertheless, 3 feet to 3½ feet high, with a dozen big blooms on the single main stem. It also has golden stamens and is scentless. Confined to the boulder slopes above 15,000 feet it flourishes under the most wretched conditions and bears out the curious fact that in this genus the most beautiful and flimsy flowers are usually found in the starkest, dreariest situations, where wind and rain can most easily pulp them; yet for a month or six weeks they go on producing flowers faster than the elements can batter them to pieces and strew their delicate petals on the bare rocks. Though scattered, this fine Poppy was widely distributed and fairly common, and we must have seen a good many plants one time and another, though never more than two or three at a time.

As I have said above, the Poppies were a great feature of the alpine flora in June and July, and we saw in Tibet, more than once, a thing I have never seen in Western China, or, indeed, anywhere else, namely, four species of Meconopsis in view at the same time. Sometimes on the alpine moorland one would find oneself marooned on a rock washed by a perfect sea of blue and yellow Poppies, dozens in number, including M. pseudo-integrifolia, M. impedita, M. Cawdoriana, and M. simplicifolia.

Amongst the last to flower, in July and August, were two very interesting species. There was the dwarf yellow-flowered M. Florindæ, the only yellow-flowered dwarf known, and a child of the woods, and there was a variety of M. brevistyla, probably distinct enough to have a name of its own, found on the cliffs at 16,000 feet. M. Florindæ is quite unlike any species in cultivation, and it ought to be a great acquisition; the only closely-related species are M. polygonoides and the blue-flowered M. lyrata, neither of which is in cultivation. Although the colour is not a very bright yellow it must be stated in defence that I saw the plants in flower under the worst possible conditions, well past their prime on a pouring wet day, so that they naturally looked a little wan. Grown under kindlier conditions the flowers may turn out to be a bright daffodil-yellow. M. Florindæ grows from 6 inches to 9 inches high, sending up a wisp of a stem bearing a few narrow leaves, entire or deeply cut, and terminating in a single nodding canary-yellow flower with sometimes a second one below that, the stem giving off another pedicel. It is found only in deep shade, on banks in the upper mixed forest, almost buried by the rank undergrowth which, by mid-July, surges waist-high, and though, after some search, I found several hundred plants, forming little colonies, they were all together in one comparatively small area, nor did I ever come across the plant outside that area.

However, I secured ample seed of both these woodland species—M. Baileyi and M. Florindæ—and this has germinated freely; they are more likely than most species to survive the shocks of our uncertain climate.

The Tibetan M. brevistyla is another proposition altogether. Experience has shown that the Chinese M. brevistyla, which comes from about the same altitude, that is to say, 16,000 feet and upwards, which is as high as flowering plants climb, does not do with us. Neither is this new variety or species likely to do so. The fact is, these very high alpines flourish under conditions of heating and lighting which we cannot even remotely approach in Britain. Our plant is short and stumpy, with bright cadmium yellow flowers, single or two together on the main stem; it is covered with long silky pale orange hairs, and grows scattered or in small colonies on the highest screes and cliffs, finding such shelter as it can under the lee of a convenient rock. But as its inability to put up with our climate is almost a foregone conclusion, I need say no more about it.

It is the same with the widely-distributed Tibetan species, M. horridula, of which we found numerous specimens. The high alpine form has usually Cambridge-blue petals, and is hopelessly non-suited in Britain, but the variety called M. racemosa, which comes from lower altitudes, does fairly well with us. We met with both varieties; typical M.

horridula with no central stem, all the scapes, sometimes 20 or 30 in number, being one-flowered and independent, comes from barren screes at 16,000 feet. The variety called racemosa, on the other hand, has a central stem 12 inches or 15 inches high, bearing about a dozen axillary flowers on short pedicels, and this plant will grow in England, though it is by no means one of the most striking species. The flowers are usually Oxford blue.

Of the species enumerated above and met with in the course of our Tibetan journey, three, M. Florindæ, M. Prainiana, and M. Cawdoriana, are distinctly new, while M. Baileyi is new to cultivation. The two yellow-flowered species of the section Grandes are certainly new varieties, and probably new species, related to M. pseudo-integrifolia and M. brevistyla respectively, while M. impedita, M. horridula, and M. simplicifolia were already known. As for the Ivory Poppy, it may be a new species, or it may be a colour variety of M. simplicifolia, which it closely resembles in structure as well as in fragrance.

All these species grew on the drier ranges, where in the alpine region there is not such a dense tangle of woody plants, and the herbs get a chance. On the wetter range are not nearly so many species, thoug M. Baileyi and M. simplicifolia grow Two other species were found, but as was in flower it is impossible to give One was related to M. Florindæ, and have been M. lyrata; the other was related to M. simplicifolia. Altogether we found 10 or 12 species of Mecono the comparatively small area we covere a bad record for one season's work in explored region. There can be little that more species remain to be discov eastern Tibet.

REMINDERS FOR THE WEEK

Southern and Midland

Asparagus beds

Now is the best time to form new plantations, where these have been previously prepared. The roots should not be allowed to lie about when received. The crowns should be 3 inches below the surface when set and 1 foot by 18 inches apart. Seeds may also be sown thinly in drills of well-worked soil at a distance of 18 inches apart, covering the seed 1½ inches deep.

Onions

Plants grown in boxes from seed sown in heat during the winter should, by this date, be hardened off and fit for planting out. The bed should receive a liberal dusting of soot and the plants set out 9 inches apart in rows 15 inches asunder, making the soil firm around the roots.

Brussels Sprouts

Where the resultant plants from an early sowing made under glass have been well hardened off there need be no delay in getting them into their permanent quarters. The soil should have been deeply dug or trenched and well enriched with manure. Two feet 6 inches between the rows and 2 feet between the plants are none too much room to allow.

Rhubarb

Crowns that have been forced under glass during the past few months should be planted out, and if not pulled during the coming season will soon recuperate and make crowns that can be forced again a few seasons hence.

Fruit trees on walls

With the drying winds and sunshine at this period the soil is apt to become dry. A good watering should be given to the roots and a heavy dressing of decayed manure or leaves.

Black aphis

Cherries are always liable to attacks of this insect, so at the first signs it must be kept at bay by syringing the trees with Abol or some other insecticide.

Blackberries

Most of these useful fruits, including Logan and Hailsham berries, are usually grown by nurserymen in pots, and where it is contemplated planting a few it is not too late to get them in. Old stools should be given a mulch about this date.

Cucumbers

A hotbed may now be made up in a frame for growing Cucumbers during the summer. The material should be well mixed and fermented before putting together. Seeds may be germinated in small pots placed in the propagator in readiness. Plants in houses are now growing freely, and attention must be paid to thinning the shoots, watering, and ventilation.

Fruit houses

Ventilation is a very important item now, while the foliage is tender. The cold winds, if allowed to penetrate amongst these, will cause irreparable damage.

Evergreen hedges

There is no better time than the present for planting Cupressus, Yews, Thuja, Lonicera nitida, and others, provided they are planted carefully, well watered in, and given a mulch afterwards, not forgetting to stake all large plants that are liable to be shaken by the wind before they become established.

Dahlias

Now is a good time to plant the tubers. Stations should be prepared for each and enriched with manure at least 18 inches deep. The crown should be at least 3 inches below the surface, and if the shoots appear too soon a shovelful of ashes placed over each will protect from frost and also the ravages of slugs.

W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Shading

Shading is a necessary evil, but those whose houses are not fitted with modern shading screens, which can be manipulated at will, must attend to it now. Shading is especially needed at this time in the fernery, in which the young fronds readily scorch if not screened from the sun. Shading, while it must be effectual, ought to be done as lightly as is consistent with the welfare of the plants, for if too heavy it will defeat its own ends and do more harm than good. The preparation known as Summer Cloud, applied in accordance with the directions given by the makers, is as good as anything I have used for the purpose.

Lawns, &c.

While the cold weather has certainly checked growth, the mowing-machine should now be kept regularly at work. There is yet time to undertake any re-turfing or patching of grass tennis courts or croquet greens, but the work should not be delayed. The roller should be run over greens and courts frequently in order that the sward may be consolidated before play begins in earnest. Hard tennis courts, too, must be rolled at least twice weekly, and if, as sometimes happens, the surface has turned green during the winter, a dressing with the appropriate weed-killer will soon put matters right.

Walks and paths

To keep these trim and free from weeds during the summer they ought now to be given an application of weed-killer. The supervision of this work must be given to a careful man in order that grass verges may not be burned. Apply the preparation when the walks are damp, but when the weather promises to be settled for a day or two. Adhere closely to the proportions given by the makers, it being false economy to endeavour to make weed-killer "spin out."

Rose garden

If pruning be not already complet work, save in the case of Tea Roses, be pushed on. In pruning, all we badly-placed shoots ought to be cleanly, and when that is done the re can more easily be dealt with. C sense *plus* observation is of more se Rose pruners than detailed and often i directions, and experience soon teac novice what is the best way in w handle his plants. After pruning, the borders should be lightly forked up, such can be given, a dressing of son and safe chemical fertiliser may be before forking is done.

Hardy fruit

Black Currants and Raspberries, es the latter, will appreciate a liberal m half-rotted manure at this season. absence of more orthodox material a of half-decayed leaves will be bette nothing. Prevention being better tha let the Gooseberry bushes be well dust dry soot if caterpillar is known, or su to have been present last season. T Plums, Pears, and Peaches on the wa in bloom or on the point of blooming protected from possible frosts. A thickness of cotton fruit-nets will g be sufficient. Branches of Spruce tuc hind the branches are also of service way, where nets may be limited in Should the Strawberry plantation hav up till now, left to its own devices, should elapse before it receives attenti in the case of young plantations, any in the lines ought to be made good.

Flower beds and borders

Beds and borders of Tulips, Wall etc., may be lightly hoed when the sufficiently dry. Wallflowers have, i exposures, suffered rather severel blanks, or weather-beaten plants, oug made good from the reserve bed. Th ness of Cheiranthus Allioni has be more amply demonstrated—out of c ably over 1,000 plants I have not seen which could be ascribed to the severit winter.

Kitchen garden

Pea-staking must be done in good t if the young plants be allowed to f they are never afterwards quite satis Brassicas sown in heat earlier in the and pricked off into boxes will now l for hardening off in cold frames. T important sowing of Celery is now c Celeriac should by no means be Late frosts are apt to be troublesom early Potatoes which may be appearin ground must be protected in son Cover further batches of Seakal weathered ashes or with fine soil, an Celery trenches are not prepared t should now be undertaken.

W. McGt

Mabie Gardens, Kirkcudbrightshire

VEGETABLES

The culture of Beetroot

REAT amount of worthless Beetroot nnually produced in this country, and most cases the reasons are too early and too rich soils. Under no condi- ould fresh manure be applied to the of soil where Beet is to be grown. in all decently tended gardens there ever be any need for the adding of at all for this crop. The only time would be permissible to incorporate a nure in the soil for Beetroot is when own to be actually very poor. Even ly well-rotted dung should be used, in moderation, and none of it nearer ace than 12 inches.

n before the second week of May the e usually much too large and coarse, mbers may even bolt. Before draw- drills the ground should be thoroughly ll lumps being reduced to fine mould, surface raked level. Allow 18 inches the rows and draw drills about 1½ eep, and scatter the seeds thinly and overing in with the feet and making hout being actually hard.

on as the lines of seedlings are ole run the Dutch hoe up between the nd repeat this at frequent intervals plants get so close that it is unwise through them.

ing should be carried out while the e quite small, allowing from 7 inches es from plant to plant.

oots should be harvested in October rost is severe enough to harm them. re numerous good sorts to be had, Dobbie's Purple, Nutting's Dwarf agnell's Exhibition, Dell's Black, and non-bleeding Galloway Purple. The ed gives the finest roots on fairly il, and when so grown produces -sized shapely roots, which may, safety, be cut before being cooked, ally retain both flavour and colour.

n House, Linlithgow. C. BLAIR.

Protecting Broccoli

nnot always select or set aside the tion for Broccoli at the time of plant- and it sometimes happens that, as approaches, and the possibility of eather, we are up against the pro- providing protection for the crop. It taking the necessary precautions to gainst loss. "Heeling over" the the north is a method calculated to rop, but a simple way is to use light itter in severe frost. I have used for ose Pea haulm and Bracken. Some of Broccoli need less protection than owing to the leaves turning in, as in of Knight's Protecting, an old and sort. Protection is needful, not only ere frost, but spring sun following ich damages the curds.

MIDLANDER.

Outdoor Tomatoes

who grow Tomatoes in the open e most likely chance of success if e a south or east wall or boarded command. It matters not if it is t high, as to allow of greater length ts can be trained obliquely. With veniences success in an ordinary sea- most a certainty. The greatest mis- that of not having the plants large at planting time, owing to late sow- a rule, the plants cannot be put out ty until the middle of May. At that y should be at least 1 foot high, and growing in 5-inch pots; if 6 gher, and proportionately stocky, all the better. Such plants, directly they take hold of the soil, commence to show flower-trusses, and if carefully managed as to watering and regularly removing all side shoots, confining the plant to one stem, there is not much trouble in obtaining a "set" of fruit. When once this is assured the full height of the plants the point should be removed to concentrate the energy of the plant into the development of the fruit. In reds good varieties are Sunrise, Holmes's Supreme, and Up-to-date. If a small-fruited yellow is required then Golden Nugget may be chosen.

S. H.

Seakale in April and May

We do not make as good use of this vegetable as it deserves, as grown naturally it gives little trouble, merely covering over for blanching. Kale grown for late work lasts for years. At the same time I find I get much better results by planting fresh stock, say every half-dozen years, and by so doing have very fine Kale. If the plants have been well grown such aids as pots are not required. I find it quite sufficient to give the plants a little fresh lime over the crowns, this keeping slugs and worms at bay, and then a covering of fine coal-ashes is beneficial, and after that a quantity of soil from between the rows well banked up over the plants. Plenty of room is necessary between the rows to prevent damage to the roots. The Kale, when strong, has a tendency to push out at the side, hence the importance of plenty of soil when covering. In a warm spring I have often had to retard the growth by an extra covering of Bracken over the soil if it is light. In heavier land growth is less active. Kale grown thus will give good cutting material for from four to six weeks, and of fine quality also.

W. M.

Kohl Rabi

This is, in some districts, looked upon rather as a field root, but it has its uses in the garden as well, although it does not appear to be by any means popular. Yet, in a hot, dry summer, when Turnips are giving trouble, a sowing of Kohl Rabi may save the situation. The bulbs, if used when they are the size of a small Turnip, make an excellent substitute for that root, and they possess a distinct flavour. If allowed to grow too large the roots become hot and stringy, and it is, perhaps, due to the fact that Kohl Rabi has been allowed to grow too long before being used that it lies under suspicion in some gardens. The best soil in which to grow it is that of a sandy nature, but it is not at all fastidious. Seeds may be sown at any time from April to midsummer in drills 18 inches apart. Thin till the seedlings stand 9 inches from each other.

A SCOTTISH GARDENER.

How to grow fine Parsley

In some gardens considerable difficulty is experienced in getting this to thrive, while in others too thick sowing, with no attempt at thinning out the rows, results in very weedy produce that quickly dies during drought in summer or sharp frost in autumn. Yet this plant may be had in perfection in every garden if a little intelligent care be given it at the start. For early supplies it pays to sow a pinch of seed in a pan early in February, pricking off, when large enough, into boxes of good compost, and planting out early in May. Treated thus, picking may begin in June and be carried on, from the same plants, until November, or later, in mild winters. Good results are also got by sowing out-of-doors during March, and thinning the seedlings while quite small to 6 inches or 7 inches apart. Where any difficulty exists in getting Parsley to thrive the following plan will, almost certainly, ensure a fine crop of best quality. To the site where it is proposed to sow or plant Parsley wheel a generous dressing of leaf-mould, and dig this lightly into the bed. The best method to adopt is to first manure and deeply dig the ground, and just before planting or sowing apply the leaf-mould and lightly fork it in. The layer of leaf-mould should be about 6 inches thick, and it should be little more than covered with the soil when forked in. I have never known this to fail, even in gardens where Parsley invariably died if sown or planted in the unprepared soil.

C. BLAIR.

Preston House, Linlithgow.

Planting early Potatoes

Experience during the last few years has taught us that planting Potatoes too early in the season is both a waste of time and labour, and a source of bitter disappointment. Many plant early, thinking to be before their neighbours, but they are often greatly mistaken. The best plan is to lay out the tubers singly in a cool vinery about Christmas, or in any outhouse protected from frost, and where abundance of light and air can be admitted on every favourable opportunity. Thus treated, by planting time they will have made fine, strong, green shoots, when they should be taken up carefully, putting them into drills about 3 inches deep, when they go on growing at once, and will all be fit for lifting at the same time, and will prove much more satisfactory than those planted early and cut down by frost in an early stage of their growth.

S.

FRUIT GARDEN

Figs in pots

I QUESTION whether there is any fruit-tree that will maintain its fertility for such a lengthened period, or that will produce so much fruit from a given space, as the Fig. Restrict its roots either in pots or in brick pits, and its greatest amount of fertility will be ensured, for if allowed a free root-run in rich soil its energies are expended in producing gross, watery shoots and leaves, whereas, when starved into a fertile state, and furnished with short, hard, well-ripened shoots, fruit in abundance is the result. I have a quantity of Fig bushes that have probably occupied the same-sized pots for the last 20 years, and they are certainly more productive than young trees; in fact, I see no reason why a Fig-tree might not do good service as a pot tree for a century. In selecting young Figs, the same rule should be followed as in the case of Gooseberry and Currant bushes, viz., those should be chosen which have single stems about 1 foot high, and regular, well-balanced heads of branches should be formed by pinching out the points of the strong shoots as soon as they have attained the desired length. After the heads are well furnished with bearing wood every shoot should be stopped at the third or fourth leaf, as the second crop under glass is usually more abundant than the first; and if well supplied with liquid-manure the trees will perfect both crops well, and likewise ripen off their young wood and an embryo crop for the first of the following year, but care should be taken not to excite growth before the trees have shed their foliage. As soon, however, as the fruit is ripe the trees should be kept as cool as possible, and less root and atmospheric moisture supplied so as to ripen off the wood and induce a season of rest under as natural conditions as possible. I believe that the wood of pot Fig-trees grown in this manner would stand without injury a degree of cold that would prove fatal to the soft, watery shoots that are frequently found on trees out-of-doors. Pot Fig-trees are, however, always

safest under some kind of protection, and as light is not absolutely necessary for them during the resting period, they may be set in any dark shed, and the Fig-house may be more advantageously employed up to the season when it is thought most desirable to re-introduce the Figs for the season's work, which must, of course, be regulated by the time at which the produce is most required.

Figs will not only bear, but are greatly improved by a high temperature and plenty of moisture, the two chief elements in forcing, but along with them the plants should have all the light which it is possible to give them in our dull climate, for if grown under Vines or other kind of shade only secondary results must be expected. As regards soil, I find nothing better than turfy loam and old mortar rubbish rammed hard into the pots, room being left for watering, which is one of the chief items in Fig culture, for when loaded with fruit and foliage, the amount of moisture which a large Fig bush will require on a bright day is astonishing, and if allowed to get dry enough for the foliage to flag, the loss of the crop will probably be the result.

H. L.

Apple stocks

What is the difference between Crab, Paradise, and Doucin Apple stocks? C.

[Wild English Crab stocks are seedlings obtained either by sowing pips of fruit gathered from the hedges and woods, or by hillock layering. This kind of stock is that best suited for standard or orchard trees. The Paradise stock is a low-growing Apple, wild in Russia and the Caucasus, and its merits as a stock for bush or pyramidal trees consist in its short, fibrous, wig-like roots, and in its finely-grained and slender stem; hence it exerts a restrictive influence, and induces fertility at a much earlier date after grafting than either the Crab or Wild Apple stock. The Doucin is a variety of Apple long grown in France and Belgium, and, like the Paradise, it has a restrictive influence on the growth of the scion; its use as a stock, however, is mainly due to its easy propagation either by means of cuttings or layers.]

Planting dormant vines

The present is a good time for planting Vines in a dormant state, either for the purpose of introducing any particular variety to a vinery already furnished with rods, the planting of a newly-erected house, or when replanting has become necessary as a result of having had to discard the former occupants. The soil should be carefully washed out from among the roots, which enables them to be disentangled the more readily, and also allows of their being laid out, when planting takes place, with greater facility. Holes large enough in length and width to accommodate the roots when spread out regularly and straight must be opened beforehand. The roots, when covered, should not be deeper than 6 inches from the surface. It is a good plan to work in some fine, sandy soil among the fibrous roots, this inducing greater and quicker activity of growth than if covered with the compost of which the border consists. If the canes have not been cut back to the point or buds from where it is desired to train or take up the new rods, the buds as they break must be rubbed off down to that point, as cutting back now would lead to a great loss of sap by bleeding. If the border is inside the house the soil should be settled into place about the roots with a good soaking of water in a tepid state. Watering for the present is best omitted in the case of an outside border, placing a mulch of short litter over the roots instead.

INDOOR PLANTS

Streptocarpus

IT is just over a century since the first Streptocarpus was introduced to this country from the Cape of Good Hope, the plant being named S. Rexi. This was followed some 30 years later by S. polyanthus, a native of Natal. A steady flow of new species continued, and a general interest was taken in the Cape Primroses. The first man to see the great possibilities of crossing the various species was the late W. Watson, Curator of the Royal Botanic Gardens, Kew, who successfully raised many fine varieties. A selection of these was secured by Messrs. Veitch, of Chelsea, who continued the work of hybridising with gratifying results, and others who entered the field were the Cambridge Botanic Gardens and Mr. E. Beckett, of Aldenham. All have added their quota to the improvement of these plants, and now we have wonderful strains characterised by a great variety of colour, large flowers on tall stems, good constitutions, and a pleasing habit.

They can also be obtained from seeds in such colours as pink, blue, white, red, and rose shades, but for a general display the giant or mixed hybrids are suggested. These produce almost endless shades of pink, crimson, violet-purple, and mauve, which are most attractive when in bloom, a period extending over half the year.

It ought to be clearly understood that Streptocarpi are greenhouse plants and not stove subjects as some would have us believe. A winter temperature of 40 degs. to 50 degs. is ample, with a rise of 10 degs. or so during the summer. These plants can be raised from seeds and leaf cuttings, but the latter is only practised when it is desired to increase any special variety. Seeds of a good strain should be obtained and sown during the latter part of February or in March. Well-drained pots or boxes are filled with light soil and afforded a liberal watering a few hours before sowing the seeds. These are very minute and should be sown thinly and covered very lightly with fine soil or sand. Cover each receptacle with a piece of glass and place in a temperature of 60 degs. to 65 degs., turning the glass occasionally until the young plants appear, when the glass is dispensed with.

If water is needed during the period of germination the pots should be stood in a deep saucer of water and left there until the moisture percolates to the surface. When the seedlings are through the soil place the pots near the roof-glass, but protect them from strong sunlight, and directly the plants are large enough they should be pricked off a few inches apart in boxes containing a mixture of peat, loam, leaf-mould, and coarse sand. While the plants are quite small they are best grown in a warm house, but as they increase in size they must be potted off into 60 size pots, and may be removed to a slightly cooler structure, such as a pit which can be heated if required. Many of them will bloom in these pots, and the best varieties should be placed in pots 5 inches and 6 inches in diameter. The rooting medium should consist of fibrous loam one-half, peat one-fourth, and sweet leaf-mould one-fourth, to which is added a liberal sprinkling of coarse sand. A 6-inch potful of finely-broken crocks or charcoal to every bushel of the mixture will be beneficial. Stand the plants on a cool base in the greenhouse, fairly close to the roof-glass. Careful watering is advised at all times. Never spray the plants overhead, but during hot weather it is expedient to sprinkle the floors and stages with water to promote a congenial atmosphere. Streptocarpi are more or less shade-loving subjects, so blinds or some other method will be to prevent injury when the sun is brig

Although the Cape Primroses perennial, I have never kept the pla yond the second season, after which t decidedly inferior to seedlings ab months old.

Green-fly must be watched for, also bug if this pest is present in the ho pits. T. W

Double White Petunias

These are extremely useful for a s display in the greenhouse and conser young vigorous plants keeping up over a very long season. It is quite a to keep old plants, as is often done; t lanky and untidy in appearance if back, while if so treated the flowers ar so fine as from young plants. See offered in catalogues, but it is mu better plan to get hold of a good vari propagate by cuttings yearly, throw old plants away in autumn, but rese few for stock. These will be cut ba kept in the greenhouse during the They will now be covered with short, shoots 2 inches or so in length, and it quite time to strike these. My earliest been struck and potted up, but there i of time for successional plants. The with the utmost ease in light sandy c about five or six being placed in a 4-i The soil must be well watered at o kept moist, and the cuttings will be in about a fortnight. Pinch the tip each one a few days in advance of singly into 2½-inch pots. After this r gradual stages until the 6-inch or 8-i is reached, never allowing the plants potbound before shifting, as this wi flowers to be produced before growth ficiently advanced. Growth is rapi greenhouse or frame temperature. time the flowering pots are filled wi they will be dense bushes about 15 high and as much through, and for four months these plants will pro almost unlimited supply of flowers ting, or if not needed for this purpose useful for the conservatory. They beautiful if arranged in a tasteful with tuberous Begonias, the snow-wh finely-fimbriated flowers showing wel the richly-tinted blooms of the Although so easily and quickly gro roots of these plants are delicate, an best results are expected it is best to little care with them. The soil must and porous, yet firm, not rammed pots, of course, but pressed well do the thumbs when potting. Plenty air, a fairly dry and buoyant atmosp clear light are also essential. A lit soot water is an excellent stimulant fore the plants come into bloom, an all through the flowering time. It healthy deep green tint in the foliage flowers are much finer. A few st usually necessary, as the wood is ve and a little care in placing these so hidden by the foliage is well repaid.

Plant houses

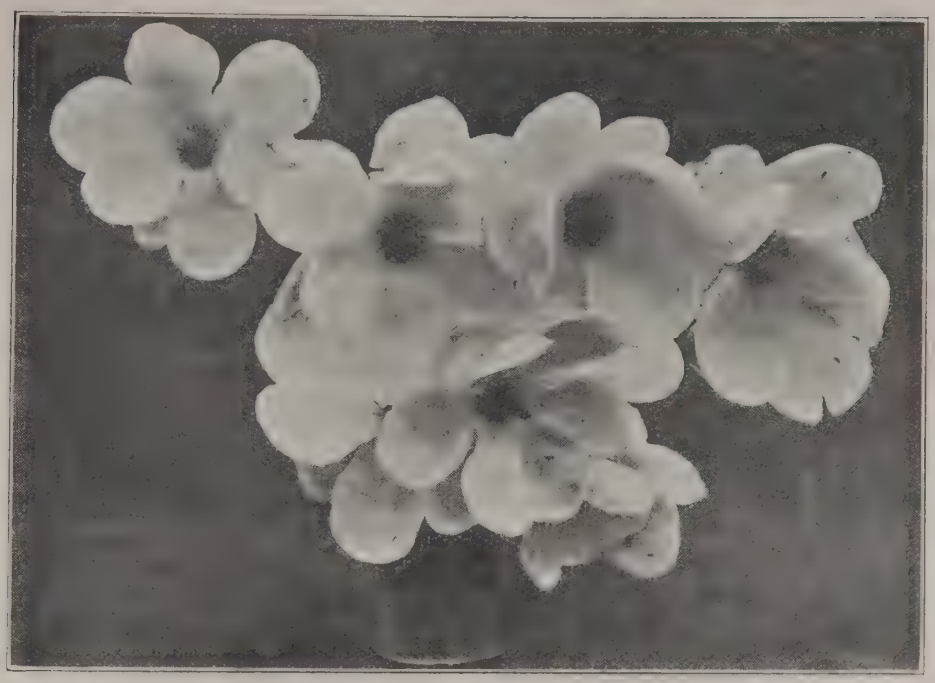
Regal Pelargoniums, now showi will be more effective if the plants b out with a few Bamboo tips, as baceous Calceolarias. Both of th doubtedly useful things require vig tention in greenhouses, otherwise prone to attacks of aphis. Sow a f of Cinerarias and Primula malaco early flowering. Those who grow I and Heaths should shorten back st growths as the plants pass out of bl when growth recommences they moved on into larger pots.

:resting Plants at Vincent ıare seen on April 7 and 8

Magnolia conspicua Robert Veitch's ety. A large-flowered form of the n, with beautifully rounded flowers are an improvement on the type. n by Col. Stephenson Clarke, e Hill, Sussex. Award of Merit.

An unnamed Cydonia shown by Lindsay Smith, Handcross, Sus- This was one of the most striking the flowering shrubs in the show. flowers, which were larger than of any Cydonia we have hitherto were of a beautiful rich tone of ot red.

The Hedgehog Plant (Erinacea ens). A prickly plant with bluish- e pea-shaped flowers—native of ıry hills of Spain. This plant res a dry, sunny position, and is ılt to grow in this country. The pecimen here figured was nearly a across, and flowering in great sion as a pot plant. Shown by ol. Messel from his garden at lcross, for which his gardener, Mr. ıber, received a Cultural Com- ation.



Lilies of the Valley

ot think many amateur gardeners h consideration to forcing, or even f Lilies of the Valley for indoor ı. It may be that my judgment e correct, however, and if the truth ascertained we should find that the e garden has, before now, been de- the purpose, with little or no re- ıe spring. The fact of the matter is ıese Lilies are more neglected than else. Usually one finds them in of-the-way corner and left to them- years, and what happens is com- wledge; the roots become a con- d mass, flowers are few and poor, cess of degeneration sets in. It is ın useless to expect such beds to rowns worth potting up for early Provided Lilies are divided y and are given attention in the cultivation, *i.e.*, are planted out in up of loam, leaf-mould, and old ıre or horse dung, one may expect ırdy crowns, which alone are worth lifting and potting. It is only by following this practice that one may draw upon the bed in the garden for potting in late autumn, as, unless culture enters into the arrangements, it is time ill-spent to trouble with roots lifted from a congested bed. LEAHURST.

Primula viscosa

It is impossible to speak too highly of the beauty of this. In density of bloom it approaches P. Auricula, but rarely equals it. The foliage is very dense and compact, and the flowers are borne in clusters at the extremities of short stalks. The petals are of a delightful rose colour. The plant enjoys under cultivation small fissures between rocks firmly packed with gritty loam, all the better if mingled with broken rock not less than a foot deep in full sun. It may be grown on the face of an old wall by first carefully packing a plant into a chink and fixing it firmly with good material. The plant is of easy increase from cuttings. These may be taken off the plant in autumn and pressed firmly into sandy soil in a cold frame, planting in early spring in permanent quarters. Old plants are improved by a good top-dressing of rich material. H. STEVENS.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FRUIT

Peaches and Nectarines in cold-house

I have some Peaches and Nectarines under glass, but no heat. They are now in full blossom, and I shall be much obliged if you will advise me as to what watering and spraying should be done from now on. Roots reach to outside. E.

[Peaches under glass need constant attention from the time of flowering until the end of the season, beside watering, which is governed in its extent and frequency by the nature of the soil and the house. Some soils of an open or light character would require twice as much water as that of a heavy or clayey nature. A watering should be thorough when given, and if a covering of strawy litter be spread over the surface less water will be needed. Plenty of air should be given the house while the trees are in bloom, and at about midday give each tree a gentle shake so as to disperse the pollen grains. When a good set of fruit has been obtained syringe the trees daily in bright weather through the hottest part of the spring and summer, or your trees will become infested with red-spider, one of the smallest, but the most destructive, of garden insects. You should open the ventilators in the morning before the sun affects the temperature, and close again as soon as the sun passes off the house. At closing time is when syringing is the most beneficial to the trees.]

Peach tree leaves failing

(Clydesdale).—Judging by the sample of leaves and wood submitted, the Peach-tree in question is suffering from a fungoid disease known as the silver leaf disease, for which there is no known cure. This is a notifiable disease, and you should, therefore, acquaint the Board of Agriculture and Fisheries of the fact. The tree will have to be destroyed, but the Board of Agriculture will, doubtless, arrange for an inspection and give instructions what is to be done.

Vine in poor condition

(Sunderland).—It is very difficult, in the absence of particulars as to the age of the Vines, whether the roots are in an inside or outside border, the condition of the soil of which the border consists, if the border is properly drained, the nature of the subsoil, and cultural methods pursued, including temperatures, etc., to say what can be the cause of the trouble. The appearance of the sample bunches forwarded is similar to what is seen when a Vine is suffering from defective root-action either through the fibrous or feeding roots having perished, or as a result of the roots having gone down into the, perhaps, crude and sour subsoil. A worn-out or inert condition of the border would cause all but main roots to perish, and the loss of fibrous roots would prevent proper development of the bunches before the flowering stage is reached. Vines which had, previous to root-lifting, got into a bad state of health will frequently produce bunches which at first appear to be healthy, but fail to develop properly afterwards. The appearance of the bunch sent bears indication of a want of vigour on the part of the Vine, but as to its cause we are, under the circumstances, unable to say. After reading and digesting the foregoing you may, perhaps, then be in a position to arrive at a conclusion as to what the trouble may be attributed to.

Green spots on Vine leaves

(H.).—The green spots on the underside of the Black Hamburgh Vine-leaves sent are what are called "warts." This affection is very frequently caused by a too close and warm atmosphere saturated with moisture. Keep the atmosphere of the vinery buoyant and well ventilated, especially early in the day, and if a great deal of moisture has been kept up in the house it will be well to reduce it somewhat. If there is space without overcrowding or shading the principal leaves the laterals may be allowed to extend a little to encourage a free root-action.

TREES AND SHRUBS

Myrtles

(A.).—A too common mistake in the cultivation of Myrtles is that of overpotting. They do not want too much root room. Myrtles succeed well in fibrous loam and rough peat, with sufficient sand added to keep the whole porous. An item of great importance is that of drainage. Badly-crocked pots are, to a great extent, answerable for the unhealthy condition of many plants. As your plant is bereft of foliage at the bottom and sparsely branched at the top, we should recommend you to cut it down and place it in a brisk heat, using the syringe freely to assist new growth. When the latter is making its appearance repot the plant in the compost recommended above, and keep in heat for a month or two. Harden off gradually.

Bay-trees in tubs

(X. Z.).—A cold greenhouse is the best place in which to store these during the winter, but if this is not to be had, then a stable or coach-house will keep them safe. You may cut the straggling growths back now, and when growth is on the move, and if the tubs are well filled with roots, you may give weak doses of liquid-manure, or apply a top-dressing of rotten manure and water freely so as to wash the goodness of the same down to the roots. You can stand the plants in the open air in April, but this will not clear them of the scale, which must be destroyed by washing with an insecticide every shoot and leaf on which the scale is found.

Thrips on Azaleas

(G. W.).—Judging from what you say, we fear your Azalea-leaves have been attacked by thrips and red-spider. The best remedy for these pests is to well syringe the plants with paraffin emulsion, Quassia extract, and soft-soap, or Tobacco-water. Had you sent us some of the leaves we could have bet you the cause. We fear that your have been allowed to get dry at son The surface of the soil may lool enough, but that in which the roots be quite dry. In such cases the lea sure to fall.

Rhododendron injury

(Alpine).—It is somewhat diffi answer your question, as we have n evidence as to the insect concerne foliage looks as if it has been e weevils, and we have known many i where the clay-coloured weevil (Otiorr sulcatus) has been the culprit. These are night feeders and are, therefo generally seen, the damaged leaves b only evidence of their presence. W advise you to examine your Rhodo at night with a light; it would assist much to find the pest if you placed sheet of some description under the b are going to make your observations cause weevils, as a class, drop at on ground on being disturbed and feig If they fall on the ground it is often to see them. If you are successful effort to catch some of the pests ple us a few along in a little tin box an name them for you and also give you method of control.

The Ground Ivy (Nepeta Glech

I should be much obliged for inf whether, and where, one can obtain a common wild flower, the Gro (Nepeta Glechoma). So far my e has been that such seeds are not o from general seedsmen. I have h this plant is very useful for growi low trees or shrubs where no grass w Have any of your readers had expe it? H

[We fear you will not be able seeds of this. It will do well under it is possible that some of our reader able to supply plants of it, as it is v mon in some parts. We often ha mens sent in for name.]

Deutzia gracilis

(Burslem).—If, as a result of cut Deutzia down, you can induce stro shoots to break up from the base, make strong shoots which will flov next year. Strength of growth de the treatment meted out to the plant from the pieces you send, your pla poor condition; in fact, starved, and be turned out, have the ball red potted in good soil. The plants nee As to the Campanula, try what div do, potting the divisions into small keeping close until the roots begin t the fresh soil.

GREENHOUSE

Heating a greenhouse with oil

(O.).—The reason why your oil greenhouse fails to burn in frosty w that the low temperature serves t the oil, and it then refuses to flo wick to be burnt. It is just pos you have been using inferior oil, w these heating lamps or stoves it can too refined. The best, if more gives not only the greatest warmt purest air. Possibly if you could v material round the base of the la cistern it would tend to keep the oil gealing. Oil lamps are, after all reliable protectors, not only for th stated, but also because the combustn limited to, as in your case, a couple the heat generated is relatively sm warmth as is emitted can make only when the outside temperature

-point. But when the temperature 20 degs.—that is, 12 degs. of frost—is that these lamps fail. Hanging canvas round the sides of a house s much protection in very cold

ens after flowering

).—The plants that have done bloom- ıld be stood in a cold frame and as carefully as if in flower. They covered with a mat if there are signs Do not crowd the plants, and as w signs of going to rest the water hould be lessened, little being neces- ing June and July. After this, if ittle moister the young leaves will rt, when the corms may be shaken he old soil and re-potted in a mixture leaf-mould, and sand.

ıd other insects on Camellias

llia).—Your Camellias have been at- y scale, while there are also traces of g. Every bit of the plant's wood ıge must be sponged over several th an insecticide, such as Gishurst ıd. Use a brush for the hard wood. st do the work thoroughly, working h well into the joints and corners ıe nests are. It would be well, too, the house thoroughly cleaned down ıinted. This you can do when the out of flower.

ior a cold greenhouse

Fox).—With care some of the fine f Primula, as P. japonica, P. denti-, P. obconica, P. floribunda, and P. es, may be grown, and would prove resting. Chrysanthemums may also ı, while Auriculas would also do well. erns are easily managed and are very , while the whole tribe of Hyacinths, and Narcissi with Spiræas might your purpose. You can also have nus, Azaleas, Spiræas, Wistarias, dodendrons in bloom. Violets, too, would be very useful. You might ue and a white Passion-flower on the l.

purpurea

ıa).—The secret of getting this beauti- to bloom freely is to induce a strong luring the early part of the season, en it off well in August. The plants f need be, be repotted in March or part of April. Annual repotting is ssary, for even when the bulbs are ıcked in the pots they will grow and ell year after year. After repotting, plants in a greenhouse temperature, when growth is well on the move, water, and at the end of July stand- e full sun for a month and watering paringly. The best soil is yellow htened by a little well-decayed leaf- ıd a liberal sprinkling of silver sand. of flowering of the offsets will en- end on the treatment you give.

FLOWER GARDEN

s or border

shoe).—If you desire to hide the m view you might grow Sweet Peas tion throughout the whole length of r. If the idea is a flower border we vour the Sweet Peas at the back and isplay of Stocks, Asters, Godetias, ıms, annual Chrysanthemums, Mig- ınd many more. Should you favour s, there are many things, as Asters, Sunflowers, Pyrethrums, Cam- Trollius, Irises, Lilies, and the like ıld do admirably. As the soil is ıd so recently under grass, it will eep and generous cultivation before ccess is assured, and in the circumstances we think you had better grow Sweet Peas and annuals for this year at least.

Cutting down Chrysanthemums

(Scot).—If you cut down the later-flowering varieties, such as Queen Mary, Majestic, and Mrs. G. Drabble, at the end of April and the majority of varieties a month later you would not go far wrong. It is advisable to do it thus early because in your case you are cutting into hardened wood, and from this the new growth is a comparatively long time in starting again. Have you tried late-rooted plants for this dwarfing system? It is an easy plan and the object is attained with a minimum of trouble.

Violets

(N. C.).—If you have no further use for the flowers, your better plan will be to encourage, by weak applications of soot and liquid-manure, a freer growth for a week or two, when the plants may be lifted and the best outside runners removed for furnishing next season's supplies. You say you lifted the plants in November, which is very late for framing.

Raising Poppy Anemones

(H.).—Sow the seed as soon as the ground is in a fit condition, in drills, in an open and sunny spot, choosing a well-drained soil. Sow thinly in drills 1 foot apart, so that the seedlings may have room to develop. By the end of the growing season the largest tubers should be of flowering size, and may be moved to a place where they can bloom. To grow these Anemones well, give them a good depth of fairly rich soil and good drainage.

MISCELLANEOUS

Residue from acetylene gas

(W.).—The value of this product is due entirely to the lime it contains, other plant foods, such as nitrogen, potash, and phosphates, being absent. The lime is present either as slaked lime (in fresh samples) or carbonate of lime (mild lime) in samples which have been exposed to the air. It should prove an effective and cheap dressing for all purposes for which lime is required, and should be of special value on soils which are sour and deficient of lime or inclined to be stiff, and as a top-dressing for pastures.

Grafting wax

(E. A.).—The following is a good recipe for making grafting-wax:—Melt in a basin 1 lb. of tallow, 2 lbs. of bees'-wax, and 4 lbs. of resin. Stir well together, and keep in a cool place in the dish it was melted in. You can buy grafting-wax (Mastic l'homme le fort) in tins, ready prepared, from 6d. upwards.

Soot-water for plants

(S.).—Tie about a peck or more of soot in a piece of coarse open calico or canvas, then attach it to a stone or brick-bat, and put it in a tub or other suitable vessel. Fill up with water and allow it to stand for a day or two; then stir up and squeeze the bag well several times. Let the fluid settle, and use in a perfectly clear state, and be careful to dilute sufficiently with clear water.

Ground beetles

(H. D., Somerset).—The larva you send is that of a ground beetle. The majority of the ground beetles are carnivorous and do a great deal of good to our gardens by helping to control insect life. You will have noticed that the larvæ of ground beetles, like the adult beetle, have powerful jaws, with which they hold their prey. We receive reports from time to time of certain ground beetles doing considerable damage to Strawberries, both by eating the fruit and leaves and shoots generally. The beetle concerned is Harpalus. Apart from these, ground beetles do a vast amount of good. J.

Preserving netting

(T.).—The best thing for this is boiled Linseed-oil. The netting should be saturated in it while hot, then, when it has cooled, taken out, pressed or wrung, and hung up to dry. This renders the netting fairly weather-proof and at the same time fairly supple.

ROSES

Own-root Roses for pot culture

ROSE-GROWERS do not fully appreciate the value of Rose plants from cuttings, or there would be a larger demand for them. Especially do I recommend them for pots. The numbers of fine roots the plants produce seem eminently fitted for pot work instead of the long spiral roots of the Brier stock. Let anyone plant out under glass in a bed of well-prepared soil some own-root plants, and also grafted plants of the same variety, and grow all under the same conditions, and he will quickly see a marked difference in favour of own-root plants.

Of course, like all things in gardening (and not only in gardening), it pays to do a thing thoroughly; therefore, when taking the cuttings, they should be of the very best and healthiest growth obtainable. The present is a very suitable moment for taking cuttings from plants in bloom. The growths that have borne a flower are best. Cut the shoot up into pieces containing two eyes or leaf-buds. Retain the foliage, and cut shoot level at the bottom eye. The cuttings root best and succeed best if potted at once into small pots, known as thimbles, and there is no better place for them than a dung-bed, but, failing this, a box fitted with glass and placed on the hot-water pipes of greenhouse is a good place. There should be enough Cocoanut-fibre in the frame to plunge the small pots up level with their rim. The cuttings are watered well before plunging them in the frame. The best soil for the cuttings is sandy loam and leaf-soil. A temperature of about 70 degs. to 75 degs. should be maintained in the dung-bed or propagating-box, and care must be taken to cover up the frame at night so that heat does not rapidly decline, and shading with paper should be resorted to on fine days. The cuttings must be sprayed over now and then, and diligent search made for decaying foliage. In about a month the cuttings should be rooted. When the roots are seen coming through the pot the cuttings must be potted on into small 60's, and kept in a temperature of about 65 degs.

It is not well to have the potting soil too sandy for the later stage of these cuttings, as I find they lack that robustness they should have unless the soil be fairly firm.

Plants raised like this are very economically produced, and are far more satisfactory than grafted plants. Let anyone plant out some of these own-root plants in beds of soil upon benches situated in a light, well-heated greenhouse, and see what vigour there will be, especially if the plants receive a dressing of bone-meal now and again as a stimulant.

To obtain such plants as I have described it is necessary to have some budded or grafted plants grown on in heat, in order to have them forward in growth and ready to strike early in March. It is money well spent to get ready a supply of such plants. Many of the delightful Rambler Roses make pretty little table plants if struck from cuttings, and their growths kept pinched back. They will yield lovely trusses of bloom. There are hosts of interesting Polyantha and China Roses that are worth growing as miniature pot plants for decoration. E. S.

Spraying of fruit trees with arsenate of lead: danger to bees

The Ministry of Agriculture and Fisheries again desires to bring to the notice of fruit growers throughout the country the danger to bees which may be caused by the spraying of fruit-trees *when in open blossom* with washes containing arsenate of lead. It is not desired to discourage the use of arsenate of lead sprays, as these are of the greatest value in controlling the Winter and other moths, the larvæ of which are responsible for an enormous amount of damage to fruit-trees. Spraying with this insecticide, however, should be restricted, as far as possible, to two definite periods, viz., before the blossom buds open and immediately the petals have fallen. In the case of Apples, an application during the earlier period will give better results than at any subsequent time. Spraying during the actual blossoming period is particularly to be deprecated on account of the fact that heavy mortality may be caused to bees visiting blossoms on which the spray has fallen. It is realised that, as the different varieties of fruit-trees do not come into blossom at the same time, it may be a matter of some difficulty to arrange that no open blossoms whatever are sprayed, but instances have been brought to the notice of the Ministry of the indiscriminate spraying of open blossom with lead arsenate, for which no reasonable excuse can be put forward.

Bees are of great value to the fruit grower by the assistance they render in the fertilisation of fruit blossom, and in his own interests, therefore, as well as for the sake of the beekeeper, the fruit grower should spare no effort to avoid any unnecessary mortality among these beneficial creatures.

The Ministry will be glad to receive particulars of any cases where the deaths of bees in any considerable numbers appear to be due to spraying of this nature.

Benn Brothers' Other Journals

The Cabinet Maker.—Wholesale Furniture Trades Exhibition at Edinburgh; Retail Advertising; Drapers' Exhibition; Woodworking Machinery at the Building Exhibition.

The Chemical Age.—"The Chemistry of Beet Sugar Manufacture," by J. Kwantes; Chemical Trade Returns for March; China Clay Trade Review.

The Electrician.—"Electricity Supply and the Consumer," by J. Rutherford Blaikie; Annual Report of the National Physical Laboratory; Electricity in Mining (I.E.E. Papers); Guildford Electrical Trading Clause in Committee.

The Fruit Grower.—An Easter Tour of Zeeland; Selling by the Clock; The Proposed R.H.S. Exhibition: Hall Described.

The Gas World.—Calorific Value of Gas Supplied; New Type of Gasholder; Some New Patents.

The Hardware Trade Journal.—The Ironmonger and Contemporary Shop Window Display; The Building Trades Exhibition; New Things for the Houses of To-day; Sports Requisites for the Season.

Catalogues

At the beginning of the year nothing is more interesting than to peruse the catalogues as they come to hand, and to wonder at the ever-increasing lists of novelties. While the latter may be, and doubtless are, improvements upon their predecessors, the advice of an "old hand" is to rely for the main crops upon older varieties which have stood the test of time. If we are led, by a glowing description, into depending entirely upon, for instance, a new Sprout, Lettuce, Tomato, etc., we may find ourselves in a false position when the time for supplying the demand arrives. It must not, however, be inferred that I ignore novelties; nobody, perhaps, gives more novelties a trial than I do. The mistake which (I have observed) is made by many is this: When a novelty is ordered it is, as a rule, given a favoured spot and treated in a favoured manner. Not unnaturally, the results may be better than those from ordinary strains which have received only routine treatment. The result is that the latter are discounted; but, in the succeeding season, when the novelty, in turn, receives but ordinary attention, the results are by no means extraordinary, and a return is made to the older favourites. The best guide in ordering seeds is to take notes of the varieties which have stood the test of wet, dry, hot, and cold seasons, and by so doing the chances of failure are few. Yet it is wise to include a few novelties each year, but, as has been hinted, it is unwise to give them preferential treatment. Ordinary, everyday cultivation is the best way in which to test them, and afterwards they stand or fall upon their merits. A STEWARTRY GARDENER.

FERNS

Dwarf Ferns in the rock garden

MANY of the dwarf Ferns are so essentially rock plants, so beautiful and so eminently suited for associating with Ramondias and other crevice-haunting plants, that one wonders why rock gardeners do not make more use of them than they do. Most of them, certainly, need a shady site in our more southerly counties, at any rate, but there are not a few which will do splendidly in full sun. Moreover, we shall find in any good list a first-rate selection of dwarfs which are not only singularly lovely, but absolutely hardy and easy to grow.

Among those of the latter which I have found most useful and in every way delightful the Spleenworts (Asplenium) take a foremost place. Common as they often are, the black Spleenwort (A. nigrum) and the little Wallrue (A. Ruta muraria) are excellent for sunny chinks, whilst for cooler places there are A. Trichomanes in its various forms and the scaly Spleenwort (Ceterach officinarum), always so distinct with its deep green, leathery, blunt-lobed fronds felted beneath with golden-brown. A. septemtrionale, its slender fronds protruding from the rocky niche like forked adders' tongues, always strikes a novel note, and the somewhat similar A. germanicum, which looks like a compromise between the foregoing and the Wallrue, is equally attractive. Woodsia ilvensis is another little native making neat rosettes of blunt hairy fronds; and then there is its companion of the mists, the Parsley Fern (Cryptogramma crispa), than which there is nothing more lovely. The Parsley Fern is not the squeamish creature it is often believed to be. Like most of the Ferns mentioned here, it will prosper on a diet of fine old black leaf-soil, sand, and broken slate, but it likes to have its roots squeezed between two stones. Cystopteris fragilis, the Bladder Fern, has always been a favourite of mine. Its 6-inch fronds are so finely and delicately cut, rivalling those of the Parsley Fern, and it is such a cheerful, contented being, satisfied with almost any situation and soon producing a colony of self-sown youngsters. C. bulbifera is another interesting and elegant species, and C. alpina, of only 2 inches to 3 inches, is a precious gem for a cool, rather damp corner. The Bladder Ferns generally are not evergreen, but there is a pretty Madeiran species (C. sempervirens) which is, but it is not hardy everywhere. The common Polypodiums are often very useful in the rock garden, their foliage being at its best in autumn and winter. The Welsh variety, P. vulgare cambricum, excels in its finely-cut, elegant fronds, and there are numbers of fancy forms of the ordinary type, some of them be tremely pretty and effective. P. calca a most beautiful Fern, but it does not non-limy soil. On the other ha Dryopteris (the Oak Fern) is one of t willing, as it is one of the daintiest imaginable, its 6-inch fronds, delica Maidenhair's, cropping up with su mirable discretion as to "spacing" t might credit it with the possession o scientious and seemly regard for the Anemones, Dog's-tooth Violets, an spring flowers which accompany it. lepia anthriscifolia also tunnels about Oak Fern, putting up at intervals like a tiny Bracken which has been n fined, crimped, and frizzed. This, a so gentle in its manners that it also used among other little plants whic genial companionships of the sort familiar Blechnum Spicant I always h for on cool, but not necessarily dam Like the Polypody, it is charming in and if it gets too big it can always be by smaller specimens which will vertical chinks as do the ordinary worts.

The most comely of all the mat-Ferns, to my mind, is Lomaria alpina dark green, leathery fronds, all ove one another in a dense carpet of glo dure, are exceedingly beautiful at all Though not supposed to be quite h have never known L. alpina suffer least, even when growing in a damp, and with the thermometer registering of frost. This pretty and easy-t little thing I should always place an "best half-dozen" rock garden Fe another dwarf creeping species which not like to be without is D pilosiuscula.

Many other excellent species and come to mind, but these brief sug will, perhaps, serve to stimulate a interest in this most engaging depart rock gardening. A. T. JOH

SHORT REPLY

A. H. B.—We can see nothing wro the Rose leaves you send us. In bability the falling of the leaves ma to the cold weather we had a few wee

NAMES OF PLANTS

Mrs. E. A., Derby.—Jasminum linum, an introduction from Yunn treated as a cool greenhouse subjec not likely to prove a success even a plant outside in your county. The flowers are often semi-double, as in t men you send us. For full cultivat pot plant see article, GARDENING TRATED, February 13th, 1926, page 10

Alpine (A. T. S.).—3, Primula Juli

G. Gardener.—Early single beddi Dusart.

J. C. G.—Amelanchier canadensis berry or June-berry). Your tree parently, grafted on the Mountain Rowan.

S. G., Bournemouth.—Cotoneaster

TRADE NOTE

We are glad to hear from the Net partment at St. Dunstan's that the the advertising of the garden, fa sports nets made by the war-blinded brought along a considerable nu orders and many inquiries. The Arthur Pearson always maintained blinded soldier busy is a blinded happy," and we are sure that our will send along all possible orders most excellent work produced by the less craftsmen. A line to the Net partment, St. Dunstan's Head Inner Circle, Regent's Park, N.W bring all details and a price list.

GARDENING ILLUSTRATED

59—Vol. XLVIII. APRIL 24, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

... ... 268
imbing ... 266
for pic-
t 258
plant-
... ... 266
leaves
... ... 268
closing its
... ... 268
iberous ... 269
CARNA-
IETY ... 265
Chrysanthemums: Stopping 257
Cinerarias 266
Cinerarias after flowering 269
Cinerarias drooping 269
Cyclamen in a cool greenhouse 257
DAFFODIL SHOW, NOVELTIES AT THE 262
DAHLIAS FOR GARDEN DECORATION 255
DAFFODILS, NEW, AT VINCENT SQUARE 261
Erythroniums 257
Ferns, Tree, in South-West Scotland... ... 257
FLAX, THE BLUE (LINUM PERENNE) 259
Fruit bushes, manuring 258
Fruit trees in pots ... 258
Fuchsias and Pelargoniums, soil for ... 268
Garden at Kew, the rock 256
Gardeners and their hours 257
Gloxinias grown cool 266
Herb Paris 256
HOLLAND, NEWS FROM 267
Hyacinthus (Galtonia) candicans 269
Lilies, Water, in tubs 269
Lily of the Valley naturalised 257
Lily, the Sword, of Pliny 256
Mulching 258
Pelargonium leaves unhealthy, Ivy-leaved 268
Pink, the Amoor 256
Potatoes for planting 266
Primula obconica, the poisonous properties of 256
Raspberries, autumn-fruiting 258
Smilax, growing ... 268
Sweet Peas in partial shade, growing ... 269
Syringas, some 260
Tomatoes without manure 266
Veronica filicaulis ... 265
Vine in poor condition 268
Vine leaves diseased 268
Vine leaves, fungus on 268
Violets, planting ... 267

Dahlias for Garden Decoration

he extent to which fashions change in our gardens is exemplified by the modern Dahlia more than any other flower. The hief characteristics of the Dahlia of to-day are its gracefulness and beauty, its freedom of flowering, and general utility

old days the Dahlia had little con-
on, being generally left in the
through the winter and giving
ers during the autumn. With the
such glorious sections as Collarette,
eony, Decorative, both single and
t excluding the Dwarf Miniature,
possible to obtain a fine display
in July until late October, when
lly cut them down. They may be
om 18 inches in height for filling
up to a height of 5 feet for plant-
ge beds or filling spaces in the
der. One great point in Dahlias
decoration is that they stand all
weather; they revel in excessive
y as well as they do in sunshine.

ION.—The Dahlia may be planted
y chance of
any soil or
provided it is
the drip or
de of ever-
s. The soil
able to the
one that has
ly dug and
with well-de-
nure. This
done some
previous to
In gardens
e is a green-
ame it is ad-
purchase the
ring April.
ling Dahlia
grow their
m cuttings
ing spring,
re usually in
. Where
obtained in
will be found
rooted, so on
wise to put
5-inch pots
them cool
ger of frost
enerally the
is a good
nt out. In
there is no
for this the
best left in
nen's hands
latter-men-
but plants
dered early

to prevent disappointment. The bed should be given a dusting of soot and lime. This will help to deter slugs. The plants should be turned out of the pots carefully and a hole made with the trowel large enough for the ball of roots to be 2 inches below the surface, taking care to make the soil firm around them. A good watering should be given as the work proceeds, finally placing a ring of soot or lime around the plants to protect from slugs and other marauders until the stems become hardened. When the plants arrive there is usually a small stake attached to each. These will suffice for the time being, but as soon as growth proceeds the permanent stake should be applied. The best stakes for the purpose are stout Bamboos or square deal stakes painted green. A study of the plants should be made and each staked according to the height. Let the stakes be 6 inches shorter than the plants will attain when full-grown, as nothing is more untidy than a bed of charming flowers with stakes showing above the plants. These should be made firm in the soil and the plants secured with soft material, repeating this as necessary. A very bad enemy of the Dahlia is the earwig. A few hollow stems of Broad Beans, Hollyhocks, or anything in which the pests can hide during the day will catch many of these if placed amongst the plants and examined each morning. When the plants are growing freely the soil should be kept loose by the use of the Dutch hoe. A mulch of manure will be appreciated by the plants and save much labour in watering and hoeing when growing freely. Another important item in the culture of Dahlias is the removal of all decaying blooms.

About the middle of November the foliage will have been destroyed by the frost, so the stems should be cut off about 9 inches from the ground, labelling each root, and lifting with a fair amount of soil attached. If very wet they may remain in the sun for a few hours to dry before storing away in a frost-proof outhouse or cellar, or they may be clamped in the same manner as Potatoes, taking care that they do not become either too dry or too moist. Ashes are useful to bury the roots in.

In spring these may be brought out, and if increase is desired and a warm greenhouse is to hand the roots may be either potted or placed in deep boxes and placed in heat, where cuttings will soon appear. Another means of increase is by division of the roots.

Rugby. W. E. W.

Dahlia Lovelight, clear pink, with silvery tips and bright golden centre
It was very effective last year in the Hyde Park border

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The poisonous properties of Primula obconica

I HAVE read with interest the correspondence in your paper about the poisonous properties of Primula obconica, and should like to add my experience. Many years ago, when I was journeyman in a large place in North Wales, we grew quantities of Primula obconica without, so far as I know, any mishap to anybody. On a new head gardener taking control he came to me one day and ordered the whole batch to be destroyed as being dangerous to handle, saying he himself dare not go near the plant, and asking if I ever felt any ill-effects from it. I replied in the negative. He smiled and said that, as a rule, people with a fair or ruddy complexion were the most liable to be affected. I still grow it, but not in quantity, and have never suffered any ill-effects. This brings to my mind an incident which occurred a few years ago. I was showing two gentlemen through the greenhouses one day when they stopped opposite a batch of Primula sinensis of various colours then in full bloom. After admiring them one gentleman turned to me with the remark, "Very pretty, but most dangerous—they are so liable to give anyone asthma," a statement which was at once corroborated by his companion. This is the only time I have ever heard this accusation hurled against one of our most beautiful winter-flowering plants. I wonder if any reader of GARDENING ILLUSTRATED has heard of it? CYMRU.

—— Mr. McGuffog's belief is that the modern type of this valuable plant is not so dangerous as the original type of three decades ago.

Very strange it may appear, but it is exactly 30 years ago when I first received a rude awakening as to the poisonous nature of this plant. In the gardens where I was then employed we had a large batch which was being retarded in a cool house for Easter church decoration. Previous to this date I had never suffered any ill-effects through growing it.

About this time a very irritating rash appeared on my hands and face. My eyes became inflamed and swollen, and I felt quite ill. I consulted a doctor, who told me I had eczema, for which he prescribed some ointment and powder. I continued this treatment for some time, but the rash and irritation became worse. A friend advised me to see a very old chemist who resided in a town a few miles distant and who had a reputation for the treatment of skin troubles. I remember quite well going into his shop and asking him if he could give me something for eczema. He looked at me and said, "Who told you you had eczema?" I replied that I thought I had. He said, "No, you have been poisoned. What is your occupation?" When I told him he said, "Primula obconica," at the same time reaching from a shelf a large glass jar which contained a fluffy substance. "This," he said, "comes from under the leaves, and when in the right condition for distribution a puff of wind will do the rest, even though you do not actually come into contact with the plant."

He told me that he could cure me if I discontinued growing it. This request was complied with, and he did cure me, but not with ointment, but a very black medicine.

I regret, however, that I did not ask him for the prescription, as since that time I have met several gardeners who would give almost anything to be cured.

In your reply to "E. G. H.," in GARDENING ILLUSTRATED of January 16th, you state the trouble can be got over by wearing gloves when handling the plant. I am afraid this precaution is of very little use if one has once been subject to the rash. My second experience will explain why I think so. I have no doubt you will think I was rather foolish, after what I had previously suffered, to risk growing Primula obconica again. About five years ago I saw a very fine exhibit at Vincent Square. The size and colouring of the blooms were so exceptional I was tempted to try it again, thinking, perhaps, I should be immune after so many years.

I purchased a packet of seed, raised a nice batch, and took the precaution to wear gloves when likely to come into contact with the plants. All went well until they were nicely in flower, when, alas! the rash and that terrible burning sensation began to appear on my face, and, sooner than risk a repetition of what I had experienced many years before, I had the plants destroyed. It seems to me that while a few suffer there are many who can grow it without any ill-effects.

EDWARD MONTAGUE.

Netley Castle Gardens, Hants.

—— I have been very interested in the recent discussion on Primula obconica and its poisonous propensities. While head gardener at Merton Place some years ago I had a foreman who could not touch this plant. After potting a batch he came out over hands, arms, and face in a kind of rash or eczema, which was very painful. He was away from work for some weeks. The same man told me later on that he had grown the plant again with no ill-effects. I believe that the state of health predisposes certain persons to attack. I know that some men cannot touch Ivy without being poisoned, a case being one of my men who, after clipping Ivy on the mansion, came out in a rash—an apparently healthy man otherwise, but on no account able to work among Ivy at any time without causing skin trouble.

B. J. MERCER.

—— As Mr. W. McG. is interested in cases of Primula obconica poisoning he might like to know of a gardener I have known since 1898. He was particularly successful in growing P. obconica and very fond of them, even though they caused him great irritation. He found, by washing in very hot water, the irritation was relieved. Unfortunately, he is now in bed and has been there since December. He seems to have lost all interest in life, and lies in a half-unconscious condition. The doctor says that P. obconica poisoning is the only thing that is causing the illness, and that he will recover if he continues the drastic treatment he is undergoing. F. B. H.

The rock garden at Kew

On entering the rock garden at Kew on April 11th I wondered whether the dreary waste of grey stones spotted about indiscriminately on a bank of flowerless soil adorned with labels was intended to show the public what a rock garden ought not to be or whether it was a serious attempt to grow alpine flowers. If the former I must say it was a success, but if the latter I cannot congratulate the Kew authorities on the result. It seems to me to be a cross between what the late Mr. Farrar called the "Almond Pudding" and the "Dog's grave," styles in neither of which can any self-respecting plant thrive or look happy.

Rock gardens should now be almost at their best, and every amateur with a tensions to a rock garden has no diffi having masses of flowers out.

Why should not Kew have as good garden as Edinburgh? Here the ro properly laid, and the greatest skill is in the cultivation and proper placing very large and varied collection of plants and shrubs, and from Febr November it is always possible to fin esting plants and flowers in quantity.

I must confess that the Kew rock is very well weeded, but a weed wou be a relief in such a desert. The end the Cumberland Gate is rather less some of the plants look almost ha the whole is quite unworthy of Kew nothing better can be done it would to abandon any attempt at growing If, however, the rock garden is to would suggest that part, or even separate one, should be devoted en plants which bloom from the begi July to the end of October. So man seem to think that the rock garde for the year when once mid-June is this is by no means the case, and th reason why it should not be almost these months as in April, May, a It is here the public wants educating

I may add that the alpine-house little better than the rock garden, sidering the large number of frames alpines can be grown for bringing house, there should be no difficulty a much better display of flowe January to end of May.

The Sword Lily of Pli

In your number of March 27th Si Cook, writing on the pronunc Gladiolus, states that Pliny applied to some sort of plant supposed Sword Lily (not, of course, our which came from South Afric Gladioli grow in profusion, wil orchards of Tuscany, in Southe The "Dictionary of Horticultur their distribution as "Central Eu Mediterranean regions, West Asia so there seems to be no reason Pliny referred to any other flower.

Barnstaple. JANET M. HA

The Amoor Pink

One of the many plants which loved and lost" is Dianthus de Amoor Pink. It is a very beaut perennial, which I grew in a flat rock garden facing south-west in w loam, leaf-mould, and sand, with kept well supplied with water in th days of summer. It was lost du longed absence from home, due, I being overgrown by a more rampa and I have never been able to lay upon another plant. It formed plant about 6 inches high, wit leaves often tinted with red, ar good tuft. Farrer seems to cast on the correctness of the name, ported by the "Index Kewensis," fers it to D. sinensis. I must join this authority, but whatever the t this plant, I should be glad to h more in my garden. S.

Herb Paris

I notice in GARDENING ILLUST 220, an inquiry from "T. H.," a Herb Paris (Paris quadrifolia) tained. This quaint plant is a B of rather local occurrence, growin half-shady woodland conditions found it growing wild in N.W. the Craven district, and a year o came across a strong colony of i near Stevenage. I have never se

either as seeds or roots, by any nan, though I once saw a Japanese f Paris offered by a Japanese nursery-'he plant would only appeal to the s" gardener, being quaint rather ›wy.

'. H." will send me his address I very happy to collect some roots and m to him from the Stevenage colony, can find time to visit Stevenage I lly take him to the spot, so that he the plant growing and collect a few himself.

quadrifolia, as the editorial footnote H.'s" inquiry states, is herbaceous ennial. The rhizomatous root runs und and throws up stems from to 12 inches high, each carrying lly, nominally four, but often five or ves in a whorl, rather like those of a above which is carried a solitary ith narrow yellowish petals and at tre a four-seeded black berry of boot-spect. CLARENCE ELLIOTT.

age.

Ferns in South-West Scotland

›laces in Scotland are so highly in the way of climate as Logan, ›ire, and still fewer, probably none, ›rth contain such a wonderful variety ›lants, found difficult in other places, mpossible in the open air. Mr. l is a true plant-lover, and his gar-w how he takes advantage of their le conditions to attempt subjects pre-lifficulties in their cultivation in the)ne of the striking things at Logan y in which the Tree Fern (Dicksonia a) flourishes in the open air. There ll, upwards of 20 plants growing in and in the woods, and these, to-ith Cordylines and other plants of aspect, give the garden quite a appearance. I remember a number ago a reference was made to D. a growing in the island of Arran, ›ot generally known that it flourishes t Logan, where there are some very imens, approaching in size those in es as the Keeble Palace at Glasgow, ›ere is a remarkably fine collection ›ss. S. ARNOTT.

Erythroniums

eference to Mr. Moore's note, issue h, page 240, regarding the recent article on the Erythroniums, I may I have grown all the Erythroniums in the market except Carl Purdy's and, although they do quite well in they appear to be more vigorous in hade. I am at present growing a Pink Beauty in sun after it had been from another garden where I had it l shade, and it is not so vigorous in as it was before. I have seen with that Mr. Moore has planted his iums a foot deep. It is a cause of t that E. americanum has a habit of becoming so deep in the ground vill not flower, but forms a number offsets. E. americanum, however, the least attractive of the genus.

S. ARNOTT.

amens in a cool greenhouse

eference to Mr. McGuffog's note on ›s in your issue of March 13th, page artily endorse his view on the cool t of these lovely subjects. Many s err in giving too much heat to ›s, thereby losing the fine generous vhich Mr. McGuffog truly describes lation.

› the position that I must grow them having the heat to harm them, and I have better plants than ever I had in other situations where I had more heat at my command. The wealth of foliage enhances the beauty of the plant. A. A.

St. Edmunds.

Lily of the Valley naturalised

In addition to the two or three places noted in GARDENING ILLUSTRATED as the home of the above it used to grow in considerable profusion in parts of St. Leonard's Forest, near Horsham, in Sussex, not far from a spot known as "The Hammer ponds," a relic of the old Sussex iron-smelting days. It is many years since I saw it. Possibly ere this it has come under the eye of the hardy plant hunter. E. B.

Gardeners and their hours

Well, Well! The letters on the subject (issue April 17th, page 241) are what one might expect from the two writers, "A Hampshire Gardener" and "Another Scot." In the case of the former because he is influenced by local conditions. Hampshire is, perhaps, the worst-paid county, generally speaking, and certainly pretty bad in the matter of hours. "Another Scot," by imagination, exaggeration, and perhaps a little irritation, has penned a long letter for the edification of readers. His inference that 50 years or 60 years ago gardeners were nothing but mere slaves is ludicrous, whilst there should be no occasion to laud and magnify the wonderful work of our forerunners in the profession. I have never given the slightest occasion for anyone to imagine it possible to belittle the work or methods or results secured by gardeners of 50, 60, 100, or even 1,000 years ago. But even "Another Scot" must surely agree that, with practice and progress, everything is perfected.

With regard to hours, I do not for one moment seek to advise gardeners to "adopt the common labourers' methods and only work a limited number of hours," and I regard such a statement as the outcome of pure imagination.

The ideal gardener, the professional man, must be available at all hours—he not only must, but WILL be. In his charge are the lives of the plants, and he must not grudge them adequate attention whatever happens. It is not right to grudge such attention, and it is only correct that the whole of such attention be given by the head gardener or by someone appointed by him. No genuine employer expects any man (as "Hampshire Gardener" puts it) to be at his "beck and call at all times." The plants may expect it, and, if they do, they must have it so far as is reasonable. So "Another Scot," in saying that I consider the gardener should act in a manner which would be detrimental to the care of the plants, harmful to his own progress, and damning to his employer, is somewhat wide of the mark. In all correspondence of this sort let us keep in view the object of our "word war." Mine was NOT to encourage the slacker or the dissatisfied, neither was it an onslaught against the gardeners of Scotland. It was simply to try and make gardeners, as a whole, realise the greatness of their calling. As a profession they have much to contend with, and one of the greatest of present-day evils is the existence of the New Rich, for whom, in many cases, it may be almost impossible to work. But among the New Poor very seldom is a complaint heard, and gardeners, generally, are out to give pleasure and satisfaction to their employers, and that at no little trouble.

Amusement at another's views is not professional conduct, and the opinion among "Scottish Gardeners" of their assistants is poor encouragement to those concerned.

BRUCE HEWITT.

Chrysanthemums: Stopping

PINCHING and stopping are words that have some meaning with those who grow the blooms for exhibition, inasmuch as it is thought that by taking the point out of a growing plant at a certain date the operator may induce a flower-bud to appear at an approximate time; and similarly induce such flower to open so that it shall be in perfection.

It is pleasing to note that among the more successful cultivators the idea is dying out; slowly perhaps, but surely, for in former articles I have not certainly encouraged the fad.

It is not easy to understand why we try our utmost to root the cutting, give the new plant a shift into a larger pot to get growth into it early, and then, just as this is making progress nip out its point; for whenever this is done the plant receives a check. It has to form another leader, and this takes considerable time. Take out the point of a plant to shorten its subsequent height. This is feasible, but for no other reason.

In the olden times, when the late Mr. E. Molyneux and others were taking the leading prizes at exhibitions, topping was unknown. It was the custom then to root the cuttings early of a sort requiring a long season of growth, and following later as varieties were known to bloom at a comparatively early date, so as in each instance to obtain a crown bud at a favourable time. The older growers developed the blossoms as well as cultivators of to-day.

I am interested particularly in new varieties—seedlings—and here experimenting is done to find out the ways most suitable to bring out the more perfect flower. I cannot call to mind one instance last year where stopping the points of the plants assisted; but on the other hand it would not be difficult to supply particulars of cases where the method had led one astray. Stopping advice seems specially harmful to the amateur who may not have expert knowledge of the condition of the plants owned or grown. Such grower is led to think the one great thing to obtain the perfect flower is the manipulating of the stems. I would strongly urge such to let their plants go their own sweet way, so to speak, and then thin the shoots if it be desirable to have the highly-developed flower. As mentioned, taking out just the point of a plant (this should be done in early spring) does prevent tall growth somewhat; or rather it assists a plant in the way of not becoming leggy. One can keep the foliage healthy down to the rim of the pot; otherwise it is no great assistance in providing a bushy style of plant, for this in course of its season's work will branch of itself if the side shoots be not removed.

Take single Chrysanthemums. These generally are rather taller in habit of growth than the double varieties. Yet from experience I obtain comparatively inferior blossoms in the autumn from topped plants, even if I only take out the points in early spring.

Apart from the delusive results of stopping, the culture of the subject from a general point of view would become more simple were it not practised. The grower need not bother about dates and so on. By growing the plant in its natural habit there are only the training and thinning to worry, with details of potting and so on. The timing may well be left to the season, for no grower has yet reduced the culture of the Chrysanthemum to an exact science. There is to me a great deal more in selecting suitable varieties for varying purposes than by attempting to make the plants flower out of season as out of character by "pinching" their points. H. S.

FRUIT GARDEN

Fruit trees in pots

ALTHOUGH handsome, well-flavoured fruit may be grown in the open, the influence of pot culture on Apples, Pears, etc., under glass is remarkable, imparting to them higher colour and richness of flavour. I have noticed at different exhibitions how much the exhibitor of outdoor-grown fruit is at a disadvantage in an ordinary season through loss of points. Particularly is this so at late summer and autumn exhibitions, as the outdoor grower cannot get the finish on his fruits as the one who has glass at command does.

An important operation in the cultivation of fruit-trees in pots is pinching back the shoots, as the trees must not be overcrowded with wood. When side-shoots are about 3 inches in length they should be pinched, but allow outside leaders to grow unchecked to maintain vigour in the tree and to prevent side-shoots growing again. Given good cultivation the fruits will be fully grown during our most settled summer weather. Spraying and fumigation must be attended to, but directly the fruit commences to ripen these must cease.

In the cultivation of fruit-trees in pots, potting is one of the secrets of success, and as it is an annual operation, to neglect it means failure. Very large pots are not required. Turn the trees carefully out of the pots, free the roots of soil, knock the ball gently on the bench, pull out the thicker roots, and shorten them a little. Try the ball in a clean pot of the same size, and if there is a fair space for the fresh soil all is well. Big shifts do not give the best results, so reduce the ball as much as possible to avoid unwieldy pots. For drainage let there be a fair amount of crocks with a layer of lime-rubble on top. Good fibrous loam that has been stacked for some months is the best soil. Chop it up in pieces 2 inches or 3 inches square, and to every four parts add one part of fairly-rotted stable manure or material from an old Mushroom-bed. Add enough lime-rubble to ensure porosity. The whole must be well mixed to ensure equal distribution of the ingredients. Over the rubble place a few pieces of turf, add a little fine soil, and make the whole firm. Place the tree in the pot, add a little soil, and work it well in among the roots, using a long, stout rammer. Add little by little until the pot is full. Stand the pots in a sheltered position away from the wind. When housed in spring let them start into growth naturally without any fire-heat. All they require is protection from untoward weather, such as chilly nights and east winds. On all suitable occasions ventilate freely, and seldom should the house be entirely closed at night. On bright mornings, until the flowers open, the trees will be greatly benefited by syringing them and damping down paths. Any bees that may happen to find their way into the orchard-house should be encouraged to visit the flowers to effect pollination in a natural way. Otherwise a rabbit's tail should be carefully drawn over the open flowers when the pollen is dry. When the fruits have set, the syringe must again be resorted to for damping down as before. When the roots become active on the surface top-dress with two parts loam, one part well-rotted dung, and a little bone-meal. Soft tepid water should be used, and every pot during the height of the growing season and in sunny weather should be examined three times a day. Although it is as well to remove unhealthy or deformed fruit as early as possible, I do not advise thinning finally until the fruits are swelling freely. F. H.

Mulching

A mulch is frequently applied immediately after planting in early autumn, a date when the soil around the roots would be much better without it, so that the sun may still add warmth to the rooting medium a few weeks longer. Far better defer this surface covering until hard frost sets in, when a thickness of 3 inches or so of partly-decayed manure or leaf-soil would, unless very severe, protect the roots to a certain extent while the hard frost lasted, and be of value to the same. When it is only a score or so trees the covering may well be pulled aside during mild periods, thus admitting sun and air to the rooting medium, replacing the same when the weather demanded it. Where extensive planting has been done the extra labour probably could not be bestowed, although, in my judgment, it would be time well spent. With spring-planting the same holds good. There can be no valid reason why we should obstruct the two absolutely necessary elements, sun and air, to encourage early root-action. If the material is got ready the work could soon be carried out. To exclude the sun's warmth from the soil in the absence of severe weather during March and April is, to my idea, going against Nature a trifle too early. We do not usually suffer from drought to any great extent during these two months, and if the surface soil is kept lightly pricked up as occasion demands few trees or shrubs should show much sign of distress. As the sun gains more power as soon as May comes in—a date when the soil around the roots will have become much warmer—a mulch as advocated above should prove beneficial throughout the summer, relieving to a great extent the necessity of much artificial watering during spells of drought, while in a very wet summer the said trees or shrubs would be all the better without it, especially so on land that is retentive and cold. J. MAYNE.

Autumn-fruiting Raspberries

The late or autumn-fruiting varieties of the Raspberry are so greatly esteemed in many establishments that an effort has to be made to keep up a supply until the canes cease to yield fruit, or, as is more often the case, until frost destroys both the blossoms and fruit. The esteem in which they are thus held is fully justified by the fact that they serve to considerably prolong the season in which this much-appreciated fruit can be had, and it is strange that their cultivation has not long ago become further extended.

Regarding the question of cultivation, this presents no difficulties, for anyone who has a soil capable of growing the summer-fruiting Raspberry can succeed with the autumn-fruiting kinds. Like the summer-fruiting kinds, the autumn-bearing sorts delight in a deeply-stirred and thoroughly-manured soil, and if planted under these conditions the canes will yield profitable crops of fruit for many years afterwards, provided, of course, that they are annually mulched and watered with diluted liquid-manure. The canes are best trained to a trellis 4 feet 6 inches to 5 feet in height, and if the demand is such that several rows are required, the best plan then is to devote a portion or a whole plot of ground to them. In this case the rows should stand 5 feet distant from each other. Another and an excellent method is to plant them so that they run parallel with a footpath, a row on either side, and distant some 3 feet from the edge of the path. Grown in this manner, they are very conveniently situated for attending to, not only from a cultural point of view, but in netting to secure the fruit from bird attacks and in the gathering of the same. So far it will be seen that there is little or no difference in the cultivation of the autumn-fruiting Raspberry and that of the summer kinds, but the next point that has to be tioned, which is that of the time to pr cut down the canes, shows rather a divergence, inasmuch as, while the ca the summer-fruiters are only thinned o strongest and best being retained and the autumn-bearing kinds have to down close to the ground about the January or early in February. A crop canes is then produced in due course, have to be thinned out to about 6 apart, selecting, as a matter of cour strongest, and cutting the residue cle It is these new canes which produ autumnal crops of fruit, and these sel varieties, if grown under the same con as accorded the summer-fruiting sorts, fruit at the same time as they do. the summer kinds would, if cut down spring, produce a crop of fruit in a but the yield in this case does not co weight for weight, with that obtaine the varieties grown specially for fruiting. Of these the best are Octob October Yellow, and Belle de Fontena

Apple-trees for pictorial eff

Frequently one finds that it is im in gardens to combine beauty and utili in consequence there is a great waste space. This is shown very largely i modern gardens where fruit-trees a gated to the orchard or the kitchen Happily, this defect is not present i of our best gardens, in a number of there are borders of hardy flowers s vegetables from the paths, and having them some of our best Apple and oth trees. In some good gardens I kno are at intervals Apples trained over of iron or wood, with Snowdrops, D and other flowers beneath. So, also, t behind the hardy plant borders w bloom give most delightful additions beauties of the hardy flowers in front. is, indeed, nothing more beautiful fruit-tree in full bloom, as it harmoni the early flowers of the border.

In certain of our old gardens the a fruit-tree in the garden scheme of de was perhaps better understood tha Their makers had not the wealth o flowers which are now at comman possibly as much for their beauty as utility, they planted Apple-trees largel borders. I know many old garden these trees must have been a great long ago, and which still reveal in s gree the charms of the combination blossom and the Narcissi, Anemone anthuses, Primroses, and other flowe season. In addition to the charm blooms on the fruit-trees, there is, m that of the fruit. In its various st fruit is always interesting, and w Apples begin to ripen there is a sub mony between these and the Sunflow Starworts, the Dahlias, and other It takes nothing from the attraction flower garden to have within its boun trees whose beauty does not only co the blossoms of spring, but also in t or golden fruits of the autumn time can admit the Japanese double Ch the Crabs into the flower garden or th bery surely we can find room for Apples and other fruits.

Manuring fruit bushes

Gooseberries, Currants, Strawber other bush fruit will be greatly ben given a little artificial manure now. phosphate and sulphate of potash m gether at the rate of two of the for one of the latter, used at the rate of o ful to each bush or yard run of Stra plants, is excellent for the purpose, s evenly on the surface and hoeing in.

'he Blue Flax (Linum perenne)

By Clarence Ponting

hose who have to consider costs I ld suggest that a stock of plants of pretty blue Flax, Linum perenne, d from seed for insertion in groups ıerbaceous border, or as edgings to verges of a lawn.

plants must be massed in order to to perfection, and Linum perenne to this class. Anyone who has seen ıg of some hundred feet or so will get the sensation. I have such an n my garden, and it is no uncommon be stopped in the village and asked Linum is faring by people who saw ear. The general impression seems been: "That they had never seen like it in their life."

u know that beautiful little sky-blue , the Chalk Blue, which flits over ving grass and alights on the sway-ms? Well, the flower of Linum is almost its counterpart in colour—heavenly blue!

lant is not at all particular as to , like most blue flowers, it likes lime form or another Borders deficient substance should be dressed with ıalk or lime if the best results are to ed. Those who are impatient and

Linum perenne, Lavender, Cerastium, and other flowers, showing the utility of Linum perenne as an edging plant

Linum perenne at the foot of a bank of hardy flowers

vait for a stock raised from seed may plants from any nurseryman and w, taking care that the tap-root is to grow downward when planting. il is dry the plants should be watered even then may wilt a little at first, feathery, delicate green foliage soon erect, and flowers follow in late ıtinuing until late June. The plants lifically and will self-sow unless the eight of seed-pods is cut away. If of plants is sheared down to within inches of the ground when it has completed flowering it will throw crop in some six weeks' time, new containing the flowers pushing up from below the cuts. Although this display is not quite equal to the summer one, it is very nearly so, and quite worth having.

Taking this dual crop naturally exhausts the plants and will cause them to deteriorate unless fed with short manure when the second crop of seed-pods is cut down when cleaning up for the winter. But properly looked after the plants increase year by year until they require a foot square of space. For a permanent edging the plants should be put out at a distance of from 9 inches to 1 foot.

As the plants become heavy with seed there is a tendency to hang over the path unless supports are placed in time. Short Pea boughs answer very well if inserted between the plants when they commence growth in the spring, the foliage soon hiding them from sight. For this reason it is advisable to put the plants about a foot away from the verge, or edge of the path, planting in front of them Aubrietia, which flowers at the same time and acts as a foil to the intense sky-blue of the Linum.

Plants are, however, not too cheap, and a large stock can be raised without difficulty from quite a small packet of seed sown in open ground during April or May. I think I got somewhere near a thousand plants from a threepenny packet when I first raised a stock. The seed is large and can be sown at a sufficient distance apart to avoid transplanting. Choose a sunny position for the seed-bed, and draw ½-inch drills into which the seed is sown, 3 inches apart if you have the patience. Here they can remain until autumn, taking care to keep down weeds. The resulting plants will not be very large, and have a tap-root. Carefully lift them, inserting in their permanent quarters with a dibble, which ensures that the root goes in a downward direction. Quite a good display will be produced in the following year, whilst the plants rapidly enlarge as time goes on. In time the plants become exhausted, and it becomes necessary again to raise a fresh stock from seed, or the plants can be allowed to self-sow one year, which will produce a sufficient number of plants for most small gardens.

If planted in borders, not less than six should be planted as a clump, where they will make a most distinctive patch of blue. The plant loves a sunny position where possible, but *will* grow anywhere except in absolute shade. In poor, peaty soils which are deficient in lime the plant will not thrive unless lime is incorporated in the border. It simply revels in clay, and is thoroughly happy in a border after the builder's men have done their best to make it like a road. Those who have just occupied new houses should make a note of this. Probably the amount of lime contained in such a border has something to do with this.

The best display is seen in the morning, after which the blue to some extent bleaches out, leaving the flower a lavender-blue.

Some Syringas

By Edwin Beckett, V.M.H.

It is not intended in these notes to deal at length with the many fine Lilacs of the Syringa vulgaris group, which have been produced by hybridists and now grace our gardens, but to call attention to those which may be termed species, a charming group of hardy shrubs chiefly the results of the exploration of the wilds of Asia by intrepid plant collectors. These native species forming, as a rule, medium-sized bushes, could well find a place in quite small shrubberies and win high commendation as beautiful flowering subjects. Curiously enough, they are not so much in evidence as they deserve to be, probably owing to many being of fairly recent introduction. In noting down particulars of some of them it is not proposed to deal with white-flowered species of the S. ligustrina group, which can only really appeal to an observer as somewhat glorified Privets, to which group they are closely related. Those which will be referred to are the species whose colours range through pink and lilac shades. The first that claims our attention is

Syringa hybrida Lutece, which was, I believe, raised by MM. Lemoine et Cie at Nancy and is a hybrid between S. villosa and S. Josikæa, and therefore falls into the section known as villosæ (which section will be dealt with first). It forms a tall, handsome-foliaged bush, the leaves of which are each about 6 inches long by half as much broad, and of a bright, cheerful appearance. The panicles of flower, which are freely borne, range about 8 inches in length, and in the bud stage are of a deep violet tone, opening into flowers of a fine deep lilac hue.

S. reflexa.—This plant, which we owe to the activities of Wilson in Western Szechuen, is, perhaps, unique amongst the Syringas owing to the downward, curving, pendulous racemes of flowers. It forms a bush from 7 feet to 10 feet in height, bearing very large leaves of a deep green colour. Some which I have measured were 10 inches in length and nearly 6 inches in width. The racemes, each about 6 inches long, are closely packed with flowers which are brick-red on the outside of the corolla and deep reddish-pink within. Closely allied to it is

S. Komarowi, also discovered in the same province by Wilson. This species does not appear to bear so long an inflorescence, nor is it pendulous, otherwise it is like S. reflexa, the colour ranging from rose-pink of deep tone to a purplish-tinged red. S. Komarowi Sargentiana is an accredited variety, but does not appear to differ greatly in appearance from the type. Neither seems to carry such large leaves as S. reflexa.

S. Wilsoni.—This, another member of the villosæ, is a charming plant, again from the same province, and, as the name denotes, by the same collector. A medium-sized bush with small leaves, it bears much-branched panicles of large flowers of a very beautiful pink shade, the lower part of the interior of the corolla being of a deeper tone of purplish-pink. The inflorescence is about 6 inches in height and in the bud stage deep pink. This species is possibly the same as the S. tomentella of Franchet (synonym S. alborosea of N. E. Brown), but this lacks confirmation by botanists.

S. Yunnanensis at first glance seems to very closely resemble S. Wilsoni, but on examination it is at once seen that the individual flowers are not so large as those of its relative, while the corolla does not carry the purplish-pink tinge within, being self-coloured of the same beautiful shade of pink, another difference being that the petals are not reflexed like those of Wilsoni. A further distinction is observable in the foliage, for whereas that of S. Wilsoni bears all-green leaves, those of S. yunnanensis have a very noticeable red midrib, the colour being continued down the leaf-stalk and veins, and also found in the flower-stems. The leaves of this species are each about 1½ inches long by 1 inch wide, and are downy on both upper and lower surfaces.

S. Julianæ.—Though a native of Western China, I do not find any reference to it having been introduced by Wilson. The habit of the plant as we know it is to form a spreading bush of greater width than height, rather than of upright growth. Flowering early (during May and continuing into June), it is a pretty subject in the shrubbery, with its many twin panicles of fragrant flowers which vary from violet to rosy-purple, and borne on the previous year's wood. The inside of the corolla is of a lighter tone of lilac, and while the flowers are comparatively small, they are freely borne on the well-branched panicles which each measure about 4 inches in length. This species is allied to S. pubescens (Turczaninow), and these two both carry violet-coloured anthers, being, so far as is known, the only members of the Syringa family to do so. The foliage of S. Julianæ is of a cheerful tone of darkish green, the leaves each measuring up to 2 inches in length by half as broad, hairy on the surface and even more so beneath, the grey hairs on the underside being particularly distinct.

S. velutina (Komarov) is presumably now in cultivation through the efforts of the late Mr. Reginald Farrer, or if not actually the type, then the plants raised from the seed he sent home from China are very closely related thereto. The bushes are of light open growth in appearance and the panicles of flowers mostly borne in pairs, as in the case of the near relative, S. Julianæ, are each about 4 inches long by as much broad. The flowers, freely carried on the well-branched panicles, are on the small side, lilac-red without, and light lilac turning almost white within the corolla, and decidedly fragrant. The young growths are of purple tone.

S. villosa.—At the end of May and early in June this species is a beautiful sight with its long panicles of lilac-rose coloured flowers, the panicles ranging about a foot long and occasionally of even greater length. It flowers on the new wood, both at the end of the growths as well as along them at the leaf-axils. The foliage is very variable in size, averaging from 4 inches to 6 inches, though on strong young growths the leaves will sometimes reach nearly a foot long. The bush attains to a height of about 12 feet, is very robust, and on account of its fine panicles, which are longer than in its near relatives S. Emodi and S. Josikæa, is probably one of the very finest of known species of Syringa. It is presumed to have come from Northern China and has been long in cultivation, though it has been somewhat confused with other species, being at different periods known under the synonyms S. Bretschneideri, S. Emodi rosea, S. Josikæa eximia, S. pubescens, and S. verrucosa.

S. Emodi.—This Himalayan relative of the foregoing is a late-flowering species in June, and therefore valuable for that characteristic. Panicles of slightly purple flowers, each from 3 inches to 6 inches long, are borne at the end of the new growths in numbers from one to three. The leaves run up to 8 inc inches in length, dark green on the and paler beneath. The odour of th is reminiscent of a rank-scented Priv

S. Josikæa.—The native habitat c doubtful. It is possibly only a varie villosa, with more slender panicles of toned flowers, averaging about 6 i length. It flowers between the tim villosa and S. Emodi, and thus form succession.

S. Sweginzowi.—E. H. Wilson in 1904 a Syringa which was deck later period by Mr. C. Schneider as by a condition of the foliage from th form and only exhibiting very min tions therefrom, so that it was prob a geographical influence setting up t ence. The Wilson form is, at any the time being, known by the Sweginzowi. The flowers are d fragrant, pale pink with a deeper throat, and are borne in slender pani freely. It is one of the best of the

Of the vulgaris section there ar two that call for brief notice.

S. persica.—The Persian Lila native habitat is supposed to be Afg is, perhaps, as well known as Lilac. It is useful for flowering at of May, looking very charming with panicles (each about 3 inches lo branched and carrying fragrant li flowers. It is not such a strong-grow as the average hybrid Lilacs of t group, and therefore the more valu shrubbery of restricted dimensions. a white form (S. persica alba) and cut leaves (S. persica laciniata), which forms an equally neat shrub.

S. pinnatifolia.—This is of dis pearance amongst Lilacs, owing to it leaves. This introduction of Wilso he found growing in Western Szec not likely to become so popular others as the panicles of flower are s small. Differences of opinion exist exact shade of the flowers, the de varying from white, white tinged and Wilson's own description—pink bly a more detailed description to fi would be that it is a very pale cr tinged with a lilac-pink.

S. oblata.—A species closely all vulgaris, but of rather doubtful gardens, inasmuch as, flowering a ginning of May, it is too early to effective should the weather be var is quite hardy, and is a native of but the vagaries of our climate do the most part, agree with it. Th are short and broad, measuring inches in length by half as much breadth, appearing on the old w flowers are pale lilac in colour and also has the tendency to be more b long.

S. Palabiniana.—One of Wilso introductions, this has not yet atta cient size to describe with detailed It came from Korea, and gives p becoming a very valuable shrub, as the foliage is of a deep purple h first unfolds, and maintains this t considerable period. The flowers, deep reddish-purple in colour, and it looks like being a very welcome The racemes do not appear to be are closely set with bloom.

From the foregoing descriptions t are lovers of shrubs will no doubt esting reading, and possibly an in grow more of a group of plants that well worth their interest and attenti

SEEN AT THE DAFFODIL SHOW

Firetail in a market bunch
said to be the market flower of the future. The deep orange-
e is in bold colour contrast to the ivory-white perianth

Mr. Guy Wilson's Valetta, which gained an Award of Merit
It is an ivory-white Trumpet, beautifully modelled as if cut in marble

NEW DAFFODILS AT VINCENT SQUARE

general consensus of opinion the l Horticultural Society's Daffodil w, held on April 13th and 14th, was t the Society has ever held. The s filled with Daffodils, and no fewer ar large groups received the gold The winners of the gold medal were Barr and Sons, Mr. J. L. Richard- Donard Nursery Co., and Messrs. Cobley, Ltd.

ntries in the competitive classes ex- hose of any previous year, and the exhibitors were Mr. P. D. Williams, rth, who won the Engleheart Cup, . Wilson, Mr. W. B. Cranfield, the of the class for 24 varieties, Miss ock, Mr. W. F. M. Copeland, and H. Rollo Meyer.

arket variety Red Rim, shown by . Secrett, Twickenham, received the ss Certificate and 10 others received of Merit, namely :—Samaria, shown rs. H. Chapman, Ltd., of Rye; shown by Mr. F. A. Secrett; Mulberry, and Folly, shown by Mr. Villiams, of Lanarth; Seraglio and entinel, shown by Mr. J. L. Richard- ha, shown by Mr. W. Welchman, of ; and Valetta and Carmel, shown by Wilson.

Peter Barr Memorial Cup, which is annually to someone who has done good work on behalf of the Daffodil, was awarded to the veteran grower, Mr. William Poupart, of Marsh Farm, Twickenham.

The attention of visitors was at once drawn to the pink trumpet Mrs. R. O. Backhouse, shown by Messrs. Barr and Sons and Messrs. J. R. Pearson and Sons. It is a most remarkable colour break in trumpet Daffodils.

The exhibit by Messrs. Seymour Cobley, Ltd., Spalding, consisted entirely of market bunches. Some idea of the splendour of this exhibit may be obtained from the illustration, page 262. It was a glorified salesman's stand. The varieties shown were Firetail, White Lady, Osprey, Robespierre, and Prelude. This exhibit, although quite unlike anything ever staged at Vincent Square, was an example of what the market grower should aim at growing. In contrast to the bold display of market bunches was the delightful corner group of Narcissus Osprey over an undulating carpet of Moss.

Mr. J. L. Richardson, Prospect Gardens, Waterford, who has been showing so very well this season, had good blooms of novelties, including Mitylene, Beersheba, and Silver Salver. His seedling No. 401, with which he secured first place in Class 37, was particularly noted. It is a large flower with white perianth and lemon-yellow trumpet, and has since been christened Jack Horner.

There is no prize offered for the best bloom in the show. Incidentally, it would be interesting if prizes were given for the best blooms in each section. One variety that would have secured high marks was Comrade, a medium-sized flower of cream-white colour and beautiful in outline. It was shown by Mr. W. Welchman, of Upwell, Wisbech, in Classes 1 and 22.

Perhaps the most remarkable variety was Folly, a large incomparabilis with pure white perianth thrown back in marked contrast to the bold orange-red corona. It is not a show flower with the formal cardboard back, but a garden flower of great promise.

Other flowers to which one's attention was drawn were Quartz, white trumpet, shown by Mr. Guy Wilson; Samaria, a chaste white Leedsi, shown by Mr. Herbert Chapman; Traboe and Mulberry, two of Mr. P. D. Williams' Barri varieties.

Special mention should be made of Beersheba, shown by Mr. Guy Wilson; Mitylene and Silver Salver, shown by Mr. Richardson; Warspite and Spanish Flag, shown by Donard Nursery Co.; Venetia, shown by Mr. W. B. Cranfield; Striking, a Poet with red eye, shown by Messrs. J. R. Pearson and Sons; Socrates, another Poet, John Evelyn, shown by Messrs. Barr and Sons; and Twinkle, with apricot perianth and bright orange eye, shown by the Welsh Bulb Fields, St. Asaph. H. C.

Novelties at the Daffodil Show

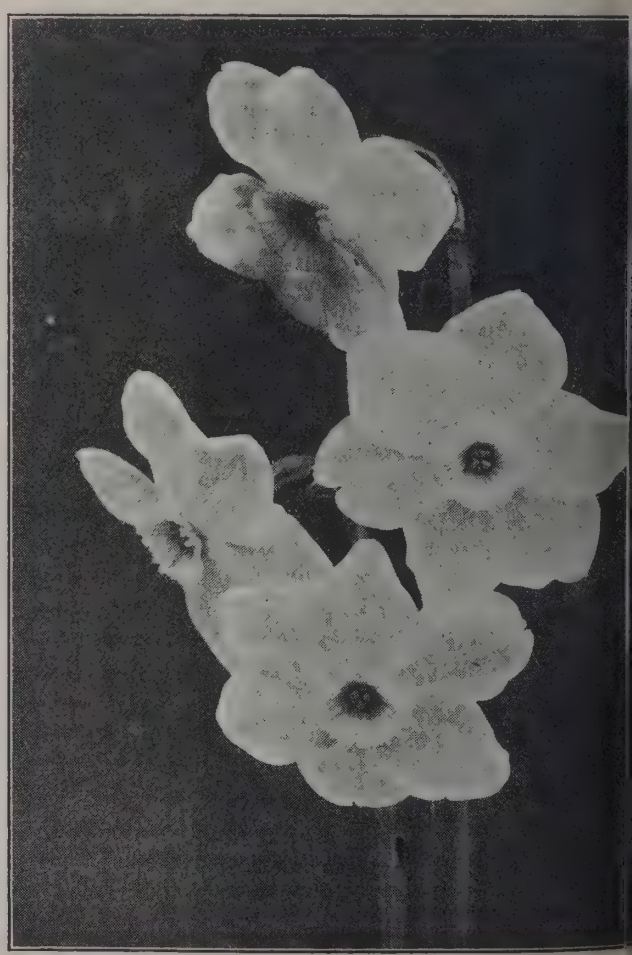
April 13th and 14th

CONTRAST IN EXHIBITS

The grand collection of market by Messrs. Seymour Cobley, L the quiet corner of Narcissus naturalised in Moss shown by Dobbie and Co.

The former exhibit, which gain Gold Medal, contained market b of Firetail, White Lady, Robes and Osprey

Traboe, which gained an Award of Merit
It was one of the best varieties shown by Mr. P. D. Williams
Note the broad, overlapping perianth



The pure white Samaria, for which Mr. Herbert Cha received an Award of Merit

a remarkable novelty shown by Mr. P. D. Williams, ch the pure white perianth is thrown back in contrast to the bold orange-red corona

Comrade, a flower of perfect form—a cream-white self of medium size shown by Mr. W. Welchman, Upwell, Wisbech

ry, another of Mr. P. D. Williams' novelties. The -red eye is remarkable for its intensity of colour

Jack Horner (Mr. Richardson's 401), a large flower with white perianth and bold lemon-yellow trumpet

REMINDERS FOR THE WEEK

Southern and Midland

Runner Beans

It is a mistake to sow these in the open too soon, but if a few boxes are sown now in gentle heat and grown cool as soon as germination has taken place plants will be produced that will come into bearing several weeks sooner than those sown out of doors during the early part of May.

Carrots

Now is a good time to sow the main crop of Carrots, either intermediate or long-rooted kinds. Twelve inches to 15 inches is a fair distance apart, covering the seed not more than half an inch in depth. Wood-ashes and old soot are excellent for working into the surface soil previous to sowing.

Cardoons

Seeds of these are best sown now in pans and germinated in a cool frame, pricking off when large enough to handle, and planting out in single rows in trenches that have been well manured.

Peas

This is an important date for sowing a good reliable Pea that will turn in during August. One of the best I know for this purpose is Senator, a Pea that never fails and is not liable to mildew, which ruins many crops of late summer Peas.

Arum Lilies

These are now past their best, so should be given ample supplies of water and occasional stimulants for several weeks before placing them out of doors for the summer. If aphis is troublesome the house must be fumigated and the plants sprayed with insecticide.

Schizanthus

This is now coming into bloom and should be liberally fed where the pots are well filled with roots. Nothing is more attractive than a good batch of this plant when well grown. The same applies to Clarkias, which should never suffer from want of water or the foliage will drop off.

Deutzias

Many plants of these are spoilt from lack of proper treatment after flowering is over. When this occurs the plants should be pruned hard back and grown on in a cool house to encourage fresh growth previous to planting outdoors during the summer.

Primula malacoides

This accommodating greenhouse plant may be sown at intervals from now till the end of June. A sowing made now will produce good flowering plants by the end of October. It is wise to add lime-rubble to the potting compost and keep the roots confined as much as possible. Four-inch to 5-inch pots are quite large enough in which to flower the plants. Princess Mary is one of the best to grow.

Border Chrysanthemums

There is no advantage in keeping the plants in pots or boxes after this date, so they should be planted out in rich soil in the vegetable quarters for preference. When they become established the points may be pinched to promote a bushy growth.

Nasturtiums

Many amateurs fail to get the best results from these plants, owing to the mistake of sowing the seeds in soil that has been recently manured. The seed should be sown now on ground that has borne a previous crop without the addition of manure.

Mignonette

It is a poor garden that contains none of this flower. Where it is found difficult to raise the plants outdoors, sow about four seeds in a small pot, germinate in a cool greenhouse, hardening off for planting out at the end of May. I find it advantageous to add lime to the soil where the plants are to grow.

Gooseberries

About this date, or soon after, the Gooseberry caterpillar will put in an appearance, so the bushes should be examined daily, and if one is seen the bushes should be dusted with Hellebore Powder. This is a good remedy, and steps taken in time will prevent the crop being ruined and the bushes defoliated.

Tomatoes

Where plants are growing in the greenhouse for planting outdoors care should be taken that they do not become drawn. Good crops are always assured on sturdy, short-jointed plants, which is not the case with those that are of soft lanky growth.

W. E. Wright.

The Gardens, Stockton House, near Rugby.

Scotland

Tomatoes in cool houses

If Tomato plants have been grown on sturdily and without too much heat they may now be safely planted in a cool house—that is, a house in which there is merely sufficient heat to exclude frost. Whether the plants be grown in pots or put out in a prepared border it is sound practice to give them ample space in which to develop. Tomato plants are, at times, put out so closely when they are young that, in their final stages, they form a thicket to the centre of which light cannot penetrate. Plants in a border ought to be at least 3 feet apart in the lines and 2 feet from plant to plant. It is never advisable to grow too many sorts. Choose one or two good croppers which set freely and concentrate on them.

Chrysanthemums

By this time all the Chrysanthemums ought to be in 5-inch or 6-inch pots and in cold frames. If any specially strong pieces appear to require it they may have an intermediate shift into 7-inch pots, from which, in late May, they can be transferred to their flowering pots. Plants intended for specimen bushes will, of course, be pinched as becomes needful. The tips root readily now, and if these be planted out when rooted in fairly rich soil and kept to a single stem through the summer, lifted early in September, and put into 6-inch or 7-inch pots, they will make useful dwarf plants with but little trouble. The leaf-boring maggot ought to be watched for, and affected leaves should be promptly picked off and burned.

Plant houses

An occasional "shuffle" in the case of flowering plants in conservatory or greenhouse is of service, and some plants are certainly benefited by a change of position. Azaleas in pots now require a good deal of water; so, too, do Arum Lilies. The latter must be kept as cool as possible. When they cease to be effective their place can be effectively taken by Canterbury Bells or some other fairly tall-growing subject. A few pieces of Humea elegans are useful round about this time.

Tuberous Begonias

Tubers which have been started in boxes will now be sufficiently advanced to permit of them being potted up. The double usually preferred for pots, and if la men pieces be desired it is merely of repotting until the plant is in pot. Begonias do not call for any f post. Well-rotted loam two parts mould one part, a dash of soot, coarse sand will grow Begonias pe believe that feeding Begonias with fertilisers in solution generally res decay of the tuber during its nex period.

Gesneras

The early batch ought now to moving into the pots in which the intended to flower. Pots 7 inch meter are usually large enough, bu 5-inch pots are useful in many supplementary batch can now be se Gesneras require more heat than l

Liliums

Liliums, whether L. auratum o the L. speciosum family, which w in cold frames, will now be well If planted in pots which were only the bulbs will now require a little and the pots should be top-dressed good material. It is wise, howeve the bulbs in boxes so that three o the same stage of development m into single pots. It is aggravat three or four bulbs are planted, mant, in one pot, to find that th bloom simultaneously and that mu effect is lost. By growing them fo boxes and selecting those at the s when potting up, this failing can, extent, be eliminated.

Fruit houses

Thinning and disbudding are n the latest Peach-house, but the w not be done all at once or the suffer. Let the operation be spre fortnight, or even more, selecting and the fruits which are in the m able positions as the work goes earlier houses may require to be again, but at no time ought thinni a too drastic nature, for there is a tain to be some shedding of fruit stoning stage is reached. Syrin morning and afternoon, in bright Aphides and red-spider have a ro tion to cold water. In the vinerie sub-lateral growths are regularly and that the bunch-bearing s securely tied to the wires. Vine now very active and require not ture but nourishment, neither of w to be lacking.

Hardening off

Such things as border Chrysan Antirrhinums, Cauliflower plants, lar things raised in heat and no frames ought to be gradually and posed prior to planting. More plan by insufficient hardening than from reason.

Vegetable garden

As soon as rows of seedlings ar fined let the hoe be put to work be lines. Do not wait to do this unt weeds appear; anticipate them. Fu loosening of the soil in itself e growth. A sowing of Globe Bee made, Lettuces may be freely sow row or two of Radishes can go batch of Cauliflower plants will be if put in a sheltered border. Su sowings of Peas and of Broad Bea course, be desirable. W. McC

Mabie Gardens, Kirkcudbrightsh

British Carnation Society

Thirty-first Exhibition

best show since the war, and an esting one for many reasons, was at the Horticultural Hall on the feature was the number of entries vate gardeners and amateurs, and vers from these growers equalled if not excel the trade exhibits.

ie riband in the section for private and amateurs is that for a group arranged in a semi-circular space of feet. Mr. J. Pateman, gardener ll Cain, was the only exhibitor, but s merited the 50-guinea silver-gilt cup offered.

ciety is rich in challenge cups and no less than 10 being offered on the ccasion, while the prize money has mented to quite an attractive list of

amateur exhibitors Walter Hyde, Kempton Park, stood out as having he best blooms, one vase of his com- White Pearl, Lady Inverforth, Sir ssoon, Eileen Low, and others be- ificent and easily beating last year's , Sir Randolph Baker's gardener, er. There were no less than 52 some of them for only five blooms the amateur section. The Reginald p and £5 were won by Mr. Martin Velwyn, with 100 blooms arranged on ½ feet by 3 feet. Lady Mond (gar- r. Petty) had an extra fine winning h Mary Pearson, the sweetest-per- eliotrope variety. Other leading among amateurs were Lady Brodie on (gardener, Mr. Smith), Sir Ran- aker (gardener, Mr. A. E. Usher), lker, Mr. S. J. Hose, and Mr. E. W.

were two good tables decorated with which were won by Mrs. A. Swann ivelsfield Apricot, and by Mr. Hall, to the Marquis of Salisbury, with orthcliffe, which showed the judges' ce for new shades.

g the various classes for colours it was interesting to see the old variety Baroness de Brienen beat the fine exhibition variety Laddie. Among the whites Crystal White vied with White Pearl, and Topsy was the crimson in this colour, while Red Laddie was the largest red, a grand vase of Brilliant was put up by Mr. W. H. Page. This is, perhaps, a better scarlet. Orange Sunstar and Sheila Greer were two of the best fancies with orange ground.

The trade non-competitive groups contained complete collections of practically every variety worthy of cultivation. Gold medals were awarded to Mr. C. Engelmann and Messrs. Allwood Bros. In the former exhibit Palette was one of unusual colouring, being an orange-apricot ground freaked with rose. Dorcas was another variety of note, being a ruby-crimson with nice perfume. In Messrs. Allwood's group the scarlet Edward Allwood was shown in massed formation, which is very telling. Their Shot Silk is an art shade of chestnut-red flaked with deeper red.

The finest variety in Messrs. Stuart Low and Co.'s group was Sir Philip Sassoon, a large, very dark maroon-crimson with the perfume of Old Clove, but perhaps the chief interest was shown in Sybil, a colour which the artists do not agree upon, but best described as a purple-violet not unlike the Violet Princess of Wales.

Messrs. Keith Luxford specialised in popular market varieties. They had good vases of Enchantress Supreme, still a good variety for amateurs, and the intense scarlet Aviator was very good.

Considerable surprise was shown at the general good quality, not only in the trade exhibits but especially from amateurs, as although the past sunny weeks have been of much assistance in improving the quality of flowers, the present date is not one when growers are making heavy cuts as it is between the winter and summer crops, and Carnations are positively "short" in Covent Garden Market from growers who have had their plants in cut since the early part of last autumn.

Mauve Queen

Colour lilac-mauve. A remarkable colour break in Perpetual-flowering Carnations

Most of the large market growers cultivate their Carnations planted out in beds. Their main crops are timed to be at their best at Christmas, and they are cutting again heavily from about the time of the Chlesea Show onwards. Those who grow them in pots get their flowers earlier still, and have, perhaps, more and better flowers, but their spring crop is not so heavy or good as from those planted out. On the whole, pot cultivation is better and more expedient for the private grower, because otherwise when grown on the planted-out system, with his limited glass, he has to pull out the old plants while yet in full flower in the early summer to make room for the next season's plants, which must be planted then. It is those growers who have many houses at their disposal and who grow large quantities that the planting-out system pays to adopt.

At the Carnation Show last week one noted growers from the North, from Lancashire and Yorkshire, and from Devonshire, which shows the keen interest in this flower from provincial as well as local growers, for the Carnation has now reached a point when it is used more universally than any other flower. Its usefulness to the florist is equalled by its popularity with the amateur who wants flowers all the year round, but the way it lends itself to bedding in town gardens adds many more devotees to this plant than it would otherwise have.

There were several novelties put up for the Floral Committee, but these failed to reach the very exacting standard of excellence now demanded. The British Carnation Society is very sparing in granting its coveted Awards of Merit. A. SWALLOW.

Carnation Duchess of York

Veronica filicaulis

This is a delightful creeping plant quickly covering the ground with shoots which produce a multitude of sky-blue blossoms. It is an excellent plant for a sunny spot in the rock garden, where a plant of drooping habit is required, shoots falling over the face of a rock becoming masses of entrancing bloom. It is also a good wall plant. In spite of the fugacious character of the flowers their bright colour and the profusion in which the succession is kept up render it a desirable plant for the rock garden. It thrives in any soil in a well-drained spot and is of easy increase from cuttings. H. STEVENS.

VEGETABLES

Planting Asparagus

THE untoward weather throughout March, keen winds and ground frosts and a record month for dryness, have prevented the young shoots from making much headway, so that there is ample time during the next few weeks to form new beds of this much-esteemed vegetable. Records of beds yielding excellent cuttings for a score or more years have been given from time to time, but one ought not to be dissatisfied if, after 10 years, the roots show signs of weakening, even when the ground has been thoroughly prepared before planting, which is very essential if the best is to be got out of the roots. Asparagus responds best when given the sunniest position possible, and is a greater success when the soil is well drained and inclined to be sandy; the deeper the better, so that it can either be trenched 2½ feet deep or double-dug, incorporating abundance of the best farmyard manure that can be secured, placing a good layer at the bottom and midway. Raised beds a few inches above the ground-level and some 5 feet wide will take three rows 18 inches apart, placing the crowns as closely together as their roots will allow, covering the same with fine soil, well working it in between. The drills should be 6 inches wide, level at the bottom, and 4 inches deep, pressing the soil over the roots moderately firm and raking all over evenly. Two-year-old roots, or even three, are very suitable for planting, although I have relied on one-year-old crowns, planting a few hundreds annually, but the latter required an extra year's growth before cutting any produce. This would be the fourth year after planting. The roots, when received or lifted from the open, should not be allowed to get parched up, but be covered with a damp mat or bag, and, should the soil be exceptionally dry, it would be well to water the roots in applying a light mulch, if a very dry time sets in after the ground has been moved with a flat hoe. A light, short mulch would not much interfere with the hoe being plied between the plants, which will usually be necessary to destroy seedling weeds. There are but few varieties to choose from, the old and much-grown Connover's Colossal still holding the field with the majority of growers. J. MAYNE.

Tomatoes without manure

Your correspondent, "M.," on page 218, is doubtless on the right track respecting the use of manure in the compost provided for their root-run when potting on or planting out, as the case may be, a plan that was adopted by Mr. Thirlby, the head gardener at Broadlands, Romsey, over 30 years ago, while I was foreman there. We were never troubled with leaf disease of any sort, and had splendid crops so treated under glass. The plants were not treated as single cordons, but planted wide enough apart so that three shoots could be trained up the wires or, rather, woodwork in this instance, naturally suppressing all side growths as soon as they appeared. "M." makes no mention of feeding the plants as they come into bearing, but in the case noted above regular supplies of farmyard drainings—diluted, of course—were given every other watering, while the fruits were swelling, as in the case of Melons, and practised by the majority of growers. It must be remembered that loams are very different in texture. Some are rich, while others cannot be called anything but hungry, and it is to be feared that any attempt to grow and fruit either Tomatoes, Melons, or Marrows in the last-named, minus manurial aid in some form or other, would surely end in failure. Firmness of soil is conducive to short-jointed wood in the Melon plant, and there is no reason why Tomatoes and Marrows should not benefit likewise. I do not think there can be any doubt that the two latter are frequently planted or potted in too loose a compost for the well-being of the plants. J. MAYNE.

Potatoes for planting

While the sprouting of seed Potatoes is generally practised, it has special value in relation to the testing of the sets as to whether healthy or diseased. Tubers that have in them latent disease spores not externally noticeable invariably either break shoots weakly or not at all. The same force which sets natural germination or growth in action equally aids to set fungoid growth in action also, hence the food supply of a tuber to sustain shoots in a robust state is either not there or is very much limited. Except by cutting seed tubers in half it is not possible to otherwise ascertain whether disease spores exist in their flesh or whether they are healthy. Generally it is found that the proportion of sets thus weakened, and found unfit for planting, is probably not more than 5 per cent. of the whole, but even these few it is well to have tested, and, when found wanting, to destroy or burn them.

No one, so far, seems able to advise by steeping sets in any liquid or dusting heavily with sulphur or other assumed fungicide that it is possible to destroy disease spores in the tubers, yet to in no way injure the tubers' germinating powers. What would effectually kill one would, no doubt, kill the other. Then, in planting sets that have in their robust sprouting proved to be healthy, yet may in their progeny become diseased, no form of preventive that can be dressed into the soil when the planting is done has been discovered. Liberal dustings of sulphur have not availed against the Potato disease, and the only real or assumed real remedy, the copper sulphate and lime solution, is so little used that it plays hardly any part in battling with the disease. As has so often been said, our best preventives are light porous soils, ample room for the plants, high moulding, and, not by any means least, planting for main crop, varieties that have robust, erect, woody stems, because these always prove to be more disease-resisting than are sprawling stems with soft leafage.

Those who wish to plant early in pots or in frames, or on warm borders outdoors, can easily accelerate their belated tubers if set up in shallow boxes and stood in the gentle warmth of a greenhouse. Amateurs and cottagers, unless they have special means of furnishing protection to the tender growths on early Potatoes, will be wise to refrain from planting too early, but they will do well at once to have their seed tubers set up in boxes ready to sprout from their leading eyes the moment temperature becomes higher. If the sets be left in boxes thickly, the mere fact they are so often induces the creation of gentle heat, which causes sprouts to break, and, being in the dark, are necessarily weak and blanched. For that reason alone it is well to get the sets into sprouting boxes in good time. There are, however, other and oft-repeated benefits resulting from this sprouting. It is easy when growth takes place to detect rogues or wrong varieties, should any have got mixed. When no growth follows boxing, then all blind tubers can be rejected. That sometimes happens even when the flesh of the tubers is not diseased, but may be due to other causes. Then, when tubers are properly sprouted in ample light and air, the shoots made do not exceed an inch or so in length, and thus keep stationary till planted. It is, however, well to damp the tubers occasionally, to check loss of sap by evaporation. In such condition tubers have some thre growth on them in advance of thos tubers not sprouted, and can be pla when the soil has become warmer a spheric conditions are more fa Further, if the sprouting boxes h properly made with cross-handles, can take place from them direct.

INDOOR PLAN

Gloxinias grown cool

WHERE Gloxinias are grown i in order to obtain good floweri first season considerable hea their earlier stages is necessary. N writers on Gloxinias refer to then quiring stove, or, at all events, inte house, temperature. Good Gloxin however, be grown under much cool tions, as I have proved over and ove In order to obtain the best results in the tubers of the preceding year s laid in boxes of sandy soil, kept aln and wintered in a temperature not lo 45 degs. at night. This is about th ordinary greenhouse; in fact, such ture as tuberous-rooted Begonias quite safe in when dormant. Much treatment will suit these two classes o By the middle of March, or thereabo Gloxinias will be starting into growt they should be potted and placed on in the warmest part of the greenhous must be moderately watered, when, u influence of the spring rise in tem and increased sun-heat, they will so into growth. Tubers about the s penny are the most suitable for flow this way. The first potting should pots 3½ inches to 4 inches in diamete a compost containing a liberal am good leaf-mould. When these pots filled with roots the plants should b into those in which they are to flow this purpose 5-inch ones are very though a few of the strongest may into pots 6 inches in diameter. Give light position in the greenhouse, ye from bright sunshine, the plants w satisfactory progress, the growth bei and sturdy. If a cold frame is avai plants may, towards the end of placed therein. Watering must be done, and if the weather be cold th may be closed early so as to husban of the sun-heat. Grown in this wa pests give but little trouble, but shou put in an appearance they may be re stroyed by vaporising with nicotine. casional dose of liquid-manure will ficial when the pots are well filled wi but care must be taken not to spill an foliage.

Plants treated thus are later in fl than those grown under warmer co and are therefore valuable in maint succession, while the amateur wit greenhouse and perhaps a frame or thereby enabled to grow them. G grown in this way will flower well and August. Tubers suitable for th of treatment can be purchased when at a very cheap rate.

Cinerarias

Everyone who possesses a greenhou which frost can be excluded shoul these, although there is ample time f ing yet. A few seeds of the show o flowering section sown now will be i about Christmas. For decoration th none that can compare with the ste Star varieties, and these sown duri will give a glorious show in spring.

News from Holland

fields of Holland

s time of the year nothing can be delightful than an excursion to nd. It is a good year for Daffodils nths, and these are followed by the ring Tulips.

rney to the bulb district is neither difficult. Either from Haarlem or e villages of Warmond, Sassen-sse, Hillegom, Bennebroek, or are easily reached by train, tram, Numerous roads intersect the nd wandering on foot from village along the fragrant fields is perhaps santer. Past green meadows and aces, surrounded by woods, where are just bursting into leaf, one e radiant acres surrounding the . The deep blues and brilliant reds f the Hyacinths are enhanced by inks and snowy white of other "A big full Hyacinth is essen-ch, its very type and standard of almost national, and nowhere else

Hyacinths in Holland

orld can the bulb be produced in ction."

irst bulbous plants," writes Mr. E. " came from Asia, where they grew Vestern Europe in the latter part of century, and soon became popular plants with the aristocracy of Holland, and England, especially . The predilection for this flower ly be explained by its property to its colour, the originally self-flower obtained from seed suddenly striped and feathered, and so re-when the bulb is planted again. s and feathers are hardly ever abso-same, even if originating from the self' flower. Each distinct Tulip refore carefully cultivated and y its possessor as a unique treasure; collection was not only a fashion, (1612) became a passion. Twenty r the man in the street had become tor in Tulip bulbs that did not exist d many were ruined. In the years houses and lands, diamonds and ows, horses, and carriages were against a single Tulip bulb. The n of several towns in Holland took is craze, which was stopped by the ent in 1637."

An old garden book of about 1696, "de Nederlandsche hovenier," gives a long list of names belonging to the Tulips then in fashion, such as Great Turk, Admiral of England, Prince of Wales, Belle Dorea, and Unique. The custom of calling the Tulips after some famous beauty or celebrated statesman has never entirely vanished.

Album of Boskoop

No doubt many readers have heard something of the preparation of the Album of Boskoop, by Mr. J. H. van Straaten van Nes and Mr. C. Ph. Moerlands, Director of the State Horticultural College of Boskoop. This album, with about 60 very fine photographs and a dozen coloured plates, is now published. It is a most sumptuous volume, beautifully produced, and it contains a history of Dutch horticulture from the year 1200 to the present time. Those who know Holland, and especially Boskoop, will enjoy the delightful illustrations and letterpress.* Boskoop has long been a centre of arboriculture. Even in the 16th century the trees and shrubs of Boskoop enjoyed a good name abroad. Matthias Lobel, the famous physician of William of Orange, testifies in 1572 that more trees, shrubs, and plants were grown in the Netherlands than in Germany, England, France, Spain, and Greece, and that they were grown partly for their medicinal properties, but more generally for the decoration of country estates. One illustration in the Boskoop Album shows a field of 20,000 Rhododendrons, another a field of 30,000 Hydrangeas, and another a field of 50,000 Polyantha Roses. These illustrations give some slight idea of the present-day magnitude of the industry in Boskoop.

A Pæony show in June

We are interested to hear that a National Pæony Show will be held at Boskoop on June 15th and the three following days by the Dutch Society of Pæony Growers and Exporters. Mr. P. den Ouden, of Boskoop, has been elected President of the show committee. The show is going to be very interesting to Pæony growers, and the main object is to make the Pæony more popular among growers and the general public.

Pæonies have been known in China since 1400—at least, the Tree Pæony. The Pæonia chinensis in hybrid varieties, which will be mostly shown, dates back about a century. Pæonia chinensis originated from P. albiflora, which came from Siberia, and the latter variety, so far as we know, was crossed by a certain M. Jacquin, gardener to King Louis Philip, in France, and a few other amateurs, such as Comte de Cussy, Prince de Salmon Dyck, and Modeste Guerin. Certain of those seedlings are still in commerce. During the last 100 years a most beautiful assortment was raised, including several Dutch seedlings.

The State College of Agriculture at the Cornell University, New York, afterwards continued by the American Pæony Society, has done very much to improve the nomenclature of, and also to increase the interest in, this flower. In the United States the Pæony is very popular as a cut flower, especially on Memorial Day.

During the last 20 years large quantities of Pæonies were exported from Boskoop to America, and even now, under the Quarantine 37 Restrictions Act, quantities are exported under special permits. Curiously enough, the best varieties, which are so popular in America, are practically unknown in England, and an exhibition of these varieties, well arranged, will be of great interest and importance to the horticultural trade of Europe. H. C.

* "Album of Boskoop," by J. H. van Straaten van Nes and C. Ph. Moerlands. Published by J. H. van Straaten van Nes, Boskoop, Holland. Price £2 4s. 6d. post free.

Planting Violets

Those who grow plants mainly for flowering in frames should pay close attention to the requirements of the stock during this season. Cuttings or side shoots are layered or old plants are divided during April and at the end of the month, also early in May the young stock is planted in the summer quarters. The position is of great importance. I remember, while paying a visit to a medium-sized garden a few years ago, seeing a batch of young Violet plants actually struggling to exist in clayey soil in a hot, sunny position. This was at the end of June. About the same time, and in the same neighbourhood, I saw a grand batch of plants quite 1 foot across, each one in a north-aspect border composed of very light loam. It did not seem to be any trouble for these plants to grow, simply because they were in suitable soil in a suitable position. They grew without check; red-spider did not worry them, but it was eating up the tiny specimens in the hot border first referred to.

The ground should be well prepared before the Violets are planted in it, and if the natural soil is heavy and inclined to bake and crack during a spell of hot weather it would be very beneficial if some old potting soil or some sifted from the rubbish-heap were mixed with it, or, at least, placed around each plant to help them to become established. If there are any openings or draughty corners place boards or hurdles to break up the cold currents, as the latter will favour the spread of red-spider. Surface mulching may be helpful in some cases, but I much prefer using the Dutch hoe frequently and thus creating a dust mulch. Never mind the weeds, these cannot grow where hoeing is constantly attended to. Even where the ground is quite free from weeds use the hoe. The dust will settle on the under sides of the leaves and red-spider will not give trouble.

At first some watering may be necessary until the plants are established, afterwards simply hoe the soil between the rows and remove runners while the latter are young, thus concentrating the whole strength of the plant in its main crowns and main leaves. Stock so treated will be strong by September when that time comes for the lifting.

GEO. GARNER.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FRUIT

Vine in poor condition

Some 10 years ago I planted a Vine in a small house with outside border. The border was made of turf, builders' rubble, and bones, and contained, say, 2 cubic yards. The Vine has done fairly well, and now carries about 32 feet of bearing wood, but lately it has shown signs of weakness. It has been top-dressed with 6 inches of poultry guano and ashes for the last three years. How can I treat it to produce stronger growth? F. E.

[After reading your note, we are not surprised that the Vine in question has become weakened, and the only wonder is that it has survived the three consecutive applications of poultry-manure to the roots. The manure from poultry-runs is a very valuable stimulant, but at the same time a powerful one, and must be used with caution. When applied in small quantities, a marked effect upon whatever the crop may be generally results; but when employed in such an indiscriminate manner as you have done, it burns and kills the roots of whatever it comes into contact with. Again, poultry manure is generally mixed with ashes in varying quantities, which fact renders it quite unsuitable for top-dressing Vine borders with, particularly when applied to a depth of 6 inches. Independent of this, a quantity of material containing such a large percentage of stimulants over and above what may safely be employed for Vines, the very fact of such a body of ashes lying on the border surface, choking up the air passages in the soil, and preventing both solar warmth and rain from exerting their due influence on the roots and border, is detrimental in the extreme. This kind of manure is all very well if, after having lain for some months in a heap, it is spread on the ground and dug in for vegetable crops, and it also answers for hardy fruit-trees if used with discretion. The first thing to be done under the circumstances is to immediately remove the ashes. Then, as soon as open weather prevails, prick up or loosen the surface of the border with a steel fork, and remove the soil until live and sound roots are found. Then top-dress or make good the deficiency with some good turfy loam, to which add some lime rubbish and a certain proportion of a properly compounded Vine manure. Make this quite firm over the roots and keep the surface covered with about a foot of long, dry stable litter. It would also be advisable to enlarge the border by adding another portion—from 2 feet to 3 feet in width. Use good, sound loam for this purpose, and for manure add what is termed Vine border compound, which contains all that is necessary for the present and future needs of the Vine. Both this and the foregoing manure are compounded and sold by various horticultural sundriesmen, as you will see on referring to our advertising columns. The great thing is to use the manures as directed by the vendors (instructions on this head being invariably sent to all purchasers), and not to exceed the quantities named. This coming season do not start the Vine into growth any earlier than you are compelled; crop as lightly as you can, and encourage as free a growth, without undue crowding, as trellis space will allow, which will induce the Vine to make an abundance of new roots. With this and careful attention to ventilating, damping, and closing the house in the afternoon early enough to ensure a temperature of 85 degs. to 90 degs., until the Grapes begin to colour, you will be enabled to partly restore the Vine to health again; but it will require another season's careful management before you can do so effectually.]

Vine leaves diseased

In one of my vineries I have three old Black Hamburgh Vines each with two leaders. Each year one plant (always the same plant and the same leader) has one or more shoots which become like the enclosed. This year only one shoot is badly attacked and one other has a leaf or two touched. Would you be so kind as to tell me what is wrong and how it should be remedied?

West Hoathly. P. W. C.

[This is a disease called Diptheritis, or Lorification of the Vine, the cause of which is unknown. We have had experience of it, extending over many years, and though troublesome, have never found it to be contagious, as Vines on either side of one affected with the complaint have always remained immune. It is also a curious fact that, though a leader on a young rod may become affected, all other portions of growth and foliage remain practically healthy. So, too, with old rods the growths on one spur only will exhibit symptoms of the disease, while those on all of the other spurs remain perfectly healthy. In the last-mentioned case the removal of the affected growths has usually sufficed to get rid of the trouble, but in one or two obstinate cases the spurs were sacrificed, when there was an end of it. The best thing to do with young leaders when affected is to cut them back to where wood and foliage are sound and robust, and get them to break and make new growth.]

Fungus on vine leaves

(F. A., Kent).—We think the mould or fungus on the Vine leaves submitted to us is the Vine Sclerotinia (Sclerotinia fulkeliana), a remedy for which is liver of sulphur solution (sulphide of potassium) applied in the form of a spray to all parts of the foliage. To make this, dissolve 1 oz. of the sulphide in a gallon of hot water in which 2 ozs. soft-soap have been previously dissolved. Then add sufficient water to make 3 gallons. You will probably find it necessary to spray two or three times before finally subduing the pest.

GREENHOUSE

Abutilons

(J. L.).—The best thing to do with the Abutilons that have become potbound and starving is to cut them somewhat l and when fresh growth commence plants out and well rub down th roots, then shift them into larger those they came out of, using s loam mixed with well-rotted man sprinkling of sand. When the pl made fresh root and growth they freely.

Soil for Fuchsias and Pelargon

(W. T.).—Fuchsias like a free, li ous compost, such as equal parts and loam, adding thereto a good silver sand. Pelargoniums like a ing compost, say, two parts loam leaf-mould and a little sand. A rotted manure may be added to th compost, but the Pelargoniums are better without it. Pot the Pel firmly, but the Fuchsias somewha

Begonia Rex losing its leaves

(F. M.).—Begonias of the Rex ty a minimum winter temperature o Kept in a cool greenhouse, they a lose their leaves in the manner Keep the plant as warm as possil ing so that the soil is kept just ni In due time a fresh leaf will be see and when this has attained to som the plant out of the pot, shake aw old soil, and replace in a clean pot o size, using a compost of sandy p as warm as possible, watering n and shading from hot sun.

Ivy-leaved Pelargonium leaves unhealthy

(J. J.).—The leaves of the plant are suffering from a disease very c this section. Plants that have b fed or propagated from highly-fed very liable to this disease, which resemble a kind of eczema. Plants comparatively poor soil are seldom If you withhold stimulants and r worst-affected leaves we fancy the be restored to health.

Aspidistra leaves splitting

(T. H.).—There is no doubt potted the Aspidistra too deeply, a require to be on a level with the the soil. Potting too deeply causes to get deformed, and when they ex split and are disfigured. Aspidistra main in the same pot for a numbe if the drainage is good. Repottin rich soil and giving warm quart month or two would assist matter convenient to repot, give a little manure once a week and water it ling overhead to encourage fres from below. If you do repot, take you do not over-water until the r begun to work freely in the new so

Growing Smilax

(B.).—Smilax pays best if plante bench in 8 inches or 9 inches of and well-rotted manure. If seeds now and the seedlings potted on w enough into 3-inch pots, and the out in July upon a bench as rec above, you would be able to cut thr lots of strings from such plants pr could maintain a night temperatur 60 degs. If unable to give them ment you can, of course, grow the which must be of good size, say, a 8-inch. Smilax may also be ra suckers from the roots, but seedling ferable, and it is far better to ra plants from seed each year rather old and worn-out plants.

LOWER GARDEN

Sweet Peas in partial shade

.).—In growing Sweet Peas, em-
sually laid on the great advantage
ed from giving the plants a very
ion, but seldom is it that the half-
in the garden is recommended
Growers of Sweet Peas for ex-
ow very well how essential it is
varieties must be screened from
the sun if they are to be gathered
like a proper condition. What is
ssoms for show is also true of
table decoration, and those who
ve the finest will not ignore alto-
claims of that part of the garden
r mid-day, one may count on
For such a position we suggest the
g transplanted there rather than
at the start need not be delayed.
ties scorch and bleach very much.
should be borne in mind if the
forded by trees, and that is, the
should not be planted too close,
hen coming into bloom, every pro-
ide to give them plenty of feeding,
soil being removed and a dressing
y's Hop Manure, good, friable
g the place of soil that may be
It does not follow that plants
e shade require much less water
the shade is the outcome of trees,
t may possibly be found that the
is needed more frequently. Be
ay, no one need regard the partly
of the garden as being altogether
or growing this, the most popular
als.

tuberous

e are supposing that you want to
Begonias in the open air. Occa-
cellent beds are met with in
gardens, their bulbs, as a rule,
ed into growth very gradually,
a cold frame. Cocoanut-fibre for
the corms in when starting them
s useful. The new roots lay hold
lily, and the bulbs can be planted
d deal of this adhering to them.
grown cool it is not wise to start
s if only ½ inch of growth has been
final planting takes place, they
better, and both the quality and
y of the blooms are better.

annuals

addition to the Canary-creeper
canariense), you can grow on
s Tropæolum Lobbianum, T.
Mina lobata, Lophospermum
Maurandya Barclayana, Eccremo-
er, and Cobæa scandens. Sweet
l also answer, while the annual
in many shades of colour are
w trellises.

ies in tubs

—Water Lilies do well in half-
d in the turf and half-filled with
and water. On lawns the cask or
ight be sunk level with the sur-
giving the leaves and flowers of
Lilies the appearance of growing
ground. Of course, the strong-
rieties of the Marliacæa type are
s for this mode of culture, but
nany of the less strong-growing
answer well treated thus.

s (Galtonia) candicans

his noble bulb from the Cape
e autumn flower-spikes 4 feet to
, with spires of waxy-white bell-
ns, each about 1½ inches long. It
dy in light soils, and is very effec-
bold groups in the mixed border,
ower garden. It can be increased freely from seeds, which flower about the fourth year. The distinct habit of the plant makes it valuable, and a group in bloom in good, deep soil in the late summer is very striking. You can plant it at the same time as the Gladioli, and the two are very effective when in bloom together, as they ought to be.

Cinerarias drooping

(G.).—It is by no means an uncommon occurrence for Cinerarias to go off in the manner described, and we have always attributed the failure to unsuitable compost, or a sudden stoppage of root action brought about by a sodden state of the soil, the same being induced by careless watering. There may be grubs in the compost. Turn one of the dead plants out and examine the soil. Should there be any grubs, water with lime-water. In any case, water with caution. The Cineraria likes the soil moist, but quickly feels the effect of even one overdose of water.

Cinerarias after flowering

(A.).—After your plants have done blooming you can cut them down to within 2 inches or 3 inches of the soil, top-dress them with some light soil, and place under a shady wall. Keep them fairly moist at the roots and they will soon send up a lot of suckers, which can be taken off and rooted in sandy soil in any cool shady frame, and then potted on. These will make capital plants for flowering next season. As a rule, however, we think it would be your best plan to raise your stock of Cinerarias annually from seed, except in the case of kinds you wish to perpetuate.

TREES AND SHRUBS

Azaleas after flowering

(A. L.).—After Azaleas have done flowering growth at once recommences, and to encourage this the plants should be kept in a warm, moist place and frequently syringed. By midsummer they may be stood outdoors in order that the wood may become ripened, as on this to a great extent depends the future display of bloom. Take great care that the plants do not suffer from drought when in the open air. If you think the Azaleas need repotting do it at once, using a mixture of peat and silver sand and ramming very firmly. Azaleas will, however, grow and flower well for years without being disturbed at the roots. Only prune off any straggling shoots, as, the less cutting, the better will be the display of bloom.

Flowering Heaths

(Erica).—Heaths can certainly be grown in an ordinary greenhouse. During the winter they should be kept quite cool, merely excluding frost from them, ventilating freely in mild weather. The treatment that suits Pelargoniums will do for them. When done blooming cut them back just below the flowers, allow them to start fairly into growth and then repot them, using only the best peat with plenty of silver sand. During the summer give plenty of air, and shade a little from very hot sun. By the middle of August they will have made good growth, and should then be placed in the open air in a sunny position.

Magnolia grandiflora

(Smilax).—We are assuming that this is the Magnolia to which you refer. The tops of this branch naturally, and all that need be done is to spread them out thinly, keeping the growths secured to the wall. The strongest branches must be kept to the wall by means of strips of leather and strong nails. The trees ought never to be closely trained, and, of course, you must not cut the wood back close to the wall, as you suggest. Young plants should not be pruned at all, and old plants do not require much done to them in that way. It is advisable to cut out a branch where too thick, but not otherwise.

MISCELLANEOUS

Marguerite Daisy-fly

(A. C.).—The leaf you send has been attacked by the grub of the Marguerite Daisy-fly (Phytomyza affinis), and the best way of destroying it is to hold the plant up to the light so that you can see through the leaves. The position of the grub can then be easily seen. Pinching the leaf at this part will kill the grub. As there are several broods of this insect during the summer it is well to kill as many as possible of the first brood.

Preserving Fern fronds

(W. S.).—The proper time to cut Fern fronds is when the plant is at its best—in fact, whenever the frond is perfect in form and of the size required. There are many methods of preserving Fern fronds, but we know of none more simple and effective than placing the fronds singly between the leaves of a thick pad of blotting-paper, or between the leaves of a thick book, where they should remain till quite dry. In no case should they be exposed to the air till perfectly dry, or they lose their colour, and a heavy weight should be placed on the pad or book to keep the Ferns airtight while in the process of drying.

NAMES OF PLANTS

C. Bird.—1, Muscari comosum.

S. G., Bournemouth.—Ceropegia Woodi. N.O. Asclepiadaceæ. Natal, 1897. A quaint trailing plant for a hanging-basket or rockery in a warm greenhouse. Mother of Thousands is Saxifraga sarmentosa; a Japanese plant.

L. Allegro.—1, Epimedium rubrum.

A. E. Humphreys Owen.—1, Pink flowers, Pulmonaria rubra; 2, blue flower, Anchusa myosotidiflora.

Mendip.—1, Pulmonaria angustifolia; 2, undoubtedly a Myosotis, probably M. azorica, which will flower later on; 3, Erysimum pumilum (the Fairy Wallflower); 4, Saxifraga ceratophylla.

A. E. Humphreys Owen.—Rhododendron, red-flowered, probably an arboreum seedling. White not recognised.

Thirty-five Years a Subscriber.—Rhododendron Prince Camille de Rohan.

T. A. V.—1, Berberis Gagnepaini; 2, B. Darwini; 3, hybrid, please send again; 4, Berberis Hookeriana; 5, Ribes sanguineum.

CATALOGUES RECEIVED

Donard Nursery Co., Newcastle, Co. Down.—Choice Narcissi.

Rancho Santa Fe Bulb Co., California.—New and unusual varieties of Gladioli.

Special cup for Pæonies

Mrs. Edward Harding, of Burnley Farm, Plainfield, New Jersey, the well-known authority on garden Pæonies, has presented to the Royal Horticultural Society a sum of money which is to be devoted to the provision of three cups, one of which will be offered for award in each of the years 1926, 1927, and 1928, at one of the Society's fortnightly shows. The competition will be open only to amateurs, and exhibits must consist of three flowers of each of six varieties of Pæonies. Flora medals in silver-gilt and silver will be offered by the Society as second and third prizes respectively. This year the competition will take place on either June 1st or June 15th, according to weather conditions, and entries must reach the Secretary, R.H.S., Vincent Square, S.W. 1, not later than by the first post on the previous Wednesday in either case. The decision as to the date of the competition will be made on or before May 22nd, and a card will be sent to all who have written to ask that the notification should be sent to them.

A notable yellow Ajax

IT is called "Goldbeater," and might have been appropriately called "Beaten Gold." Whether it is in the catalogues I cannot say, but by the kindness of its raiser, Mr. Guy Wilson, of Broughshane, Co. Antrim, I have been able to consider at my leisure a dozen or so of its blooms in all their freshness and splendour. "Goldbeater" is a large flower, one of the largest, though with yellows within hail like King Alfred, Yukon, and Michael I should not say that its size is its distinction. That, rather, I should say, is its colour, a rich yellow, though my colour vocabulary is not equal to saying precisely what yellow; a Gorse yellow, I should think, the yellow of its parent maximus, but verging on the sultry Spanish tint of Santa Maria. One of the parents is maximus, but as to the other I understand Mr. Wilson is not certain. In addition to the maximus colour Goldbeater has also the characteristic maximus wave in the perianth segment, of which feature, I believe, the "true blue" Daffodil florist does not approve. Nevertheless, these curves give a variety of line and shadow which, to irresponsibles like myself, is sheer delight, though at the same time they necessarily tend to lessen the apparent size of the bloom as contrasted with flowers like King Alfred that have the perianth flat. The trumpet of Goldbeater is all it should be, not long, but long enough, a bold, solid affair, in colour a shade deeper than the perianth, expanding crinoline-fashion, and recurving at the brim in a frill. W.

Benn Brothers' Other Journals

The Cabinet Maker.—Encyclopædia of Furniture (Reviewed); Woodworking Machinery and Practice, XII.; Window Dressing (The D.I.A. Lectures); The Worshipful Company of Basketmakers' Livery Dinner.

The Chemical Age.—Special Laboratory Furnishing and Scientific Instrument Issue; "Developments of Modern Laboratory Glassware," by Professor W. E. S. Turner; The Supremacy of British Scientific Glassware; What British Manufacturers are Doing.

The Electrician.—"National Electricity Supply," by Geo. Wilkinson; The Modern Electrical Power House (Details of the New Rummelsburg Power Station, Berlin); Retail Selling Clauses in Guildford Bill.

The Fruit Grower.—The Control of Insects; Itinerary of the France and Spain Tour (with map); Tar Oil Spraying Controversy.

The Gas World.—Constitution of Coal; Education of the Consumer; Inquiries under the Gas Regulation Act.

The Hardware Trade Journal.—Special Sheffield and Yorkshire Issue: "Sheffield's Industrial Supremacy," by Mr. J. H. Chapman; "Links between Science and Industry," by Professor Ripper; "New Glass Making Enterprise in Yorkshire," by Professor W. E. S. Turner; Modern Methods of Cutlery Manufacture; Hardware Imports and Exports; Tennis Balls and Rackets in the Making.

Royal Gardeners' Orphan Fund

The Annual Festival Dinner of the Royal Gardeners' Orphan Fund will be held at the Hotel Victoria, Northumberland Avenue, W.C. 2, on Wednesday, May 26th next. The chair will be taken by G. J. Nicholls, Esq., C.C., F.R.C.I., who is Chairman of the Central and Spitalfields Markets Committee. It will be remembered that quite recently Mr. Nicholls conducted H.R.H. the Prince of Wales around the Central Markets on the occasion of an early morning visit.

Hardy Ferneries

WHILE flowers are indispensable for the ornamentation of a villa residence, a collection of hardy Ferns forms an equally important addition, and when properly and tastefully arranged they may be made to assume as natural an appearance as they do in a wild state; the rustic appearance, too, of a hardy Fernery forms an agreeable contrast to the more dressy portions of the grounds. It is difficult to lay down definite rules for the construction of a fernery, so much depending upon the position which it is to occupy, and the space at command. In fixing on the site, the first thing to be aimed at should be a shady, secluded nook—not one that can be seen from the windows of the mansion or cottage, nor yet from the flower garden, but a part that is unexpectedly come upon when walking through the grounds. The situation should also be one that is sheltered from boisterous winds. Moisture, too, is essential to the well-being of hardy Ferns, but this cannot always be given in sufficient quantity to carry them safely through hot summers. Anything like straight lines must be avoided. If the space to be occupied be long rather than broad, it should be broken up here and there so as to form miniature dells, recesses, and projections, but all should have as rustic an appearance as possible. The plants in all cases should be allowed sufficient space in which to develop. Where outdoor Ferns have failed to do well, the ferneries have generally been cramped for room. What is wanted is breadth and length, height being of secondary importance. If the fernery be so arranged that it could be traversed by a narrow path from which the plants could be examined all the better. The stones employed should be placed in as natural a manner as possible, and yet they should possess a certain amount of artistic arrangement. Anyone who has searched for Ferns in their native haunts cannot have failed to observe that they luxuriate in a light, sandy soil, and this must form, if possible, the main bulk of the fernery. I have, however, many times used Cocoanut fibre mixed with turfy loam, and it has always appeared to answer admirably. For very delicate sorts a compost may be formed of peat, leaf-mould, and loam, with a sprinkling of silver sand to keep all open and porous, but the stronger sorts, as has been stated, will succeed best in loam without the addition of peat. When I use Cocoanut fibre I find that it retains a considerable amount of moisture without soddening. Fern roots being generally of a wiry nature will grow in almost any soil that is of ordinary texture, but it ought not to be heavy. Ferns dislike manure, both in a solid and liquid form.

In arranging the plants I would not separate the evergreen from the deciduous kinds, but so dispose them that when the foliage of the latter dies down in the beginning of winter there would still remain plants enough to interest the cultivator. I would therefore plant plenty of sorts that would retain their verdure throughout the winter, such, for instance, as the Blechnums, Scolopendriums, Polystichums, and Polypodiums. In planting, an error of too common occurrence must be avoided—viz., that of planting too deeply. Generally speaking, the crowns must be kept well above the soil, but they should be made firm, and the stronger-growing sorts should be planted first. Dwarf growing varieties with fine fronds should have the most sheltered nooks assigned to them. If water exist in the fernery, a place must be afforded for the Royal Fern (Osmunda regalis). A list of hardy Ferns would perhaps be out of place, inasmuch as cultivators have their own favourites. I may, however, just small fernery may be constructed i corner where flowering plants w ceed, and if arranged according t and judgment, it will always be enjoyment to the cultivator.

A hardy Maiden-hair

Although there is a British (Adiantum capillus-Veneris) whic duced some remarkably distinct a varieties, it is not a Fern which ca mended for growing out of doors, in very sheltered spots and under able conditions indeed, either in Devon, in Wales, or in Ireland. are too severe to allow it to thrive

Such, however, is not the case to Adiantum pedatum. The Maiden-hair, as it is popularly call in any part of England, as in country it will bear over 30 degs. as a proof of what is stated here added that Mr. Lowe, in his exc "Ferns, British and Exotic," Vol that "In January, 1854, plants o pedatum lived out of doors with t ture 6° below zero, whilst near th killed all the plants of A. capillu North American Ferns are mostly their hardiness and for their us producing as they do in the hard contrast which could not possibly by planting British species an alone. If failure has attended ma at acclimatising this beautiful Fe places in England, it is due to t in some cases it has been planted too heavy and too retentive a na in some others the undergroun have been kept too close to the su ground, and not being protected i either leaves or snow, it feels the c less severe than that of its ow Although this thoroughly distinct nificent species is given as a nativ India by Colonel Beddome, it is a North American Fern, and is great abundance from New Bru Canada to Alabama. In Canad grows abundantly in moist woods among rocks and where there is a of decayed vegetable matter. In it forms, under the shelter of tre often covering several acres at a s according to eye-witnesses, such A. pedatum, with its light pea-gre foliage, are a grand sight. Its shaped fronds, affecting the form foot (hence its specific name), ar upright, dark purplish, shining somewhat fragile nature. These a from the extremity of long u rhizomes, which, through the annu lations of leaves, often lie burie deep, or even more, in decayed matter, the fronds having to get t before they can reach the surface which is also protected every winte covering of snow.

A. pedatum may also be utilised advantage for the decoration of th tory in the spring, by either emp grown plants or lifting from the o in January or February good clu are put into 6-inch or 7-inch pots in a frame or in a house in whic perature is kept up to between 40 50 degs. The crowns soon start in and in a short time produce a cro of a most pleasing light green colo very effective character.

GARDENING ILLUSTRATED

50—Vol. XLVIII. MAY 1, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

bina 278
gens fl. pl. 277
TS GLAN-S 275
the hang- 284
Runner ... 281
... ... 275
KANSU- 275
topping ... 282
Austrian 276
... ... 274
stick ... 283
erfoliata 283
Cornus Nuttalli 272
Daphne Blagayana ... 275
Erythroniums 272
Fern failing 283
Fir tree, cutting down 282
FLOWERS, CUT, A RESERVE BORDER FOR 278
Fruit-trees, treatment of 282
Garden paths, durable 283
GARDEN, THE ARCHITECT IN THE 271
Hepatica, the 273
Hippeastrums 284
Holly fly, the 282
Horticultural societies' news 283
Ivy, ground 284
Laurel leaves injured 282
Lichen on fruit-trees 274
Lily of Pliny, the Sword 272
Lily of the Valley, the pink 272
Lithospermum thrives, where 272
Mandevilla suaveolens 283
Manure scarcity ... 281
Melons, frame 274
Melons over a water-tank, growing 274
Mignonette 278
Morisia hypogæa ... 272
Myrsine africana ... 275
NATIONAL ROSE SOCIETY'S SPRING SHOW 276
Nepeta Mussini 283
Onion fly, control of the 281
Orange, treatment of 282
Orange troubles 282
Peach-buds dropping 282
Phyllocactuses 284
Plagianthus Lyalli ... 272
Plants from seed, hardy 278
Plants, sending wrong 283
PLECTRANTHUS OERTENDAHLII (T.H.F.R.J.R.) 273
Potatoes, cutting seed, and effect on disease 272
Primula obconica, the poisonous properties of 272
Rhododendron Rhodora 275
Rhubarb renewals ... 273
Shrubs of reputed hardiness, effect of frost on 273
Soil insects 283
Sweet Peas 277
Tomatoes in cold houses 281
Veronica filicaulis ... 273
Vetch, spring Bitter (Orobus vernus) ... 272
Wistaria buds, sparrows destroying 282
Yew unhealthy 282

The Architect in the Garden

Being comments on a recent lecture by F. Inigo Thomas, F.S.A.

CTURE on "Gardens" was re- given by F. Inigo Thomas, ., before the members of the Royal of British Architects. The lecture in the R.I.B.A. Galleries, where were gathered together from all the country. There were, we very few horticulturists present on on. In short, it was a lecture by ct to architects, and, as such, it dered highly successful. The lec- well delivered and illustrated by des showing the work of architects . It was clear from the start that r did not appreciate landscape gar- the broad and natural lines as ut by that practical gardener Brown. It was, he said, difficult and what Capability Brown and re driving at, as they did not know beyond the fact that their clients ling freely.

turer might have explained that uld not tolerate the work of the n the garden and that in his zeal to re he destroyed formal gardens. also have told his audience that as a practical new ideas in the it of country England. The m the formal to al was not con- rdening, it was n all artistic ex- of the period, azy paving and hand in hand

turer seemed to the fact that who followed ook pains to formal features ic aims and de- whole. It is to d of Repton) that we look nd development dscape school of whose influence apidly to the and whose still control or, influence the of large areas formal style of gardening. Un- ost architects, as a Nature-lover. He appreciated to the full the glory of the lake, the waterside, and meadow; at the same time he knew well the meaning and value of such principles as are suggested by the terms proportion—harmony and unity. But on the subject of landscape gardening the Nature-lover and the architect never agree. From the gardens illustrated on the screen it was obvious that the lecturer placed art before Nature. He did not profess to know much about trees or plants, but merely used them to produce the design. This was particularly so in the case of Italian gardens, to which much attention was directed.

Generally speaking, trees were not allowed to grow naturally, they were clipped into shape or employed as avenues or pleached alleys as part of the design. Trees were used, not as living things, but as so much material in construction. The architect's garden, with its grand terraces, straight walks, marble columns, long flights of steps, pergolas, statues, and fountains, does not, as a rule, give pleasure to the Nature-lover, and it is well that architects should recognise this.

Under an Italian sky pergolas may form delightful shady walks, but too much pergola would be a mistake in England; indeed, for the greater part of the year the pergola, owing to the drip from overhead, is the least comfortable place in many gardens in England.

A certain formality is usually necessary in gardens, especially around the house, and this is in keeping with the best traditions of landscape gardening in this country. Where the architecture of a house is of a particular period it is desirable that the garden immediately surrounding it should be in character with the building, but it is hoped that the Italian style on a large scale will never become popular here.

In this country it is not advisable that a garden should be so arranged (as in the case of so many American and Italian gardens) that it may all be seen at the same time. Repton, whose principles happily still influence the treatment of large areas in the informal style, says:—

"The eye, or rather the mind, is never long delighted with that which it surveys without effort at a single glance, and therefore sees without exciting curiosity or interest. It is not the vast extent of lawn, the great expanse of water, or the long range of wood that yields satisfaction, for these, if shapeless, or, which is the same thing, if their exact shape, however large, be too apparent, only attract our notice by the space they occupy, to fill that space with objects of beauty, to delight the eye after it has been struck, to fix the attention where it has been caught, to prolong astonishment into admiration are purposes not unworthy of the greatest designs."

The view expressed by Mr. Inigo Thomas was that architects may make beautiful gardens with the assistance of the gardener, but surely better gardens and happier effects may be attained by the landscape gardener with the assistance of the architect.

Some architects' gardens are reminiscent of the builder's yard, and there were some pretty bad examples illustrated

Well planned borders round a Surrey house
Rosemary and Hydrangea on a south front

in Mr. Thomas' lecture. One garden, fortunately not in this country, was planned like a crayfish, vertebræ and claws complete. Fantastic designs have already gone too far in English gardens, and it is to be hoped that we may be saved from too much of the Italian influence. Some designs which may look interesting on paper would appear quite out of place if applied in England.

There was also an exhibition of garden design (drawings, plans, water colours, and photographs) in the galleries of the Royal Institute of British Architects, and of these pictures none were better than those of the gardens at Munstead Wood and Gravetye Manor, both examples of good English gardens that have often been illustrated in these pages.

NOTES OF THE WEEK

Spring Bitter Vetch (Orobus vernus)

THERE are several kinds, but the above, which forms a loose tuft about 15 inches high of shining pinnate leaves, bears bright blue and purple flowers. The variety albus has an abundance of white, flushed with pink, Pea-shaped flowers, the variety rosea has rose-coloured flowers borne in large clusters, and in purpurea the blooms are of a deep purple shade. Easy plants to grow are all of them, but they enjoy a fairly good soil and are at their best after remaining undisturbed for a few years. In some seasons the early flowers may get slightly damaged by late frosts, but not to any serious extent.

M. S.

Cornus Nuttalli

Flowering with me at the present time is this handsome North American Cornel, a very striking shrub and probably the most attractive of the genus. It is not the actual flowers, which are crowded into a dense head ¾ inch or so across and of a purplish shade, which render it so attractive, but the large creamy bracts, six in number, which surround the flowers. This fine shrub is quite happy in different parts of East Sussex, where I have, from time to time, run across fine specimens, the leaves of which present a glorious spectacle again in autumn.

G. M.

Morisia hypogæa

Those who are in search of a neat plant suitable for carpeting bare spaces in the rock garden will find one in Morisia hypogæa. It is a very brilliant little crucifer, with a neat prostrate habit and with golden-yellow flowers. It succeeds admirably in a soil which is rather gritty, and it is an exceptionally free-flowering plant.

W. McG.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The poisonous properties of Primula obconica

AS the originator of the discussion concerning the alleged poisonous properties of Primula obconica I may, perhaps, be permitted to add to my former note. The discussion, of course, is not a new one, P. obconica having been under suspicion for many years. My point was that I consider the newer forms of this useful plant less likely to affect those handling it than the older forms. Personal experiences of having been infected total, roughly, in the neighbourhood of a couple of dozen—surely a trifling percentage of those who grow P. obconica. That is the point I endeavoured to make. Those who, after repeated experiment, suffer from handling this Primula are justified in abolishing it from their greenhouses, but, I submit, they are not justified in assuming that because they suffer others will suffer likewise. Many who, no doubt, could grow the plant with safety have been frightened to attempt to do so, and thereby have deprived themselves of one of the best of Primulas for greenhouse work. I am well aware that (as "C. Allegro" observes) there are many other plants which cause irritation of the skin. For instance, I have known of Humea elegans being blamed for producing almost the same skin irritation as P. obconica. Primula sinensis, too, and some of the Polyanthi have also lain under suspicion. There is the Poison Ivy (Rhus Toxicodendron) which, to some people, is dangerous. The ordinary Tobacco plant, Nicotiana affinis, will, at times, irritate the skin. Personally, if I rub against the fronds of Davallia Mooreana an intense itching follows, which, however, does not last long. Other plants might be enumerated, but it does not follow that, because I, or others, may be affected by any of them, they ought to be withdrawn from cultivation. Lilies, Violets, Hyacinths, Tuberoses, Stephanotis, and other flowers induce lassitude and headache in many cases; are they, also, to be taboo? One correspondent offered a preventive in the shape of smearing the arms with soft-soap, which may, or may not, be effective. I may offer a recipe, which has some value, to those who may, at times, suffer from irritation caused by plants: Fifteen minims liquid carbolic acid added to 1 oz. oxide zinc ointment. Apply freely to the affected parts.

W. McG.

—— A good deal has been said about the effects of the irritation set up by contact with this plant, but very little about the cause. A year or two ago a gardening friend of mine who had suffered from the rash sent me some of the flowers for examination. Upon looking at them under the microscope I found that the pedicels and calyces were covered with hollow bulbous hairs filled with a colourless fluid very similar to the hairs on the Stinging Nettle. In handling or brushing against the plant the bulbous top breaks off and the fluid enters the pores of the skin, hence the irritation. I had no opportunity of examining the leaves, so cannot say whether they are similarly clothed. The obvious thing is for people with a sensitive epidermis to avoid growing the plants.

Woking. W. BIDDISCOMBE.

Erythroniums

With further reference to these interesting flowers and Mr. Arnott's note in GARDENING ILLUSTRATED of April 24th, page 257, when collecting E. grandiflorum in the mountains in Canada last year I frequently had to dig more than a foot deep before "winning" an extra large bulb. I have come to the conclusion in these gardens that deep planting is essential for their successful cultivation. I am pleased to know that Mr. Arnott found Erythroniums would grow in sun as well as in shade; this should induce more gardeners to plant these really beautiful flowers.

Thorpe Hall Gardens. R. MOORE.

Cutting seed Potatoes and effect on disease

With reference to the question of cutting seed Potatoes or planting them whole, I should be glad to know if there is any evidence on record as to the effect the cutting of them might have in favouring the development of disease in the produce. I c
member that this point has been rai
discussions in GARDENING ILL
(though it probably has been at so
and the idea has occurred to me th
a Potato in two may lay it open m
to attack of disease, either (*a*) by w
its vigour, or (*b*) by removing the
of the outer skins, and so offerin
germs a readier access to its tissue
writing for information, not to su
theory, though my own limited
happens to agree in results with th
tion that the connection indicated
tween cutting the sets and increase
does exist, and I shall much est
expert opinion or that of your read

W. A. L. E

Hennacliff Cottage, Morwenstow, Holsworthy.

Where Lithospermum thri

I was interested to read in you
April 10th, page 225, an article
spermum prostratum and Heave
Both grow practically wild in m
seeding themselves everywhere, a
removed, smothering smaller pla
soil is extremely poor and full of gr
garden being originally a sort of
Gorse-brake and, I believe, entirely
lime. Your correspondent seems to
position in which the plants are
essential point, but I, personally, d
this can be of any importance so lo
plants are in a soil which suits th
have them in practically every posi
on a rock garden facing west,
shaded by trees, in another roc
facing due south, with no shade a
water garden facing north, where
more or less under water the enti
and also self-sown amongst Heath
each position they are equally ran
free-flowering, the only difference
on the west border they keep in fl
certain extent all the winter, bu
course, in the profusion of the pre
I may say that I have given plants
friends in the neighbourhood, but
exception, where they tell me it is
well, they have always failed.

R. Mo

Tregaddick, Bodmin, Cornwall.

The pink Lily of the Va

W. E. Wright, in your issue for
page 208, invites assistance in loc
plant, and I am pleased to inform
can be obtained from Mr. W.
Ingwersen, Birch Farm Nurser
thorne, Sussex, where I saw some
it on April 13th. I used to grow th
ing plant before the war, the roc
been sent me by an Irish lady, but
disappeared.

The Sword Lily of Pli

It is quite probable that Pliny's
was the Florentine Iris, i
"Giaggiolo." This word has its
the first o (see Lola's song in "
Rusticana"), and is known to
from the Latin Gladiolus, in spite
becoming "gia" instead of
"ghia." Please note that I do n
the now forbidden subject of the La

Oxford. L. J.

Plagianthus Lyalli

This, so rarely seen considering i
ful beauty, is well worth attention a
house shrub. In Devon and C
would succeed very well if planted
south wall. I wonder whether
GARDENING ILLUSTRATED who do
this showy shrub will give it a tri

om 2 inches to 4 inches in length, pointed. Its flowers are perfectly with golden anthers, produced in s clusters. The shrub is, I believe, of New Zealand. Cuttings of half-d root in sand if put under a hand-early autumn. Grown out-of-doors b needs soil made up of loam and ld. BRUCE HEWITT.

The Hepatica

gs sometimes come up very freely ny of my Anemone Hepatica plants. of plants establish themselves if not , but a large percentage, I am re lifted out through the alternate d thaws that we are so frequently with in these parts. Some plants of e-flowered form in fairly open posi-ribute their seeds freely in poorish (soil robbed by Holly, Privet, etc.) he plants, which germinate most t is interesting to notice how care-seed-sowing is provided for, the ls weighting down the long supple ntil they lay on the surface of the

eat difficulty in establishing young not so much due to pests with me way the plants seem to be squeezed the surface of the soil in the frosts s; they may be out of the ground before they are noticed. In natural s this may be prevented by the cover ves in the woodland surroundings. my plants have been in the garden 15 years.

T. ASHTON LOFTHOUSE.
sbrough.

nthus Oertendahlii (Th.Fr.Jr.)

is a handsome basket plant not for greenhouse only, but for cultivation rs under even exceptionally untoward s. Its correct name originated ely in the Botanical Gardens of Sweden, where Dr. Thore C. E. ing his research work for a Mono-the Genus Plectranthus came across lar plant, which is said to have been tion for 20 years at Kew, Dahlem, r strongholds of botanical wisdom being correctly identified. In fact, under the erroneous name of P. Benthe, which is altogether a dif-ecies, as is P. ciliatus, of Natal. It is that the habitat of the new us should not yet be known. It is indoor plant of unusual merits, as ration shows which was taken by erintendent of another Swedish Institution in November, when the s one huge flower display in almost e with a tinge of beautiful violet. es are of distinct design with a wer surface.

ts correct name according to its is now a monument of the bene-ivity of one of the Nestors of ian horticulture, the Hortulanus us of the old seat of learning, Ivar hl, who cultivated this plant and out to the young scholar as pro-different species. Mr. Oertendahl fully studied its demands on the , which are practically none what-it is not in want of much, either warmth, and very easy to propagate tings at any time of the year. I e shoots of this creeper of the family in November. They struck week during the darkest period of lish year, and it has, since last , given life again to a large basket-tings which already hang down and basket. In England there is not htest doubt that Plectranthus Oertendahlii will make a favourite half-hardy outdoor plant for rock gardens, at least I will try it in my experimental rockeries, probably the farthest north specimen of the traditional English build.

HENRY B. GOODWIN, F.R.H.S.
Airedale, Saltsjobaden, Sweden.

Effect of frost on shrubs of reputed hardiness

It would be interesting to know the fate of shrubs reputed hardy or tender during last winter's frost. Here the following are wholly, or in the main, uninjured:—Ceanothus rigidus, Cypressus funebris and C. sempervirens, Buddleia Colvillei, Cistus corbariensis, Senecio Grayi, and Veronica Hulkeana. The following have been injured but not killed:—Ceanothus Veitchianus and C. thyrsiflorus var. griseus, Teucrium fruticans, Cistus purpureus and C. crispus, small-leaved Myrtles, Buddleia globosa, Escallonia macrantha, Veronica angustifolia, and V. Traversi, Olearia Haasti, and O. macrodonta. The chief sufferers have been Bays, and a warm wall with protection has not saved a Myrtle. A. M. A. H. ROGERS.
St. Hugh's College, Oxford.

Plectranthus Oertendahlii in the Gothenburg Botanical Garden

Rhubarb renewals

I beg to thank Mr. W. E. Wright for his criticism, on page 241, notwithstanding that he appears to take exception to, and deprecate, the advice I gave on April 3rd with respect to raising Glaskin's Perpetual Rhubarb from seed. It was given from the book of my own experience. He virtually condemns the variety because he does not happen to have been successful with it. I reiterate the statement published, that sticks may be pulled within six months of sowing seed, because I have done so, and I can assure him they were larger than penholders. Mr. Wright goes on to say he agrees that Rhubarb can easily be raised from seed, and a good kind with fair treatment may be fit to pull within three years, that the best sort he knows is The Sutton, and concludes by advising your readers to purchase crowns rather than go to the trouble of raising Glaskin's Perpetual from seed, only to meet with disappointment. The only possible inference one can draw from such an indictment is that Glaskin's is not a good sort. Who has sounded the note of disappointment besides Mr. Wright? Surely, amongst readers of GARDENING ILLUSTRATED, there must be someone in addition to myself whose experience with the variety in question has been not one in which defeat was the outcome, but success! Mr. Wright recommends The Sutton, a most excellent sort, from a firm of world-wide repute.

It is refreshing to read on page 73 of their Guide for 1926 what Messrs. Sutton and Sons have to say about Glaskin's Perpetual Rhubarb.

> "A new type of Rhubarb, excellent in colour and growing to a good size, the sticks of which can be pulled within six months from date of sowing seed. It will remain in bearing continuously if grown in good soil and given slight protection in severe weather. The best results are obtained by sowing in boxes or pots without heat in March or April, and planting out the seedlings in May. Seed may also be sown in the open ground."

In view of such corroborative evidence is there any reason to doubt the advice given in my note of April 3rd? W. F.

Veronica filicaulis

I agree with H. Stevens that this "quickly" covers the ground and is of "easy increase from cuttings," inasmuch as if you do not cart away every scrap that falls on the ground you will repent it. Probably a wall is the best place for it, as it does not seem to spread underground like a Linaria or a Convolvulus. I have found it useful on the edge of a rockery path to save constant hoeing up of Poa annua, which it smothers. It would be safe under a hedge, and a fight between it and the Germander Speedwell would be interesting.
Oxford. L. J. R.

Growing Melons Over a Water-tank

I HAVE a forcing-house in three sections. Under the bed of each section is a large water-tank, with hot-water pipes running through it. I want to grow Melons and Cucumbers, and shall be glad if you will tell me whether to have water in the tanks or not? The beds are constructed of slates, and are about 6 inches above the top of the tank. Would you put a layer of manure on the slates under the soil, or would you grow them on soil alone? E.

[We should advise you to dispense with the water in the tanks, and to convert them into hot-air chambers for supplying bottom-heat, which is so essential for the successful cultivation of Melons at any time, and indispensable for Cucumber-growing nine months out of the twelve. This you can do by simply filling in the 6-inch openings or the space between the tanks and the slates of which the beds are constructed. You need not place any manure on the slates, as the heat you will derive from the enclosed chambers below should be ample for the requirements of the fruits you propose growing. Your best plan would be to cover the slates with whole turves, grass side down, if freshly cut. On these you can place the mounds of soil 4 feet apart, and distant 2 feet from the front wall for growing Cucumbers in. This will leave plenty of space for making additions to the mounds and for top-dressing, and in the interval you can utilise it for sundry purposes, such as growing on plants which need plenty of heat and moisture, and for propagating. With regard to Melons, these may be grown on the mound system, but we have always found them to succeed best when planted in narrow borders about 1 foot or 1 foot 3 inches in width and 1 foot in depth, composed principally of heavy loam rammed very firm. The border should be made sufficiently near enough to the front wall so that the plants can be conveniently tied to the lowermost wire of the trellis, and it should run the full length of the house—*i.e.*, if you are thinking of planting the whole of it at one time. A thoroughly consolidated border, constructed in the manner described, and consisting of good, heavy, fibrous loam, with a dash of bone-meal and a little old plaster or lime-rubbish added, will promote a wiry, short-jointed, fruitful growth, and under such conditions it is seldom that the stems fall a prey to canker. In case you have a light loam to deal with, you would do well to mix with it a sixth or fourth part of the total quantity of soil required, of marl or clay, according to its texture, using the last-named quantity if very light and sandy. The clay or marl should first be dried, and then pounded up fine, before adding it to the loam, and the mixing must be done thoroughly. Avoid farmyard or stable manure, as these only encourage rank and unfruitful growth. Build the border with the back and front nearly vertical, and have the top flat. Pieces of turf, well rammed, will serve to form the back and front with, and then the middle portion will take all the loose soil. If you elect to grow the plants on the single-stem system, which is by far the best way, set the plants out 2 feet apart throughout the length of the border, and place a stick to support each one until it reaches the trellis. When you have a good crop of fruit set, then make an addition to the front part of the border some 9 inches or 12 inches in width, using similar materials, and, the further to stimulate the plants, and induce them to swell their fruits to a good size, give tepid liquid-manure alternately with guano-water on each occasion when water is required. The liquid must be diluted according to its strength, and 2 ozs. of Peruvian guano to a 4-gallon water-potful of water is the right strength to use. Never use cold water, either for watering or syringing, but let it be of a temperature between 85 degs. and 90 degs. The same rule should be observed with regard to Cucumber-growing. In respect to soil for the Cucumbers, a little well-rotted manure or leaf-mould may be added with advantage to the loam and lime-rubbish, and it is unnecessary to consolidate it in the same way as for Melons. Always get the soil warmed beforehand for top-dressing with or when making additions to borders. The roots will then not experience any check.]

Lichen on fruit-trees

In low-lying positions, especially where there is much clay in the soil, the extra moisture nearly always present in the atmosphere favours the growth of such parasites as Moss and Lichen on fruit-trees generally, and Apples and Pears in particular. It is hardly necessary to add that they seriously affect the health of the trees overrun by them. The healthiest trees are those with good clean stems and main branches, those overrun and their breathing pores clogged by Moss and Lichen being the first to become stunted in growth and of comparatively little real service. In some few instances removing the principal cause, that is, an excess of moisture in the soil, is quickly followed by the disappearance of the parasites, and one of the first remedies should, therefore, be an examination of the drains. If these are badly clogged by tree roots or other obstacles, either clean out the old drains or form fresh ones. In orchards the drains ought to be disposed midway between the rows of standard trees, and, as a rule, not less than 3 feet deep, there being such a thing as draining away surface water too rapidly.

There are several known remedies for removing Moss and Lichen temporarily, this including scraping and scrubbing with brine and lime-wash. Scrubbing is a far too tedious operation beyond what might be done in that way to the clear trunks of standard trees. Newly-slaked lime in a fine state, shaken through a coarse bag or otherwise dusted or distributed among the branches when these are in a moist state, will do much towards killing Moss and Lichen; but, all things considered, it is a less satisfactory remedy than thoroughly coating them with lime-wash. Add sufficient caustic lime to a tub of water to give this the consistency and colour of milk, pass it through a fine sieve, and apply with an old syringe while still hot. Every crack and crevice that can be got at should be thoroughly searched out with the syringe, and this will destroy a good many insect pests, as well as the Moss and Lichen.

Bush fruits

The bullfinches left me alone this year, and the crop of Gooseberries and Red and White Currants will be exceptionally good. I must consider myself fortunate, for in an adjacent large garden the shoots of Gooseberries and spurs on Currants are three parts stripped of buds. Black Currants are also showing well and there is likely to be a fine crop. I am fortunate in not being troubled with big bud, and, consequently, the small area under Black Currants will be as remunerative as anything, for this fruit always commands a good price. A mistake is often made with all the above in allowing the bushes to get too old. Plenty of fruit is, doubtless, obtainable, but it is of decidedly inferior quality and not too saleable. Rather, in all gardens where all these bush fruits are grown it is a good plan to insert a few cuttings of the best sorts about every third year and transfer them, when rooted, to a bit of well-ground; one always has, then, nic plants to take the place of bushes t become old, gnarled, partially canke Moss-covered. As the Gooseberry i useful fruit for many purposes it is to plant a few different varieties tha suitable both for dessert and coo early and late picking, for there i siderable interval between the rip Early Sulphur and Warrington, an great difference in the flavour of G and some of the big exhibition Despite much advice on the matter see many suckers springing up from of bushes; one cannot be too carefu ally with Gooseberries, in remo bottom buds when inserting cuttings pose the Loganberry would hard under the heading of bush fruits, them, it is hardy, easily grown, prolific; not exactly the sort of f pleases many palates in a raw state mirable for preserves, especially wl ciated with Gooseberries. It used the reputation of being quite imm any form of disease or pest, but I in many gardens it is now attacke little red maggot, the larva of the sm known as Lampronia rubiella, th often familiar with in Raspberry pl and that often does a lot of mischief is detected. E. B

Hardwick.

Frame Melons

Now that warmer nights may re be looked for, Melons may be pl frames with less risk of their exper check than was the case a few w Sunheat combined with the warmt from the bed and the covering of t at night with mats should now maintain a suitable night tempera the plants, once set out, will quic headway. Loam of good quality, roughly to pieces and placed in the each light in sufficient quantity setting out of two plants, one to fu upper and one the lower portion u light, should be got in a day or s hand and be well rammed. Plan take place at any time, but preferab early afternoon, as the frame can closed up for the day. The soil s made quite firm round the balls wh ing is being done, and sufficient te given afterwards to moisten the wh base. Slight shade may be necess day or two until the roots get to wo new soil, after which the foliage s capable of withstanding full sun taking any harm. Ventilation m prompt and careful attention every the frame be closed early enough t temperature up to 90 degs. A gentle in the early morning and a more co in the afternoon should be afforded plants show for fruit and the femal begin to expand. It must then ce time, but be resumed so soon as a s of fruits has been set and is swe When the plants have made seve the points must be pinched out to the production of side or lateral From these, when stopped, there sho an ample quantity of fruit-bearing one age, on which the female flowe open simultaneously. These shoul about mid-day, and the laterals pinc second leaf beyond the fruit. Be stage is reached the soil in which t are set out will require adding to a side, but none should be placed round the stems or canker may ens will suffice for the roots' requirem setting is complete, when further will be needed.

EES AND SHRUBS

Berberis Kansuensis

delightfully attractive Barberry re-
d an Award of Merit when shown
he first time by Mr. E. H. M. Cox
he Royal Horticultural Society on
h. It is a deciduous species raised
d sent home from China by Farrer
years ago. The plant bears numer-
ers of lemon-yellow flowers. These
are small and round, in tight balls
yellow Peas.
orous but graceful habit, the plant
onsiderable height, and the specimen
carse, Scotland, from which the
ere shown is over 7 feet high by
oss. H. C.

Berberis

ny new species having been added of
ars, and from the crossing of various
many excellent hybrids of great
garden decoration can now be had.
nental shrubs the Barberries have
recommend them, either when in
r when laden with fruit in the
Several of those in the evergreen
ank as first-class garden plants, such
quifolium, B. Darwini, B. Gagne-
nd B. stenophylla. They prefer a
amy soil, but in this respect are by
s particular, growing freely in any
den medium.
arieties I should like to draw special
to before the planting season is
are Berberis japonica, B. Beali, and
ensis. The Japanese Barberry is a
ing evergreen reaching from 8 feet
high, with unbranched stems and a
of leaves on the top. The leaves are
n 1 foot to 2 feet long. The flowers
e in racemes at the end of the stems,
yellow colour, and delightfully fra-
The variety Beali is more vigorous,
arger and broader leaflets and longer
acemes. It is also hardier than the
. Both varieties are hardy and will
all unless the very coldest parts of
ntry, being natives of Japan and
Berberis nepalensis, a native of the
as, is too tender to be a success in

Berberis Kansuensis

A new Barberry that made its appearance, amongst others, from a packet of seed sent home from China by Farrer ten years ago

the open unless in the more favoured districts, but where sufficient shelter can be given it is worth a place, with its large dark green foliage and yellow flowers, which begin to open as early as October.

These three Barberries are worthy of a place in the garden for their bold, handsome foliage and sweetly-scented flowers, which have the advantage of being produced from autumn and throughout the winter to early spring, when all flowers seem doubly welcome. Like most of the Barberries, they resent transplanting after they have attained any size, therefore it is advisable to plant small specimens on a well-prepared site, keeping in view that they may eventually become bushes from 8 feet to 10 feet high and proportionately wide. R. Findlay.

Daphne Blagayana

This forms spreading masses of woody shoots with clusters of white tubular flowers terminating the end of the growths. It produces a quantity of sweet-scented blossoms and continues for a long time in bloom. Those who wish to grow this plant should give it shade and peaty soil of a good depth. A wide declivity between two rocks facing W. or N.W., where it can get moisture during the hot season, suits it well. A few bits of rock placed round the plant help to keep the ground cool. The shoots root freely if pegged down firmly in peat. They can remain on the plant to extend the site or be taken off and transferred to other quarters as desired.

H. Stevens.

Myrsine africana

This bushy little shrub is now flowering, and although the blooms are very small they are pretty, being of a bright crimson colour. It is evergreen with lustrous dark green leaves each ¾ inch in length, and in every way a desirable and neat little bush for suitable positions on large rock gardens or in the foreground of choice shrubberies. I once saw this shrub laden with fruit in the late Mr. Messell's garden at Handcross, Sussex.

G. S.

Anopterus glandulosus

It is only in very favoured places that this handsome evergreen shrub will stand in the open air. We have seen it flowering freely outside in the delightful gardens at Tresco, in the Isles of Scilly, but, generally speaking, it is looked upon as a greenhouse shrub. Although introduced from Tasmania over 100 years ago, it was not until April 20th of this year that it received the Award of Merit from the Royal Horticultural Society when shown by Lt.-Col. Messel, Nymans, Handcross, Sussex.

The rounded white flowers are borne in erect terminal racemes on shrubs with large shining leaves and of free-branching habit.

H. C.

Rhododendron Rhodora

Flowering now is this interesting shrub from the swamps of North America, its rosy-purple flowers appearing in clusters on the naked and rather thin twiggy shoots. By reason of their fragrance and peculiar colour they attract attention at this season. Known for many years as Rhodora canadensis, and considered distinct enough to occupy a separate genus, it has now been united with Rhododendron. It grows from 3 feet to 4 feet in height and prefers a moist and peaty soil.

Anopterus glandulosus, a beautiful but tender shrub from Tasmania

NATIONAL ROSE SOCIETY'S SPRING SHO

April 23rd. The Feast of St. George

THE National Rose Society's Spring Show, the first of the six exhibitions which will mark its jubilee year, was held on St. George's Day in the Royal Horticultural Society's Hall, Vincent Square, Westminster. Princess Mary Viscountess Lascelles, for the second time during the week, visited the hall and made a careful inspection of the exhibits with Lord Lambourne. There was a fine display of Roses, and the attendance must have been one of the largest that has ever visited the hall. It would have taken a hall three times the size of the one in Vincent Square to accommodate the great crowd of visitors.

The new Roses were the chief source of attention, and the novelties were of a higher standard than at previous spring shows.

Two gold medals were awarded, both Roses being raised by Messrs. Alex. Dickson, of Newtownards, Co. Down, Ireland, viz. :—

DAME EDITH HELEN, named after the Marchioness of Londonderry, a self-pink Rose of beautiful form and colour, and shown in better form than previously. It is sweetly fragrant and evidently a good variety for forcing.

LADY MARGARET STEWART, a full Rose with rich apricot centre deepening in colour at the base and tinted deep crimson on the outside. It belongs to the Pernetiana section and is sweet-scented.

That lovely Rose Mrs. Foley Hobbs was shown in splendid form by many exhibitors. In Class 18, for instance, for six blooms of any one variety, all the exhibitors showed Mrs. Foley Hobbs. The first prize was won by Mr. J. N. Hart, of Potters Bar, for six perfect blooms (see illustration). Could anything be more beautiful? Mr. E. J. Holland, who was awarded second prize, received a silver-gilt medal for the best bloom in the amateur classes.

In the class for a group of cut Roses staged by an amateur the first prize was taken by Mr. E. J. Holland, of Sutton, who showed about 30 varieties, while Mr. H. R. Darlington, of Potters Bar, was awarded second. Mr. Holland was again successful in Class 16 for 12 blooms.

In Class 20 Mr. F. S. Jackson, of Epsom, was successful for six vases of cut Roses, while Mr. Holland, with a basket of Mrs. Foley Hobbs, took first prize in Class 21. In the class for a basket of cut Roses, open only to growers of fewer than 30 plants of pot Roses, Mrs. Courtney Page and Mrs. N. F. Charlton were awarded equal first. The former showed Lady Sylvia, a deep peach-pink variety, which was also shown among the new Roses, while Mrs. Charlton showed Richmond. The same two ladies took the first and second prizes for a decoration of cut Roses for the dinner-table.

The new Rose, Mrs. E. J. Beatty, which gained a gold medal at the summer show, was well shown by Messrs. B. R. Cant, of Colchester. It is a lovely soft yellow—a full rose—much more so than Mrs. Beckwith, and it is Tea-scented. Fortune's Yellow and Padre were also well shown by the same firm.

In Class 1, for a circular group of Roses placed on the floor, the first prize went to Messrs. Chaplin Brothers, of Waltham Cross. The centre of the exhibit was composed of ramblers in pots, while round the sides were bold vases of bedding varieties, including Golden Emblem, Ophelia, and Mme. Butterfly, separated at intervals by Paul's Scarlet Climber. The second prize in this class was won by Messrs. W. Easlea and Sons, Ltd., of Leigh-on-Sea, whose exhibit had a central cone of their new hybrid Wichuraiana var. Thelma. This is a beautiful blush-coloured variety. The first prize in Class 3, for six pillar Roses in pots, was won by Messrs. Chaplin Brothers, who had Chatillon, Dorothy Perkins, The Beacon, White Dorothy, Blush Rambler, and Coronation.

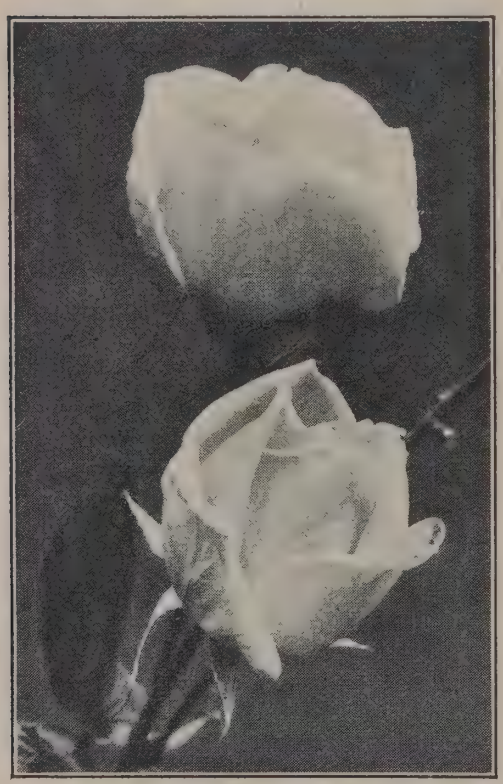
In Class 4 the first prize went to M Pemberton, of Havering-atte-Bow had, among other varieties, Eb Edith Cavell, and Ellen Poulsen.

It was a great joy to see the old Maréchal Neil, so well shown by M Goodwin, of Maidstone, and by M Hicks.

The nurserymen's groups of c were exceedingly good, and special should be made of Mr. Elisha Hick which contained Paul's Scarlet Edith Cavell, Coral Cluster, and t yellow Rosa Harrisoni.

Mr. George Prince, Oxford, who Certificate of Merit for Lady Sylvi from Mme. Butterfly, also had a f of cut Roses, including Goldfinch, de Claudius Pernet, Pax, an Uprichard.

The new Gold Medal Rose Dame Edith Helen
It was shown in remarkably fine form at the Spring Show of the National Rose S



The new Rose Mrs. E. J. Beatty
Colour soft yellow, large, full, and Tea scented

The Austrian briars

The most charming of all the ear ing Roses is the Austrian Copper well-grown bush of this, when in fu is a magnificent sight, and one wor it is not more often seen. I have growing near a public footway, amusing to hear the expressions of calls forth. The colouring is striking. The buds, of a pure dee give glimpses as they expand of the fully intense coppery-red tints on t of the petals. The fully-open flowe a beautiful golden-copper colour gradually loses its intenseness as The finest effects are obtained plants are thinned out in the autu the youngest and sturdiest rods bei flower, all small twiggy growths moved. When this is done the you pendulous rods flower much better far more graceful than when over

The Gold Medal Rose Lady Margaret Stewart
Colour rich apricot

The six perfect blooms of Mrs. Foley Hobbs, which gained a First Prize for Mr. J. N. Hart

oms are produced on very short owths from the tip of the shoot to l.

strian Copper is very hardy and wn. It makes a delightful speci- ed in a good position by itself, and es an excellent hedge Rose. It oms towards the end of May. The Yellow is identical in every respect , the petals being pure yellow both d out. One of these varieties om the other, but which is the id which the sport nobody seems to ertain. The Persian Yellow Briar, lar in habit, bears dainty little oms of a rich golden-yellow. This ety from which M. Pernet Ducher epoch-making Rose, Soleil d'Or, h, in turn, he obtained most of the Pernetiana Roses. Harrisoni is lainty, with semi-double flowers of en-yellow. It is more shrubby and habit than the others mentioned, be left unpruned. Lord Penzance Austrian Briars when he raised his ybrid Sweet Briars, the varieties his parentage most distinctly being zance and Lord Penzance. Other ve also used the Austrian Copper, with happy results. Gottfried . Muller, 1904) is perpetual-flower- semi-double blossoms being deep fused with bronzy-pink. It makes illar Rose and is very fragrant. bier (Barbier, 1910) is somewhat it bears much larger blossoms and gorous. It is only summer-flower- young blossoms are rich coppery- ng off to shrimp-pink as they ex-

All lovers of the Rose should grow some of these Austrian Briars, particularly the Austrian Copper, for even among the wonderful creations of the past few years there is nothing to equal it in the brilliance of its colouring. A. B.

Sweet Peas

By the present date everything should be in order for planting the seedlings out. The trenches should be in a fine condition after the February treatment. Planting may commence by running a line down the middle of the trench. The roots of the plants should be shaken free of soil and inserted to their full length in the trench at a distance of 9 inches to 1 foot 6 inches on either side of the line. Make the soil firm around the plants and give water enough to set them in position. A few twiggy branches, such as the remains of an old Broom, should be placed around the plants to keep them upright. A dusting of old soot will prevent the ravages of slugs and birds. In two or three weeks they should be growing freely, and will require their permanent supports. For decoration one need not go to the elaborate method of training on single stems, as is the case with those grown for exhibition. Bushy sticks, such as are used for cooking Peas, are suitable, provided they are 8 feet or so in length. These should be placed in an upright position one either side of the row, taking care to place them between the plants where they will not injure the roots. To prevent these being swayed by the wind it is wise to attach a strand of wire to several strong stakes on either side of the row, tying the sticks firmly to this.

Growth from now onwards will be rapid, and towards the end of May the first flower-buds will appear. The plants may then be assisted with weak doses of liquid-manure or soot-water. Care must be taken not to over-feed or that dreaded malady streak will put in an appearance. There is at present no known remedy for this disease, so it is wise to prevent as far as possible. Use no quick-forcing artificials, such as nitrate of soda or sulphate of ammonia, for Sweet Peas, as these generally prove fatal. Do not allow the plants to become too thick, as larger and better blooms are produced when the growth is kept well thinned by removing some of the side shoots. Keep all blooms removed before they go to seed, and if a mulch of manure is not given to the rows, which can be recommended, the surface should be kept stirred with the Dutch hoe. If dry weather sets in and watering has to be done do this thoroughly so as to soak the roots, otherwise leave it alone. W. E. Wright.

Stockton House Gardens, near Rugby.

Anemone fulgens fl.-pl.

Everyone admires the single Scarlet Windflower, which is so brilliant in late March and early April in Scottish gardens. Less known is the double form of this Anemone, which is as striking in colour as the better-known variety and which blooms with equal freedom. Certainly it is not common, but it can hardly be described as rare, and in England I have seen it planted largely. An Irish friend tells me that A. fulgens fl.-pl. is widely known across the Channel. I consider the single form the more graceful, although the double flowers of A. fulgens fl.-pl. are by no means heavy in appearance.

W. McG.

A Reserve Border for Cut Flowers

WHERE cut flowers are in request it is well to set aside a border for plants that will supply in their seasons the most useful things it may be in the power of the grower to produce. It always seems a pity to cut over a lot of plants in prominent positions, especially things which might give a bright and enduring display outside, but would have only a short life if taken indoors. The small grower will have to confine himself to things easily grown, and, fortunately, there are many such, quite as serviceable for house decoration as those not so easily acquired and requiring somewhat special treatment.

A reserve border should be in a somewhat sheltered spot partially screened from sun and high winds, the west side of a shrubbery, or high wall being a suitable site. This should be prepared as for permanent borders, bastard trenched, and a liberal supply of holding manure worked in towards the bottom of the trench. In selecting the plants the aim should be to choose those things which are likely to furnish a good succession instead of a large quantity of bloom at any one particular time. Daffodils are about the most acceptable of the early flowers, and may be planted in variety unless, as often happens, there are positions in the garden where they have been naturalised. This would also partly apply to the Spanish and English Irises, always welcome for cutting. Two early flowers, quite opposite in character, but both of easy culture and much in request, are Doronicum excelsum and London Pride; long spikes of the latter interspersed with clean, healthy Fern fronds have a beautiful effect in tall, dark vases. Following close on the above and with flowers respectively of almost the same build are single Pyrethrums and Heuchera sanguinea. If a good strain of seed of Pyrethrum is secured it can be sown in a well-prepared bed, and the seedlings, after being thinned out, allowed to stand and flower, when they can be selected for planting out in distinct colours. Two summer-flowering plants always acceptable for cutting are Coreopsis grandiflora and the large Goat's Rue (Galega Hartlandi). In Pinks, another indispensable summer flower of easy culture, two good sorts among older varieties are Albino and Paddington. For filling tall vases through August and September few things are more acceptable than Montbretias. For late summer and autumn cutting single Chrysanthemums in different shades of colour and Starworts of the light, feathery sections like cordifolius, vimineus, and gracillimus are probably the most useful. One or two of the newer forms of Aster Amellus might be included, as there is nothing like this shade among the Chrysanthemums. Other autumn flowers that may be included if space permits are a few Statices (Sea Lavenders) and Japanese Anemones.

The above list is not a large one, but, writing mainly for the small grower, I have selected a few of easy culture lasting in succession for nearly six months of the year, and the majority of which might still be planted if a place is ready for them. B. H.

A grass walk with hardy plants on either side

Hardy plants from seed

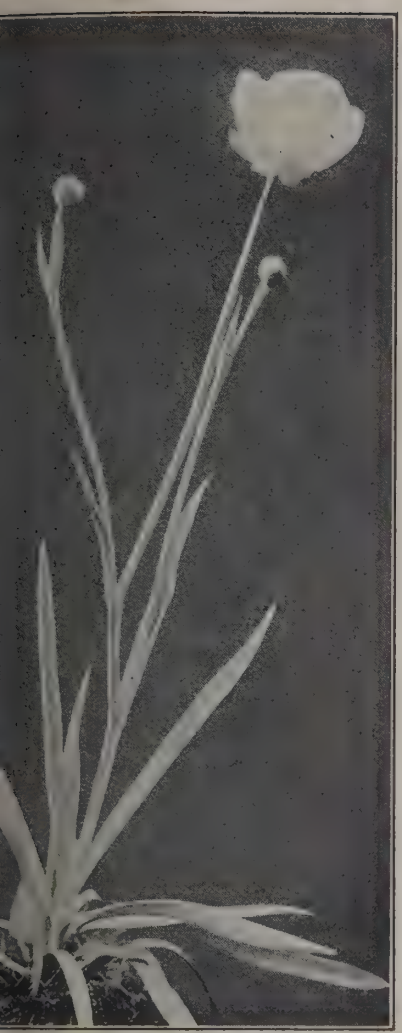
There is a feeling of "glorious uncertainty" in this propagation from seeds, by which I do not refer to uncertainty of the appearance of seedlings, but the delightful new shades of colour sometimes seen in flowers so grown. It is well known that seeds of, say, light blue Delphiniums may not produce plants bearing flowers of that colour, and, again, the form of the blooms may vary from that of the parent plant. This is mainly due to the visits of insects whose purpose it is to gather honey and, incidentally, to fertilise the flowers with pollen from a neighbouring plant. Of course, this reversion from type does not always occur, but the possibility is there and adds to the interest. Assuming that the seedlings do come true, there are a greater pleasure and a pardonable amount of pride wh good specimens are raised by o efforts. For a number of years I h a large number of hardy plants fr and the results have been extreme ing, enabling me to restock my ow and, in addition, to make gifts to m

Mignonette

One of the most popular of all o ing plants, Mignonette is, in some one of the most capricious. Ther tain soils in which it absolutely thrive—germination may be go growth may be quite satisfactory, of bloom may show, but when reach a certain stage they appea "sick," the foliage assumes a shade, and the flowers are unsa In such cases some good may re dressing the soil with lime before u Mignonette again, but, as has there are some districts in which it to rely upon Mignonette. There times, complaints concerning fail districts in which, indisputably, M as a rule, does extraordinarily w complaints annually come under and, in general, it is not a difficult diagnose the trouble. The most complaint is that the seeds have germinate. In almost every inst found that the newly-sown seeds eaten by birds. Sparrows, chaffin other seed-eaters have sharp eyes, can soon pick up a sowing of Mig the last seed. The remedy here is, to red lead the seeds before sowing. cases inspection reveals that germi been good, but that slugs have the cotyledons as they peered th ground. The cure, when slugs a to dust the sites on which Mignon are sown with fresh soot at freq vals until the seedlings become strong to resist the attacks of thei A third cause of failure, when ne nor slugs can be blamed, is someti to the fact that the seeds have bee loose, or newly-dug, soil. Mign lights in a firm run for its roots, who have soil of a light descriptio must sow seeds in freshly-dug soil beat it with the back of the spade, firmly, before sowing. After the sown rake the site lightly, and ag tread the bed. Such treatment often, turn failure into success.

Anemone alpina

One of the most beautiful of An alpina is rather difficult to establi land gardens. In my experience t due to the fact that it is planted suitable conditions. Being a grower and rooting deeply, A. alp only be put out where there is a of soil, which, if possible, ought t considerable amount of sand. F it is not likely to do well. Anothe cause of failure is the sending adequate pieces by the dealers. come to hand, many of them ove across, with absolutely fibreless ro as if they had been torn up r dispatch. Such pieces cannot po ceed. Those who possess sufficie are advised to raise A. alpina from is a tedious business, but the care well repaid—at the end of two y the majority of the seedlings will the first time. If planted in a dee plenty of leaf-mould, sand, and gri lings may remain undisturbed for the species and that fine variety phurea, appreciate plenty of moist



Ranunculus gramineus

Iris Lorteti

1E plants illustrated on this page were shown at Vincent Square on April 20th and 21st.

Ranunculus gramineus, with linear s and Buttercup-like flowers, may have overlooked by many visitors. It was n by Messrs. Hodsons, Ltd.

Iris Lorteti, shown by Sir William ence, Bt., Burford, Dorking, was one e most discussed plants in the hall. ɔoth rare and difficult to grow, and a ıral Commendation was awarded. is a bulbous species, with very large ding standards, pale mauve in colour, deeper veins; the falls are light brown, lines of dark maroon dots and a black h at the haft.

Daffodils were to a great extent ced by Tulips at this meeting, and our ration depicts a fine group of Darwin ıs.

e most striking groups in the hall on ıccasion were the collection of Hippe- ms sent by Sir George Holford from onbirt, Gloucestershire, and a large garden freely planted with Daphnes, me Azaleas, Gentians, Heaths, and ıese Maples from the Hon. Vicary ɜ, of Aldenham House.

Darwin Tulips shown by Messrs. James Carter and Co.

REMINDERS FOR THE WEEK

Southern and Midland

Early Potatoes

Where these are growing in frames they are apt to become stunted in growth if allowed to remain close to the glass as well as become scorched by the heat of the sun. To remedy this the frames should be raised by placing bricks under each corner. As fast as those planted in the open appear above the surface the soil should be drawn up slightly on either side. Many crops of vegetables are spoilt by allowing the seedlings to become overcrowded before thinning. Parsnips and maincrop Carrots should be thinned when about 3 inches in height. The Shorthorn Carrots may be thinned as required for use. When thinning Onions it is advisable to leave one or two rows for salad.

Broad Beans

It is seldom wise to sow these Beans after this date, but where the soil has been in such a bad and heavy state a row of Broad Windsor may succeed if care is taken to keep the plants clear of black fly. Those growing freely should have a little soil drawn up around the plants and the tips pinched when the first pods have set. These tips if cooked are an excellent dish. They should be cooked and used like Spinach.

Dwarf Beans

A sowing of these may now be made in light and well-worked soil. Where this is on the heavy side it is better to defer the sowing for another week. The same applies to Runners. The Golden Waxpod is an excellent and fine-flavoured Bean to grow, and it is stringless.

The herbaceous border

Too much cannot be said on the advisability of thinning the growths of the various plants, as they flower much more freely when thinned to five or six shoots. This applies to Delphiniums, Phlox, perennial Aster, Heleniums, and others. The soil should be continually hoed and kept free from weeds, and staking done as required.

Sweet Peas

It is now time that all plants raised in pots or boxes were planted out. It is wise to keep a dusting of soot around the plants until well established, and the sooner staking is done after planting the better. The shoots should not be allowed to lie on the ground, but be kept in an upright position with twiggy sticks.

Hollyhocks

These are fine, showy plants for the back of large borders, and where plants have been raised from seed sown during the early part of the year they should now be planted out. They are liable to be damaged by the wind, so stakes should be placed to them early.

Euphorbias

These are useful plants for the warm greenhouse, the most important being E. jacquiniæflora and pulcherrima, the latter known as Poinsettia. They produce brilliant scarlet bracts which are useful for winter decoration. Cuttings may be taken during the next few weeks and rooted in a propagating-case.

Primulas

The main batch of P. sinensis and P. stellata should be sown now in pans and germinated in slight bottom-heat. The seedlings of P. obconica and its various hybrids should now be fit for their small pots. It is well to include a little old mortar-rubble in the potting soil. Those who have not grown Primula Kewensis should give it a trial, its flowers of pure yellow being sweetly scented.

Pentstemons

These should be more cultivated than they are at present, as they are the easiest plants to grow. Cuttings taken in autumn and now well rooted may be transferred to their flowering quarters.

Violets

There is no advantage in keeping the plants in the frames after this date, so they may be taken up and offshoots planted out on a well-prepared shady border to form the stock for autumn planting. If planted in rows 1 foot apart and 9 inches between the plants and the surface kept free from weeds good plants will be obtained.

Ferns

Soot-water is an excellent stimulant for Ferns when well established. It keeps the fronds of a pleasing and dark green colour. The house should be shaded and the plants kept well supplied with water. Damping the flowers and staging is beneficial to them. Remove the old fronds carefully, as they turn colour.

Strawberries

The trusses of bloom will now be throwing up freely, so the plants should be bedded down with clean wheat straw. Before using the straw the bed should be weeded and the surface soil stirred with the Dutch hoe. A small handful of old soot scattered around each plant will prevent slugs spoiling the fruit later on, while it is also beneficial to the plants. W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Plant houses

In conservatories and greenhouses early ventilation has now become a necessity. Indeed, in houses which contain nothing extremely tender a little chink of air may be left along the ridge of the structures both by day and night from now onward. Fire-heat cannot yet be entirely dispensed with, but during sunny weather the fire ought to be well damped down. In houses which contain climbing plants there will be, at present, some thinning and training to attend to, especially among such things as Passifloras and Tacsonias. No one ought to grow either Cobæa scandens or its variegated form. Both are rampant growers and very often are but harbours for insect pests. Those who grow a few winter-flowering Orchids in the stove will find the present a very good time at which to overhaul them. It is best to pick away most of the old material and to cut out decayed roots, working in plenty of freshly-chopped Sphagnum. Anthuriums will be the better of a little attention, too, and (at first, at least) the treatment of these plants is similar to that given to the Orchids. Young plants of all kinds ought not to be left too long in the propagating-case, which ought never, at this time, to be empty.

Fruit houses

Keep the sub-lateral growths on Vines pinched to a single leaf. If it is needful to do so the bunches in the early house may be gone over again, removing on this occasion the smallest berries and those which may later cause crowding. Early Grapes, however, may be left fuller in the bunch than late varieties. Give the border a good dressing of artificial manure. Potash and phosphates are, I think, best in the early part of the season, while nitrogen is preferable date. Let the atmosphere be kept by intelligent ventilation. Tie in t of Peach-trees, now growing rap keep the syringe at work twice daily

Melons

When sufficient female blooms secured they ought to be fertilised pollen of the male flowers is ripe a freely. When the embryo fruits swell, the border should be top-dre some good and fairly rich material manure, when the fruits are ha forms a valuable stimulant. Some shade the Melon-house, but this i sirable. The aim of the cultivator be to secure strong and robust fol this can only be obtained by full ex the light. Early morning venti bright days is absolutely essential i of Melons.

Hardy fruit

Present indications point to a g of blossom, but the critical period over. If a little rough-and-ready can be given to wall trees of Plum Pears the chances of a crop will be Apples on the Paradise stock and the Quince should now be well m this has not already been done. these stocks are shallow-rooting assuredly suffer if they are not assis manner. Stir the soil among Str and dust the lines with soot, which invigorates the plants, but aids i struction of slugs. Blanks may yo up from the nursery bed, or, if that with some of the best of the pla have been forced. There is yet tim the fruit quarters with lime. Th necessary in many gardens, and th appears to be now more regularly fruit than was formerly the case.

Cucumbers in frames

Cucumbers can now be grown hotbeds in frames with compara Plant the young Vines in good so well firmed, and for a time conserv by matting up the sashes round abo The usual routine of pinching, etc. tised in the orthodox Cucumber-ho be adhered to in the case of plants

Cold frames

These are, or ought to be, now their utmost capacity, and the plant whether in pots or in boxes, shou posed on all suitable occasions. apt to be troublesome among bedding plants, and these minute be trapped, or picked off at night are feeding.

Vegetable garden

A little nitrate of soda, judicio will hurry along the Cabbages plant tember. A few lines of Brussel put out from boxes at this time will autumn pickings if such be ne spring-sown plants raised in hea likely to go to seed than those w stood over the winter in a seed-b doors. The plants must be given room. The main sowing of winte now due, and a sowing of the dw Ulm Savoy may also be made. Peas and Broad Beans. If a spare available it may be utilised for a French Beans which, if desired germinated in heat in 3-inch pots. of Cos Lettuce will provide plants planting at a later date. W. Mc

Mabie Gardens, Kirkcudbrightsh

Tomatoes in Cold Houses

E are few greenhouse owners who ot grow Tomatoes either for their ise or for sale. Certainly the plants linary conditions produce as profit- p of fruit as any that may be grown ss, and with this advantage, they do e any elaborate treatment, and may ted successfully by the veriest be- Another good feature in their favour ey may be grown without artificial on to those who have only an odd e. The only advantage a heated rs is that earlier fruit is produced, with unheated structures compara- y crops can be had if forward plants it from nurserymen, who usually lreds of splendid young plants for g this month. When buying the plants select short, thick-stemmed er than tall, thin, frail-looking Three good sorts for general pur- :—Ailsa Craig, an old well-tried Kondine Red, usually a heavy nd Sunrise, which is good for either outside culture. Nothing is to be planting too early. As a general e resident in the warm southern nay begin about the middle of this d Northerners could safely start at the month.

A START.—The three ways in which are usually grown are:—(1) in 2) in boxes 12 inches or 15 inches 3) in large pots. The first is to be ded, because as the borders are ar the ground ample head-room is nrestricted growth, and again on f the large area of soil more room e for root growth, and does not dry ckly as that in the limited space a s. In houses fitted up with staging, the border plan is impracticable, ust be made of either boxes or pots, which are quite suitable as re- Whichever method is used make vision for drainage by boring holes tom of the boxes and covering with crocks, then placing a few pieces of mpost over to prevent the soil he holes. Treat the drainage holes s in a similar manner. The next s that of a suitable compost. With- nce to the vexed issue of the relative dvantages of adding manure to the describe a compost which has given ction for a number of years. It is ts good fibrous loam, one part y-rotted old manure—that from old r example—and a little wood-ashes. ogether before using. New manure opinion, harmful, and rather than would do without until the time top-dressing. Fill the receptacles vith soil and plant the Tomatoes ving plenty of room for top-dressing ows later on.

REATMENT.—Until the first truss sets tle need be done, with the exception ; watering, and ventilating. With the last, bear in mind that Toma- dry, airy atmosphere, and will not xcessive dampness. Open the top each day unless the weather is As soon as the first flowers appear, push their way to the top of the -dressing of loam and cow manure dded. From this time, too, liquid- referably made from cow manure, given twice weekly. The practice the plants to a single stem is now that mention need hardly be made ng the side shoots as they appear. eginners, however, it might be ex- hat unless these side shoots are rubbed off, the plant will develop a bush-like growth, which is not considered as good a method as the single stem system. To assist the flowers setting it is the usual practice to knock the stems gently, which results in a fall of pollen. Do this about midday. Another surer method is to brush lightly over the flowers with a soft camel-hair brush or rabbit's tail. In time several trusses of fruit will set on each plant, and if excessive foliage is borne some will need to be removed or ripening will be delayed. A wholesale defoliation is not advised, but a start could be made by removing the leaves which directly shade the trusses.

PESTS AND DISEASES.—Like most greenhouse plants, Tomatoes have their pests and ailments. Green and white flies are the chief insects that prey on the plants. Green-fly can be exterminated by fumigation with nicotine preparations. White-fly, on the other hand, is much more difficult to remove, but horticultural experimentalists have made up a preparation especially for the destruction of these white torments, the judicious use of which has been followed with remarkable success. Among diseases, leaf rust is common, and is easily detected by the appearance of small greyish-brown spots on the under surface of the leaves. Spray affected plants with 1 oz. liver of sulphur dissolved in 3 gallons of water. To prevent the disease maintain a dry, airy, atmosphere. Black spot, or fruit rot, is the result of organisms being conveyed to the flowers by insects. As the fruits develop, the bacteria increase, finally putrifying a portion and making the Tomatoes useless. Remove and burn all diseased fruit. If the Tomato plants were bought in a healthy condition and the house is kept clean and dry little fear should be felt for the coming of diseases, although, even in the best of growing conditions disease occasionally makes its appearance, possibly through the agency of insects. L. D.

Manure scarcity

The growing scarcity of manure is a problem which will have to be faced by the gardener sooner or later, and a reliable substitute will have to be found. We have artificial manures of every description, which, used with discretion, produce excellent results, but they are very costly. Moreover, artificial manures do not aerate the soil, and therefore can never act in the same way as farmyard or horse manure when used alone.

For improving a growing crop or assisting a catch crop on ground already in fairly good heart, artificial manures are excellent and act quickly, but to depend on them year after year would spell failure, as the retention of moisture and aeration of the soil by some bulky substance are absolutely necessary. I have recently seen it suggested that decayed garden rubbish should be more used, the writer recommending a sunk brick tank into which all garden waste is deposited, this when rotted down making excellent manure, lime being added to keep down the obnoxious smell which Grass mowings, Cabbage leaves, and other decaying vegetation would produce. Having carried out this idea for some years—only it was stacked and not in a pit—I must say it is a good one, but should be carried out in some unfrequented part of the garden. Weeds, green tops, and waste of every description should be brought together and limed every 18 inches or so. This will soon rot down and form a valuable manure containing a large percentage of humus and other organic matter of the greatest value. It is a good plan when using this to add—if to be had—one-half of farmyard manure, better results being obtained by using them together. Another plan is to collect all waste material, this including prunings of fruit-trees, etc., and all noxious weeds, and burn it. The ashes from such a heap are invaluable on heavy ground and there is not an atom of waste.

Where early crops have been grown White Mustard, Rape, and Lupin seeds should be sown and the seedlings dug into the ground when about a foot high. These not only aerate the soil, absorbing and retaining moisture, but materially add to the supply of humus and bring the soil into good condition.

To get the best out of artificials they should be mixed with leaf-soil, of which in many private places there is an abundant supply.

M.

Control of the Onion fly

Onion growers should now take steps to prevent an attack of the Onion maggot. I make use of the word prevent advisedly, for there is no remedy. Once the all too familiar dirty-white grubs have buried themselves in an Onion bulb the doom of that bulb is sealed. No human power can save it; a sufficient reason, surely, for urging the prompt application of preventive treatment. I have followed a very effective line for some years, not having lost a crop of Onions, nor a part thereof, by this dreadful foe. It consists in the use of paraffin emulsion, which should be sprayed on the plants fortnightly from this date until the first week in August. The odour emitted by the emulsion is so distasteful to the egg-laying fly that she will avoid the plants altogether. A word must be used here to stress the importance of the faithful following of this programme. It is essential to make bi-weekly applications, or the smell of paraffin may depart, affording the enemy an opportunity to break through. Paraffin emulsion is made of the following ingredients:—Paraffin 1 gill, soft-soap ½ lb., water 2 gallons. In order to mix it the soft-soap should be churned thoroughly in a quart of boiling water before the necessary quantity of cold water is added. When using the emulsion it is advisable to syringe once on to the plants and once into the vessel, or the paraffin, being an oil, will float upon the surface of the water.

GEO. H. COPLEY, N.D.H.

Early Runner Beans

When these are preferred, as is often the case, to French Beans, an early lot of plants should be raised under glass and planted out as early as circumstances permit in May. The seed may be sown either in pots or long, narrow boxes, the latter being the more convenient when a sufficient number of plants is required for planting one or two rows of any length, and germinated in gentle warmth. When the plants are about 4 inches in height the boxes or pots should be transferred to a cold pit and gradually hardened off, after which they may be stood under a wall facing south until it is safe to transplant them. If another sowing is made outdoors in the first or second week in May, and a final one early in June, a long succession results. In the meantime the site the rows are to occupy will be prepared. A narrow trench, about 15 inches deep, is opened out, the soil being placed on either side. Some good rotten manure is placed in the bottom and sufficient of the soil is returned to refill the trench to within 2 inches of the top. The remainder of the soil is then laid on either side, which results in a saucer-like depression being formed throughout the length of the rows, which enables copious supplies of water to be applied when required without any waste.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

TREES AND SHRUBS

Cutting down Fir tree

I have in the shrubbery a Fir-tree that is gradually getting unattractive, due to the branches growing far apart. Could these be lopped? SCRAPER.

[Yes, you may shorten the branches back, but take care to leave some healthy side twigs between the tree and the cut-away portion, and to encourage the trees to thicken. It is advisable to cut the top out also. You state the height of the trees to be from 25 feet to 30 feet, therefore you would be quite safe in cutting away 10 feet of the top, and this will encourage the development of the lower branches.]

Topping Birch trees

Can one lop Birch-trees that have grown very high and been much bent by the heavy westerly gales that we get here. I received from a nurseryman some very lank, with hardly any side growths, Beech-trees, Fagus sylvatica. Would it be advisable to lop them? They are some 14 feet in height. I asked, when ordering, for trees "not too small," but I never expected anything so tall and lean. SCRAPER.

[Yes, but it should be done without delay, and any side branches should be shortened back at the same time.]

Laurel leaves injured

(Italia).—Your Laurels are seriously attacked by a scale insect which, under your conditions, will be extremely difficult to control. The pest will, of course, weaken the trees, and may even kill them in time. If the trees could be sprayed with paraffin emulsion it would certainly help you to control the pest. We usually use paraffin emulsion at two strengths, the stronger wash is used in winter, the weaker in summer. Winter strength: 1 gallon "paraffin" (petroleum), ¾ lb. soft-soap, 14 gallons water. Boil 1 gallon of water and the soap until the latter is dissolved, then add the petroleum and stir well; this will form a thick creamy mass; dissolve this in the remaining 13 gallons of water. Summer strength: 3 pints of "paraffin," ¾ lb. soft-soap, 14 gallons water; make up as before. If this wash is persevered with it should give you a good measure of control. If you find that the foliage is burned at either strength you must reduce the strength. If, on the other hand, you find that the foliage will stand this, try a stronger wash, especially during summer.

The Holly fly

(Scraper).—Your Holly-tree is attacked by the grubs of the Holly fly (Phytomyza Aquifolium). It is a very difficult pest to deal with as no insecticide can be made to reach the grubs, safely ensconced as they are between the skins of the leaves, which are very hard and stiff, and the transformations of the insect are all undergone within the leaf. The flies lay their eggs under the skin of the leaves in May and June. If the exact time of the appearance of the flies could be found out it might be possible to prevent them laying their eggs by spraying the leaves with paraffin emulsion, taking care to wet both sides of the leaves. The only other remedy is picking off the infested leaves and burning them, which would be almost as difficult as spraying. When sending queries write on one side of the paper only and put the various queries on separate sheets of paper.

Yew unhealthy

(Bognor Reader).—The trouble is clearly due to absence of air among the bushes, owing, we should say, to the bad position and close proximity of the wall. We would suggest spraying the hedge with lime sulphur, 1 gallon of lime sulphur to 20 gallons of water, repeated a fortnight after the first application. The cost is 2s. 10d. per gallon.

Sparrows destroying Wistaria buds

I have a large Wistaria which covers the east and south walls of this house and, as usual every year, has been covered with flowering buds. Every bud has now been completely destroyed by sparrows. As this has never happened before during 20 or more years what can be the cause of it? Birds are fed with crumbs at a window and have been fed every year, but only one or two stray sparrows came with the other birds until the Wistaria buds were well formed, when numbers of sparrows came, ate the crumbs greedily, and then tore the Wistaria buds to pieces. As I am afraid of other flowers being treated in the same way I should be glad to know how to prevent it. I am enclosing the remains of some of the buds. Birds here have access to plenty of water. F. O. S.

[The only remedy is to net your Wistaria or syringe the branches with some disinfectant or quassia extract to render the buds distasteful to the sparrows.]

FRUIT

Orange troubles

(T. B., Manor Yarnton).—The specimens of Orange shoots you have submitted to us show signs of several troubles. (1) The large shrivelled spots are, we think, caused by water dripping from the roof of your house on to the leaves of the Orange, then before these spots of water have had time to dry, the sun has come out and scalded the leaves. The scalds could also be caused by low temperature at night, which would result in condensation of moisture. If the house was not aired early enough the next morning the sun could very easily scald the leaves. Due attention to the roof temperature and airing of the house should prevent scald in future. (2) There are many little wart-like spots all over the leaves, due to the puncture of the tissue by an insect pest; an exudation of sap follows, hence the warts. The control of the insect concerned will prevent this trouble. (3) A soft flat scale insect is present in large numbers. The foliage should be carefully sponged over with warm soapy wat treatment should be repeated at wee vals until the pest is under con Mealy bug is present in the axils of the leaves. Sponging with soapy better still, Gishurst Compound sh you control over this pest. Use a get into the crevices of the plant. R treatment until the pest is under co

Treatment of Orange

(T. B. M. Y.).—We see nothin with your root treatment, provided age is good. Oranges do not flouri the soil in which they are growin drained. Good well-rotted loam fairly fine, adding a sprinkling o bones and plenty of good sharp sa a good compost. The temperature for Orange culture are winter (nig degs. F.; winter (day), raise night ture 5 degs. F. As the days len heat should be gradually increased F. during the day, and in summer perature can rise to 85 degs. F. house early before any great rise in ture takes place. This will help much with the leaf-scorch trouble. light house it may be necessary to glass slightly in very bright weather above temperatures Oranges should February and the fruit should be October to January following. syringe freely all through the season.

Treatment of fruit-trees

(G. G.).—It is difficult to advis distance with regard to the frui question. As the ground has trenched the trees should have bee in properly-prepared stations, each 6 feet in diameter and 2 feet to depth. If the trees are not too might, perhaps, be done in the autumn, but we think your best p be to consult a good practical ma district, and let him advise you as t best to be done under the circumst act accordingly.

Peach-buds dropping

I have two Peach-trees trained a back wall of a lean-to greenhou south. The trees have their roots house, and are about five years o flower freely, but the blooms fall o fruit is formed. There is no heat house. What is the cause?

[In nine cases out of ten, bud-dr in your case, may be traced to the mon error of allowing the border dust-dry during the winter mo grower acting under the delusion treatment is necessary for the prope of the wood. Under these cond buds remain firm on the trees unti comes for them to begin swellin instead of the buds gradually expan turn brown and drop off. You ca amining the border, find out if su case, and if so, the remedy is in hands. Give the trees a thorough water, though we may tell you tha not save the buds from falling, having already been done. In fut allow the border to become unduly winter, but always see that it is in a state of moisture, and give a goo after the leaves have fallen shoul appear to be too dry. Keep a wa on the border during the winter, a wait until starting time before apply again should it be necessary. necessary to water, always give thoroughly moisten the border do drainage.]

GREENHOUSE

illa suaveolens

J.).—This is a well-known green-mber that flowers during the late and early autumn. The blossoms like those of a large pure white lus and are very sweet-scented. It ve of Buenos Ayres, and in the districts of England, such as the ight and in S. Devon and Cornwall, grown on a wall. It climbs by not by tendrils. The oppositely-oblong leaves are dark green, but exture, and drop in the autumn. t is very liable to attacks of red-hich quickly causes the leaves to en large it succeeds much better ut in the greenhouse than in pots. s a light airy structure to flower it

ing

Your Fern is a form of Pteris nd the black flies can be destroyed ation. XL All or a similar com-he most effective, and it is safer to mildly two nights in succession n give one strong application. The ve been introduced to the plants om another greenhouse, and until are destroyed they will continue to Fumigate the Fern-case at fort-tervals until the whole of the flies peared.

FLOWER GARDEN

Mussini

—In all probability the soil is ex-nd your best plan will be to lift the l divide them, adding some fresh replanting. Now is the best time s. We have also found that the be lifted when in full bloom if vith a good ball of soil and liberally

MISCELLANEOUS

perfoliata

Digings).—Your plant is Claytonia a North American plant known Purslane, Spring Beauty, and simi-, and sometimes used in salads or ard and Cress in sandwiches. It e naturalised in several parts of y and is well established, notably, and Keston Commons, in Kent, e found it as far north as the ex-stern end of the West Ridings of I do not think that the plant has ulinary value, and its standard of not such as to make it a desirable nt, particularly as it seeds freely becomes a nuisance in the rock border. It is not without interest , but apart from that not worth about. W. I.

ts

S.).—When sending in soil insects ication you should place them in They dry out so in the post that st impossible to name them. The you sent in the phial were especi-As soon as we received them we specimens on damp paper. This was successful in bringing back the to normal shape and size, but not We are unable to help you at all gg; if you can send us some more damp soil we could tell you what The minute insects are the larval springtail (Collembola). We are think that they are only secondary ot the primary cause of your her-ants dying. Springtails are gener-found feeding on decaying organic matter, *e.g.*, wireworm or slugs will often eat holes into Potatoes, and a little later on the cavities will be found full of larval springtails, which are feeding on the decaying Potatoes. We should be inclined to look about for another cause of the plants failing. A good soil insecticide applied according to the maker's directions will probably save the rest of your plants. The specimens in the box are both beneficial; one is the larva of a ground beetle and the long thin specimens are centipedes. Both are carnivorous and are worth their place in the garden. There were not any millepedes in the sample. Millepedes are injurious and should be killed. Please see reply *re* "Garden Pests," on page 236 in our issue for April 10th.

Sending wrong plants

I sent for a plant of Hamamelis arborea and said, "None other." I received, instead, Hamamelis mollis, just the variety I object to on account of its immense leaves. I wrote protesting, and received a reply to the same that the one sent was the most popular and that they had not the H. arborea. I presume I am not obliged to keep the H. mollis. I planted it the day the shrubs arrived, and it is healthy and strong, and doing well, so it would not suffer in any way by being returned. SCRAPER.

[As you particularly specified that no other than H. arborea was to be sent, the nurseryman did quite wrong to send another species, and you will be quite justified in returning it and refusing payment. In future, when sending queries kindly put each query on a separate sheet of paper.]

Durable garden paths

(Birchdale, Kent).—In order to colour your path to a warmer tone than that of cement the addition of a good quality red oxide of iron (ferric oxide) is necessary and properly carried out this will give you a red tile effect. This should be thoroughly mixed with the dry cement before the aggregate is added. The quantity required will depend upon the depth of colour sought, and may be found by a small experiment, but 14 parts of ferric oxide to every 86 parts of cement is a proportion that has been successfully employed, and may serve as a guide.

Stick caterpillar

(L. Searle).—The specimen of caterpillar you send is that of the swallowtail moth (Uropteryx sambucaria). It is a common caterpillar in many parts of the country, but its colour varies considerably, being either brown, olive, ochreous, or reddish. You will have noticed that the caterpillars are notched to resemble a twig. This imitation is rendered still more remarkable by the attitude of the caterpillar when at rest. It fixes itself to a twig by means of its two pairs of claspers; the body of the caterpillar stands out from the twig at an angle in a perfectly straight position. If it is examined closely it will be found that a very slender silken thread is fixed from the head to the twig on which it is resting. U. sambucaria feeds on Elder, Blackthorn, Whitethorn, Bramble, Honeysuckle, and Forget-me-not. In addition it is also found on Rose, Pear, Apricot, Plum, and Apple. Your specimen is now feeding quite happily on some Pear foliage which we had by us. The moth, which is easily identified by conspicuous "tails" on the hind wings, appears in July. The caterpillars appear in autumn, feeding for a time and then hibernating in crevices of the bark of certain trees. They commence to feed again in April and are fully fed in June. Although we get the caterpillar sent to this office fairly frequently we do not consider it very injurious. We have never known it common enough for that.

Horticultural Societies' News

Norwich Spring Show

This event brought out a splendid array of Narcissi, in which Captain Sandys Wensch was the principal prize-taker. Cut flowers and flowering shrubs made a bold display, the best coming from the garden of J. A. Christie, Esq., M.P., Framingham Manor. In the greenhouse, cut flowers as well as hardy flowers, some extra good specimens were staged by J. E. Moxey, Esq., Framingham Hall. Pot plants were most effective, especially the groups set up by the Norwich Corporation Parks Department and Colonel Rivers Fletcher. For Calceolarias, stellata Cinerarias, and Ferns, Mrs. H. J. Copeman, "Westwood," Newmarket Road, Norwich, staged wonderful examples of good culture. There were some very fine Strawberries and well-kept Apples, and a good array of vegetables. AYTCH PEA.

Hunts. Spring Flower Society

The sixteenth exhibition of the Hunts Spring Flower Society took place on April 19th. The trade, represented by Messrs. Barr, R. H. Bath, Ltd., and Cartwright and Goodwin, put up three fine stands of Narcissi. The premier blooms were shown by Messrs. Barr (fine Incomparabilis seedling), R. H. Bath, Ltd. (Giant Leedsi Tenedos), and a very fine white form of Primula Juliæ "Beatrice" shown by Mr. G. W. Miller. Messrs. Barr's Cup was this year won by the Secretary (Miss Linto) after a very spirited competition with the Earl of Sandwich, Mr. R. H. Darlington (of Rose fame) being third. The hardy outdoor classes were well patronised, some excellent bunches of spring-flowering shrubs being shown.

Truro Spring Flower Show, 1926

The Spring Flower Show, which opened at Truro on Tuesday, April 20th, was a wonderful exhibition of the products of the West Country. The increased hall accommodation of Truro has resulted in the show being staged much better than in any previous year, and there was almost a record attendance on the afternoon of the first day.

In all probability the best exhibit in the show was the wonderful collection of Rhododendrons staged by J. C. Williams, of Caerhayes Castle. This exhibit contained such a wealth of new hybrids and species of every group of Rhododendrons that it would be unfair to pick out any particular hybrids or species. Next in importance to these must be placed the wonderful exhibits of cut shrubs, and in the class for 12 varieties, not including Rhododendrons, the first prize collection, by the Rev. A. T. Boscawen, Ludgvan, was very wonderful. This exhibitor was successful in flowering and staging the Waratah (Telopea oreades). Other noteworthy plants in this group were Anopterus glandulosus, Erica melanthera, Prostanthera rotundifolia, Diosma uniflora, Edwardsia tetraptera, and Leptospermums in variety. The second prize lot, staged by Mrs. Bolitho, of Trewidden, Penzance, contained Rhaphiolepis indica, Grevillea Preesii, and Enkianthus campanulatus. In the class for Acacias, Mrs. Henderson Bull, of Falmouth, took the first prize with A. armata, A. verticillata, and A. hybrida. Viscount Falmouth was placed second with A. verticillata, A. melanoxylon, and A. longifolia. In the Rhododendron class for 12 jars of 12 distinct species, Mr. Barclay Fox, Budock, was first with R. Dalhousiæ, R. habrotrichum, R. bullatum, R. Nuttalli, R. hæmatodes, R. Lindleyi, R. Falconeri, R. neriiflorum, R. campylocarpum, and R. Aucklandi. Mr. P. D. Williams, of Lanarth, St. Keverne, not only showed that he was a master of Daffodil

cultivation, but that he could also produce wonderful Azaleas. His specimens of Hinamayo were very fine, and took the first prize in this class. In the class for sprays of evergreen Rhododendrons of the triflorum type Mr. Magor was first with fine samples of R. ambiguum, R. oreotrephes, and R. Augustini. The exhibits in the class for scented Rhododendrons were very much admired, the first prize being taken by Viscount Falmouth with Madeni, Lady Alice Fitz-William, and Princess Alice.

In the Chinese Mountain Rhododendron section Mr. Williams showed R. saluenense, R. sphæranthum, and a Forrest species. In the section for 12 varieties of spring flowers Capt. Dowman, of Falmouth, showed some very fine examples of Myosotidium nobile, Sparaxis Fire King, and Cyclamen repandum. In the Alpine section Miss Skinner, of St. Clements, Truro, took first prize for a beautiful tray of 12 alpines. The class for six vases of hard-wooded shrubs, excluding Rhododendrons, was very keenly contested, and Miss Wingfield, of Penzance, took the first prize with well-grown samples of Eriostemon neriifolium, Leptospermum Scoparium var. Cytisus proliferus, and Boronia megastigma. The second place went to Major G. H. Johnstone, whose collection contained a wonderful piece of Rosa Banksii and Pyrus caloneura. Tulips were well shown, and there was very keen competition in most of the classes. Excellent Lily of the Valley came from Mr. Rogers, of Penrose.

The trade was well represented, and the display staged by Messrs. Veitch, of Exeter, contained some very uncommon and rare plants. These included such things as Lysichitum, Pimelea, Leptospermum Boscaweni, Grevillea oleoides, and Dipelta ventricosa.

Carnations were finely shown by Messrs. Allwood Bros., whose best varieties were Topsy, Laddie, Master M. Stoop, Canadian Pink, and Beauty of Durham.

A wonderful display of Daffodils was staged by Mr. J. C. Martin, of Truro, who is always surprising the trade by his wonderful new varieties. His stand included Silver Chimes and the wonderful Double White with an orange centre known as Water Lily.

Messrs. Maxwell and Beale, of Broadstone, Dorset, put up a very fine miniature rockery which was a great source of attraction. This included plants such as Cassiope tetragona, Cytisus Beani, Heathers in variety, Primulas in variety, Daphne Cneorum, and other dwarf alpine plants.

The exhibit of Messrs. Treseder contained many rare and interesting Australian and other plants, and as this firm has its nurseries actually in the Cornish Riviera, it is able to grow many of these plants out of doors.

CATALOGUES RECEIVED

H. Den Ouden and Son, Boskoop, Holland, The Old Farm Nurseries, 1926-27.

The Heckmondwike Chemical Co., Heckmondwike.—Purity fertilisers.

J. Lionel Richardson, Waterford, Ireland.—Gold medal Daffodils.

Ground Ivy

(H. S. B.).—Please write to Miss Dora Bulwer, Dalling, near Uckfield, Sussex, who will be pleased to supply some plants.

—— In the issue of April 17th you inserted a query from "H. S. B." inquiring where he could obtain ground Ivy. If he still wants some I could send him roots of ground Ivy, also roots of Periwinkle, both green and variegated varieties, which also seem to flourish under trees. REV. C. H. GOULD.

Hammoon Rectory,
Sturminster Newton, Dorset.

INDOOR PLANTS

Hippeastrums

THIS delightful genus contains upwards of 50 species, but in this short article I shall only consider the hybrids of which there is now a wonderful variety. By patient hybridising with good forms of both species and hybrids, and rigid selection of the progeny, considerable progress has been made, but even now there is still room for improvement, and the hybridist knows there is no finality to his work. The finest varieties are those with broad petals, plenty of substance, fairly large, and more or less round in outline. Great progress has been made in colour, but the prevailing shade is red, the self colours being, I think, the most pleasing. Even in a small collection could be seen those with deep, rosy-scarlet flowers, deep crimson, orange-scarlet, rich dark crimson, white with rose-coloured markings, creamy-white with rose veins, and others with various combinations, which render them among the finest subjects for the greenhouse in spring and early summer.

Hippeastrums, or Amaryllis as they are still called in many gardens, can be readily raised from seeds, and it is quite possible for anyone to secure a few seedlings of real merit quite as good as, and perhaps in advance of, existing varieties, while the majority would be worth keeping if judged from the decorative standpoint. Seeds ought always to be procured from a good strain, and it is possible to save one's own seeds. When crossing two varieties select the best forms, and as far as possible cross a crimson variety with another of similar colour, and so on. The seeds should be sown in the early spring or February, in pots or pans of light sandy soil, and a temperature of about 65 degs. is needed. A little bottom heat will be of help. When the seedlings are large enough they are potted off singly into small pots, taking care not to bury the tiny bulbs too deeply. They will grow well if plunged in bottom heat, a moist, buoyant atmosphere being maintained, and the temperature kept between 60 degs. and 70 degs. In some establishments they are planted out in prepared beds, but in private gardens this is rarely possible, or even desirable. Another method of propagation is by offsets, which are removed at the time of repotting, just prior to the bulbs starting into growth. Careful separation is needed to avoid breaking the roots to any great extent, and then each offset is potted off singly into small pots. If they are overdone in this direction the roots often decay, and it is a long time before they get established. Where possible the pots should be plunged in bottom heat for a few weeks, and be treated similarly to seedlings, but in both cases careful watering is essential. A suitable rooting medium for Hippeastrums consists of good quality fibrous loam three parts, and one part sweet leaf-mould, to which is added a sprinkling of sharp sand. A 6-inch potful of fine bone meal can be added to every bushel of the mixture. The pots should be clean and well drained, over which is placed a thin layer of loam fibre. Repotting should take place just before the bulbs become active.

I have made two references to bottom heat, but when we come to deal with bulbs of flowering size, or those approaching that stage, I have no hesitation in saying that bottom heat is not necessary unless the plants are required to produce flowers early in the year. They can be treated as greenhouse subjects, and at no time is great artificial heat needed.

During the winter the plants are rested in a dry, cool greenhouse, and with the advent of the New Year signs of life will be apparent. A few will begin to push up a flower-spike. These should be top-dressed with fr removing as much of the old as possi out injuring the roots, afterwards them at the warmest end of the gr unless a warmer house exists, when be in flower a few weeks earlier. T should be soaked for an hour or two water. From time to time other sp appear, but in the spring the remaind be thoroughly soaked, and the plan a light position in the greenhouse. majority will bloom, and afterwards son's growth is made. Examples t filled their pots with roots will ben weekly application of liquid cow man light sprinkling of Clay's Fertilise the roots well supplied with water, that the plants get plenty of light the foliage begins to show signs of the plants can be removed to a bri frame fully exposed to the rays of The water supply is reduced gradu the bulbs will be well ripened by the of winter. The ripening of the b generous treatment during their activity are important factors in th tion of Hippeastrums. It is a group no amateur with a greenhouse n taking up; in fact I know of one where a pot of bulbs blooms almost in a cottage window. T. W. B

Phyllocactuses

There are certain plants which l largely in the world of horticulture only just, during their season of b At other times they call forth little miration. Such are Phyllocactus sometimes appear utterly indifferen treatment meted out to them, whe are kept in the same pot for long whether they are given room under in some cottage window. Indeed, s which I have seen from time to time homes in pots have demonstrated t quaint plants call for no special Their propagation, too, is equally pieces of the flat stems will strike i gritty soil, or, following the plan o folk, stems stuck in the sides of t the parent plant eventually take would, I imagine, be difficult to c possessing greater contrasts. See th out flowers and they present a ma shaped, flat stems, raising little c thusiasm, but watch them, as on t and outer edges of these same ste ings appear, which gradually as shape of buds, until some sunny da formation takes place, and pla hitherto have scarcely called forth all at once burst forth into beauty of rose and red, and crimson, ora white. Loam and leaf-mould, wit mortar-rubble, make a suitable co Phyllocactuses, and they do best w potbound state. Approaching their period they should be watered lib other times they need but little.

For the hanging bask

The Ivy-leaved Pelargonium has a favourite for hanging baskets, an no time better than the spring to ma in planting. Baskets should be with Moss and soil made up of loam mould, with a little sand pressed w watered, and allowed to settle bef ducing the occupants. Young st tings of the Pelargoniums are to be to older plants, as they are more an training. Two, or possibly three, to size of basket, will usually suffic centre shoots should be pinched out lateral growths which should be t sides of the baskets, so that nothing will be seen but a mass and flowers.

THE RHODODENDRON SOCIETY'S FIRST SHOW

Vincent Square, April 27th

Rhododendron Society has every n to be heartily congratulated on the ss of its first show, held at the Royal ural Society's Hall on the above e expected a good exhibition, especie less hardy Rhododendrons from

new Rhododendron Lord Swathling, which gained an Award of Merit on April 21st and was again in evidence at the Rhododendron Show

from Exbury, and from the gardens in the neighbourhood of ee, in Sussex, but the quality and of the exhibits far exceeded all ns. Indeed, the show was a great nd no one was more surprised than had organised it. The thanks of lendron lovers are especially due to el de Rothschild, whose untiring re largely responsible for the suc- show.

stood before the great group of dron Loderi, in its very best forms, trusses towering high above other e thought that we had never seen iner in Rhododendrons. This ex- from Lady Loder, of Leonardslee, this, in competition with other ly gained the fourth place!

f interest in the show was centred class for the best group of Rhodo- shown by an amateur, and the his class alone occupied almost the he wall-space around the hall. It been an extremely difficult task for to make awards, as all of the re of a very high order of excel-

t prize, which carried with it the cup and the gold medal of the rticultural Society, was won by rconway and the Hon. H. D. of Bodnant Tal-y-Cafn, North his collection was rich in rare and species, including R. Soulei, R. lum (see illustration), R. Augustini , together with handsome varieties White, Loderi, Cornish Cross, and Thomsoni. The gem of this col- wever, was a magnificent specimen iamsianum, a low-growing species only about 1 foot in height. The specimen shown was about a yard across, with numerous rosy bell-shaped flowers and pretty leaves of bronze hue in the young stage. This plant was awarded the special prize by Mr. E. H. Wilding for the best plant in the show.

The second prize in this class was shared by Mr. Lionel de Rothschild, Exbury, near Southampton, and Mr. A. M. Williams, Launceston, Cornwall. The Rhododendrons from Exbury were very choice and beautiful, and included blooms of Loderi, Nuneham Park, and other Van Nes crosses. The collection was strong in large-flowered varieties and the blooms were clean and fresh. Mr. Williams' collection was strong in species; R. Augustini was exceptionally good. Here, too, were fine examples of R. dichroanthum and R. chartophyllum præcox, but the pick of the group was the blood-red R. hæmatodes, obviously cut from large bushes. This species was the only one to receive the high honour of the First-class Certificate.

The fourth prize in this strong class was shared between Lady Loder, of Leonardslee, Horsham, and Mr. R. Barclay Fox, of Penjerrick, Falmouth. Tribute has already been paid to the Leonardslee group. R. Loderi as here shown was remarkably fine, the two best forms being Pink Diamond and Pink Coral. Other features of this group were Glory of Leonardslee, Kewense x Aucklandii, and Fortunei x Thomsoni.

The pick of the Rhododendrons from Penjerrick, long famous for its Himalayan species, were R. Falconeri, R. Lindleyi, R. Liliani (brilliant red), the beautiful white R. Penjerrick, and the pink Glory of Penjerrick.

Other competitors for the amateur trophy were Col. Stephenson Clarke, Dame Alice Godman, Sir John Ramsden, Mrs. Tremayne, and Vice-Admiral Walker-Hineage Vivian.

Class I., for the best group of Rhododendrons shown by a trade exhibitor, brought many entries, presenting a blaze of rich colours in the centre of the hall.

The premier award was won by Messrs. R. Gill and Son, Falmouth, for a wonderful exhibit in which the Himalayan Rhododendrons were much in evidence. Such handsome large-flowered species as R. Aucklandi, R. Nuttallii, R. Dalhousiæ, R. Falconeri, and R. Thomsoni, were freely shown, and had obviously been cut with a free hand from large specimen trees. Other features of this group were numerous R. Aucklandi crosses, including the superb pink Gloriosa, which is reminiscent of Gill's Glory. The varieties Gill's Triumph, Garnet, and Cornish Cross were all well represented.

Messrs. John Waterer, Sons, and Crisp, Bagshot, were placed second with a very large group across the hall.

The plants, which were grown in tubs, were

Rhododendron argyrophyllum, from the famous gardens at Bodnant, N. Wales
The flowers are lilac-pink and wax-like in texture

remarkably well flowered, and included such good garden varieties as Alice, White Pearl, Starfish, Bernard Crisp, Mrs. E. C. Stirling, Loder's White, Corona, Princess Juliana, and Doncaster. Two new varieties were included, viz., Ragged Robin (scarlet) and Sir John Ramsden (cream and pale pink striped red on the outside of the corolla). The latter received an Award of Merit.

Messrs. R. Wallace and Co., Ltd., Tunbridge Wells, staged an attractive group in which the new Lord Swathling was much in evidence (see illustration, page 285), also Earl of Athlone (scarlet), Pink Beauty, Combe Royal, Red Emperor, Britannia, and the new Mrs. A. M. Williams, which received an Award of Merit.

The Tunbridge Wells group also contained the species R. glaucum, R. orbiculare, and the rare yellow R. charitostreptum made its first appearance at a London show. This is a low-growing species that has received favourable mention in the Edinburgh Notes.

A special prize was awarded to Messrs. R. and G. Cuthbert, Southgate, for a large group of Azaleas, including the floriferous Kæmpferi and its varieties, also the Japanese varieties Hinemayo, Amœna, Hinodegiri, Hatzugiri, and the pink species Vaseyi.

Large groups of hardy garden hybrid Rhododendrons were shown by Messrs. J. Cheal and Sons, Crawley, and Mr. W. C. Slocock, Woking.

One of the best of the new varieties to gain an Award of Merit was R. campylocarpum x Fortunei, shown by Lord Swathling.

Competition throughout all, or nearly all, the classes—numbering about 60—was keen. Most societies have small beginnings. The Rhododendron Society may be small in numbers—it is limited to 25—but its influence is astounding, and it is probably safe to say that no society devoted to one flower has ever carried through a first show on so large and successful a scale. HERBERT COWLEY.

Rhododendron Cupid, a large-flowered hybrid, beautiful clear pink, tipped with crimson in the bud

Shown by Mr. Lionel de Rothschild

The Pasque Flower (Anemone pulsatilla)

This has been remarkably good during the past few weeks, and while I am not enamoured of the Pasque Flower in the rock garden, yet it does not appear to be altogether out of place. Colour and foliage are alike good, and it is certainly very well worth growing. At one time, in Cambridgeshire, there was a large quantity of A. Pulsatilla growing wild, and very fine was the which it made in late March. One w whether it still flourishes, or whether fallen a prey to the "collector," w denuded the countryside of many of ou charming wild flowers and Ferns.

W.

SHORT REPLIES

Devon.—Yes, if you sow seeds no transplant when strong enough to flowering quarters the plants will bloo spring.

J. H.—We should think that P. would answer your purpose.

J. M. G.—See article on "Stopping anthemums," in our issue of April 257.

NAMES OF PLANTS

(*W. J. B., Suffolk*).—1, The Mespilus (Amelanchier canadensi Lonicera tartarica rosea; 4, Hors (Smilax rotundifolia).

Dorset.—We should like to see plete specimen.

Ellen B. Lacy.—1, Magnolia Soula 2, Amelanchier canadensis; 3, Berber

F.R.H.S., Donegal.—Please send mens in separate parcels. The numb all been detached. They have been m in the post.

Lady Clonbrock.—1, Sophora (Ed tetraptera var. microphylla; 2, next w

A. E. Humphreys Owen.—We fe quite impossible to name the Birch o you send a specimen. Please send when fully grown, with, if possible, catkin.

H. B. O.—1, Centranthus ruber; 2, Ulmaria; 3, Alchemilla vulgaris; chicum autumnale; 5, Cardamine hir Spiræa filipendula; 7, Arum italic Geranium Robertianum. Another N closed with these, without further id tion initials, is Daphne Laureola (the Laurel).

GARDENING APPOINTM

Mr. R. MAY, for the past seven ye dener to Mrs. LILLINGSTON, Ulv Leicester, and previously gardener field, Newbridge, Bath, as gardener FEICHMANN, Sitka, Chislehurst, Ke

"Are capitalists overpaid

This is the subject of what promis an exceptionally keen and interesting which takes place between Sir Ern (Chairman of Benn Brothers, Ltd.) James Maxton, M.P., the new Chai the Independent Labour Party, at the School of Economics on May 11th. ous debate on "Communism" betw Ernest and Mr. Newbold, the form munist member for Motherwell, wa cast and attracted great interes Ernest's recent work, "The Confes a Capitalist," which has passed through seven editions in England, and Australia, and been accepted Continental publishers, gives some the lively case which he may be exp put forward on behalf of Capitalis his opponent is recognised as one o tellectuals of the Socialist movemen dexterous and capable debater. Th is one of a series of "Lectures and Lectures" organised in aid of K ward's Hospital Fund, and the other and Chairmen include Mr. Lloyd Geo G. K. Chesterton, Lord Riddell, M Thomas, M.P., Miss Sheila Kay Miss Irene Vanbrugh, Sir William B Mr. St. John Ervine, Mr. Nigel Play others.

GARDENING Illustrated

Founded by W. Robinson,
Author of "The English Flower Garden"

2463—Vol. XLVIII. MAY 22, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

INDEX—Illustrations in Capitals

ie, Yellow Wood *nunculoides)* 291
gus bed, an old 292
s, beautiful ... 297
gia nutans, *on* 297
Austrian ... 292
ions from seed, *r* 293
owers 298
EA, HOW TO 288
EA SHOW— *NOW TO THE* 287
CHELSEA, SOME NEW EXHIBITORS AT 290
Cherry, the Cornelian (Cornus Mas) 299
CINERARIAS FOR THE COOL GREEN-HOUSE 297
Crown Imperials ... 300
Currants, flowering (Ribes) 299
CYCLAMEN IN THE COOL GREEN-HOUSE 292
Daphne Blagayana 292
Euphorbia polychroma 291
GARDEN AT KEW, THE ROCK 293
GARDEN CLUB IN THE ISLES OF SCILLY, WITH THE 294
Gaya (Plagianthus Lyalli) 292
Hot-beds, making ... 298
Lettuces, cultivation of 298
Lilium candidum failing 300
National Carnation and Picotee Society 291
Pardanthus chinensis (syn. Belamcanda chinensis) 300
Peas, garden: A row for late supply 298
Pea, the Argentine perennial (Lathyrus pubescens) 300
Parsleys 298
Pernettya empetrifolia 291
Pinks, old beds of ... 293
Plumbago capensis ... 297
Primula obconica, the poisonous properties of 292
Pyrus Malus floribunda (Japanese Crab) 291
Rhododendron fictolacteum 299
Rhododendron Vaseyi 299
Rosa Hugonis 291
Rose Niphetos 300
Roses, exhibition ... 292
Scilla italica 291
Shrub for butterflies, a 299
Tomatoes under glass —the half-way stage 298
Trees and shrubs, planting 299
Tropæolum speciosum 300
Tulips, lifting 300
Wasps, queen 292

And Now to the Chelsea Show

rd of explanation

R the first time in the long and credit-le history of this journal we failed to pear as usual during the last two . Never before, since the publication first issue of GARDENING ILLUSTRATED, rch, 1879, have our readers failed to this journal regularly week by week, e General Strike caused us to miss the publication of our issues for th and 15th. A word of explanation, not apology, is due to our readers in nnection.

journal is printed and published in the eart of the Metropolis, the one spot of ers where the strike hit hardest. Our readers who are privileged to live in where more natural conditions prevail rdly appreciate to the full the measure dislocation caused by the ock of the Strike on Lon-Millions of people trying to night and morning, from tre to the suburbs and *vice* presented perhaps the most of all the problems of the able past fortnight. In these stances we took the view was our duty to close down. t that National interest re- for a few days at least, ery available facility should ctly reserved for essential l purposes. We are not d to proclaim that we do ard our journal as essential mstances such as prevailed the General Strike. The was occupied with indus-ar and our occupation is al peace. For these reasons r, as we have said, an ex-n but no apology, because w our readers well enough to believe that they will endorse the altogether unprecedented line which we adopted.

The great upheaval has cleared the air and the nation is at work with a heart and a will and a sense of relief such as might be expected of all true Britishers after a crisis such as has not before been experienced.

The Chelsea Show

The great Chelsea Show, which should have been held on May 18th, 19th, and 20th, has been postponed till May 25th, 26th, and 27th.

We are asked to announce that all tickets issued will be available for use without alteration on the adjourned dates.

In this, our preliminary Chelsea Number, we publish a particularly helpful article with plan, entitled "How to See Chelsea," by a well-known expert, and to which we direct the attention of visitors to the world's greatest flower show.

The point that is exercising the minds of most people familiar with the great Chelsea Show is whether the enforced postponement will have any detrimental influence on the quality of the show as a whole. For many years we have watched the resourceful energies of the horticultural trade and have seen it rise to occasions at least comparable in their difficulty with the present, and the result has invariably been that it has proved itself equal to putting forth an effort truly British in its calm acceptance of established facts and in its determination to overcome any difficulty that may arise.

At the same time it must be appreciated that even the postponement of a week does impose a gigantic strain on the ingenuity of exhibitors at such a show. It is obvious that to produce a Chelsea exhibit, even under ordinary circumstances, is no light task. We doubt if the public ever realises all that is involved. Flowers are shown that of necessity have to cover a wide period of time so far as their normal flowering periods are concerned. Visitors to Chelsea would be very disappointed if all they saw there were the exhibits of flowers of the particular season in which the show is held. Many subjects that would, in the ordinary economy of the garden, have been in flower many weeks previous, have to be retarded, and so retarded that they reach just that state of maturity that displays them at their best during the week of the show. Many more have to be hastened in their development, and this also must be so arranged that colour, habit of growth, and general character are not impaired. The public desire to see specimens that

Rhododendrons and water garden

are good examples of their individual species, showing not that they can be produced out of season, but what good ordinary cultivation will give them in the proper flowering season.

To achieve this is, even under the ordinary conditions of a show, no easy task. Months before the date plans have to be made, plants prepared, and the method of showing determined. From the moment the first seed is sown, bulb potted, or plant selected, the series of events is one of constant anxiety. Failures—and they sometimes occur—are very serious matters to a Chelsea exhibitor. It is not too much to say that with some firms a Chelsea exhibit is the centre of an orbit round which the business of the year travels. An exhibit at this, or any other, show is proof positive that the particular firm has the goods and knows how to handle them. Many firms can attribute their rise from small beginnings to their present extensive operations to the ever-increasing circle of patrons gained at shows, of which Chelsea is the greatest, and few, very few, of such exhibits are composed of flowers of the season.

Take, for instance, such wonderful displays of Roses, Clematis, Delphiniums, Begonias, Lilies, Dianthus, Sweet Peas, and dozens of others, all in May, that a rapid mental survey of past shows brings to mind and the Herculean task undertaken by the combined exhibitors to produce such a feast of form and colour will be at once realised. Think, then, what it means to the grower. A burst of sunshine, a temporary heat-wave and hustle is the order of the day. Shading, removal to cooler conditions, but not too much shading or the flowers will lose colour, not too cool conditions or they will receive a check so severe that they may be spoilt altogether; and then, no sooner has the removal been effected than in our variable climate away drops the mercury, down, down, down, until the irritated foreman suspects the reliability of his thermometer, or would do so if he did not find it necessary to re-don his winter overcoat. Back again he marshals his plants to a position in which he can ginger them up with a little artificial heat, waiting longingly for that sunshine that has disappeared for a day or two, for too much heat without light will produce attenuated anæmic specimens that will bear little resemblance to the plant as he knows it. So the weary round goes on—will it be ready? it will; it is doubtful; it won't; it may just do it; it can't; it can; it *must;* just about describes the mental attitude of the grower as the days go on and the great event approaches. That is under ordinary circumstances.

Think, then, of the added anxiety when it is announced a bare six days prior to the show that it will have to be postponed for a week or more. A week in the garden means very little; a week to the grower for Chelsea means a possible disaster. Th throughout all the months has been towards having things ready by a date. If cultivation and timing ha successful, then the plants should be the time the show opens. By the show opens this year nine-tenths of i *should* have been rotting in decay served their purpose in bringing for fore the public what wonderful thi gardens could grow.

Will the grower overcome this se tantalising addition to his worries? *will.* Of that the public can rest and once again the harassed hor will rise superior to the conditi Chelsea this year will prove to be more example of the tenacity of pu domitable energy, and resourceful i without which in his constant stru natural and economic conditions long ago have succumbed.

Writing at a critical time, we a that Chelsea Show this year wil worthy of its predecessors, and th the fact of the transport difficul services attenuated and rendere chaotic by the incidence of the volume of traffic during the Whi days. Chelsea Show has been under difficulties before, but never greater than this year. The tri *certain* triumph—will therefore be t

HOW TO SEE CHELSEA

Advice to visitors, by "Tenax"

WHAT an absurdity. As if, after all these years, everyone does not know how to see Chelsea. That is what many of my readers will say, but it is not to them I offer the following advice.

Every year sees a vast addition to the visitors to this show. The regular habitués are there, and most of them know what to look for and approximately where to find it. In general organisation one show is very much like another; its details vary enormously. It is for the new or infrequent visitor that these notes are written.

The very first thing I would impress on such is that you will find at Chelsea a source of advanced, up-to-date, and reliable information on the year's progress in gardening that no other medium in any other place can provide. The information is there to collect, and if you really want your garden to be the thing of beauty it ought to be, the lessons at Chelsea must be learnt. You will need a notebook and pencil. No matter what excellent feats of memory you may have attained by natural endowment or a postal course, you will find Chelsea too vast and too bewilderingly beautiful to leave many clear ideas on your mind when you emerge from the grounds. A few brief notes made during your tour of inspection will reduce your fantastic and kaleidoscopic impressions to order when you return home. A small notebook ruled in three columns is the more serviceable, or the R.H.S. Diary includes several pages ruled for such notes.

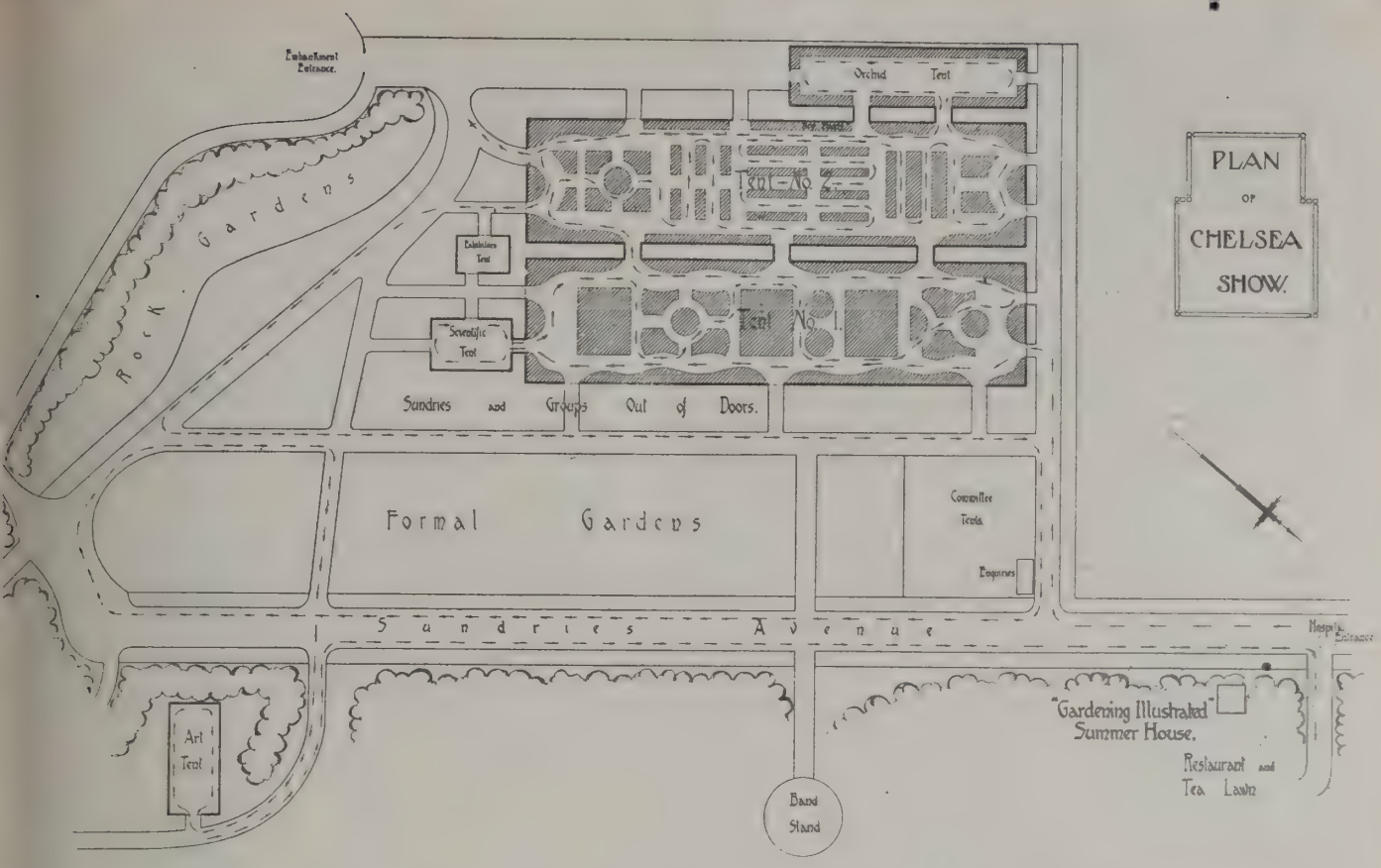
In the first column write the name of any plant that interests you, in the second add the name of the firm exhibiting it, and in the third any other information you may glean about it.

According to the rules of the Society all plants, etc., should be clearly named. Unless you are contemplating ordering at once do not worry a harassed attendant for information you can gain with your own unaided efforts. Remember that by the time the show is over he will probably have answered 10,000 such questions as yours. At the same time he will give ungrudgingly any information in his power that will interest you. He is there for the purpose. If incidentally you can leave him your name and addre *at the proper season* such plants quire do so. You will be doing hin the show generally, and incident self a service by so doing. Glor and commendation are highly de sults to an exhibitor, but his real i in being repaid for his effort sale of his goods. Yo ciation of his efforts is come, but if that feeling re pocket it will be more shows as Chelsea could ne tained except by such supp fore be as modest as you w orders, but order wheneve If you do order, to save complications make a no you have ordered and conf postcard afterwards. I number of errors made orders is very small, but th possible in transcribing have often to be made hu always under somewhat circumstances is obvious. take some means of en your name and address a noted. It is a good policy visiting card and let the copy the necessary partic from; it saves you time also.

Having provided yourse wherewithal for taking your tour. To a novice sound an extravagant terni lation. You will know t you have completed your that it is not. There is condition known to man "Chelsea feet."

Take the accompanying you, especially if your tim In any case you will nev detail of the show. M directed towards letting much as possible in the sh ble space of time.

A picturesque Tudor garden house



are, of course, certain exhibits pear to much better advantage in times than others. Whilst the strong visit the tents. The rock appear infinitely more attractive in ing whilst the background is still in It is surprising what a difference kes. The subdued morning light any crudities in construction and oth to the little pictures formed along where the rock garden exhibits appear, to an inestimable degree. ural aspect of this bank is such that ut the early part of the day the sun l the shrub background and casts a on the more distant portions of the lens. The effect is much better than the day, when the strong sunlight whole area and, by accentuating the its on the rocks and rendering the ntrasts of the flowers (often too pro- ed) too violent, destroys much of the arm and suggestion of coolness that eat attraction of this form of gar-

ormal gardens, on the other hand, ewed at any time. They are usually the two avenues, and one side or the always in partial shade. Sometimes rdens *are* formal in character, but s occasionally forget that the space allotted for the exhibition of a s distinct from a rock garden, and rock freely. In 1925 the formal was generally notable only by its

as the outside exhibits generally are no systematic method of progress ary or even possible. When one is ne tents there are such side shows as , tea, and much-needed rest on one hairs provided by the Society that ak into one's programme. In the s different, and some settled line of on is essential if one is to really see and get full advantage from it. vice is, take one side of a gangway and stick to it. Don't attempt to recross these gangways, especially during the crowded periods. If you do the loss will be your own even though the annoyance you will cause will be other people's.

In the accompanying plan the best and most systematic method of "doing" the tents is indicated by arrows. Arriving at the Hospital Road entrance one should proceed directly to Tent No. 1. In this tent are usually found the largest exhibits. Such firms as Waterer's with Rhododendrons, Allwood's with Dianthus, Perry's with Ferns, Iris, etc., Wallace's with Lilies and Irises, Sutton's, Carter's, and Dobbie's with annuals, and, indeed, all those firms who show largely and boldly are usually to be found here, but there are, of course, exceptions.

Proceeding down the left of Tent No. 1 and inspecting all the exhibits on that side you can, on reaching the end, pass into the Scientific Tent *if it interests* you, as it ought if you have a garden. If, however, plant diseases and their remedies, or scientific culture do not interest you, miss this tent, or postpone a visit until you have time later, and cross over to the opposite end of Tent No. 1 and then systematically look through the groups in the centre. These you can cross and recross until you have completed your inspection. Enter Tent No. 2, and in your progress through it take in the Orchid display in the adjoining smaller tent. Follow the arrows and you will not miss a single exhibit, and you will emerge near the end of the rock gardens. If you can postpone a visit to these till the next morning you need not loiter here, but can go and get some tea, and then wander through the formal gardens in the cool of the evening. If, however, you cannot pay a second visit, then you must take the rock gardens in your stride and pass on through the formal gardens on your way to tea. If you approach the show from the Embankment Entrance the same line of progress will answer the purpose, but you will be travelling in a direction contrary to that indicated by the arrows. In either case you will find that minor alterations have been made in the arrangements, but this applies principally to Tent No. 1, where the arrangements are sometimes slightly altered to suit the requirements of the various exhibitors.

Somehow, at some time, manage to go through the Sundries Avenue. It may seem dull after the floral sections of the show, but it is amongst the sundries that you will find many elements of the cause of which you have been inspecting the effect. GARDENING ILLUSTRATED has a summer-house in the main avenue, and you can introduce your friends (one always finds friends at Chelsea) to your favourite gardening periodical.

KING'S MESSAGE

The King had issued on May 12th the following message to his people :—

TO MY PEOPLE

The nation has just passed through a period of extreme anxiety.

It was to-day announced that the general strike had been brought to an end.

At such a moment it is supremely important to bring together all my people to confront the difficult situation which still remains.

This task requires the co-operation of all able and well-disposed men in the country. Even with such help it will be difficult, but it will not be impossible.

Let us forget whatever elements of bitterness the events of the past few days may have created, only remembering how steady and how orderly the country has remained, though severely tested, and forthwith address ourselves to the task of bringing into being a peace which will be lasting, because, forgetting the past, it looks only to the future with the hopefulness of a united people.

(Signed) GEORGE R.I.

12 May, 1926.

The King and Queen in the enclosed fountain garden at the Chelsea Show last year

SOME NEW EXHIBITORS AT CHELSEA

THERE is to be an unusually large array of new exhibitors at Chelsea this year, many of whom are well known, and will provide interesting displays in the tents, among the specimen gardens, and in Sundries Avenue. Capt. R. Crewdson Day, a prominent exhibitor at the Ideal Home recently, will add to the popular series of rock gardens. Formal gardens, which offer greater scope for variety of treatment, and compete just as successfully for the favour of visitors, will be laid out by Mr. L. O. Buckingham, of Thames Ditton, and Rural Industries, Ltd., of Cheltenham, who will show a 15th century wattle garden in its entirety, containing appropriate plants and a display of wattle fencing and furniture. The planting scheme will be carried out by Wilson and Agar, of Reading.

Orchid enthusiasts will be pleased to note that this section is enlarged by the specimens of Messrs. Sutton Brothers, of Hassocks, whose exhibits at Vincent Square recently have been greatly admired.

A very welcome exhibitor is Mr. Hosea Waterer, who will bring from the famous Woking Nursery, Azaleas and Yews. We anticipate that this will be one of the most notable groups of the show.

Carnation displays will be augmented by the appearance of Mr. J. C. Beck, of Henley Nurseries, and Messrs. Seymour and Anderson, of Nazeing. Mr. Seymour will be remembered as an exhibitor for some years past in the amateur classes.

Messrs. Jeans and Trowbridge, late of the Maurice Prichard Nurseries, Christchurch, and who made their first appearance recently at Vincent Square, will show choice alpines and hardy plants. Conifers will be shown by Messrs. Hollamby, of Groombridge, Lilacs, Trollius, Heliotropes, Salvias, and Roses by Messrs. W. and J. Brown, Stamford, and Tulips by Mr. H. Fletcher, of St. Asaph.

SUNDRIES.

Hop manure, potting materials, and sundries will be shown by Messrs. Wakeley Bros., Ltd., of 71, Bankside, S.E., and visitors beset with the problem of obtaining supplies of stable manure should use this opportunity of getting first-hand information about this well-known substitute.

Joseph Fison, Ltd., who need no introduction to our readers, will also exhibit fertilisers for various purposes. A new fertiliser that will be studied with interest is that just put out by Prices's Patent Candle Co., Ltd., and described as their Complete Garden Fertiliser. The makers of Gishurst Compound can be relied upon to have produced a new aid to gardening that will become very popular. Readers preparing for all-weather tennis should see the model hard tennis court which will be laid out by Fernden Fencing Co., Guildford, together with specimens of garden furniture. We have recently seen hard tennis courts in the Crowborough district laid out by this firm that are giving every satisfaction.

Pottery is represented by three n tors—H. T. Pitt, of Finchley, th Potters, and D. and H. Wren, o The latter will bring a potter's make pots to any shape requir hand-made pots are in a wide rang and texture. All are done in ston each pot holds water without ar sweating or porosity even with Primitive examples of pottery of interest will be shown. The E Guild, whose garden ornaments a for their excellent taste and cra will also have specimens of their view.

Two new sprayers will make th ance. The "Con-o-mist," made b Ltd., is a pneumatic hand-spray once pumped up, becomes autom The force of spray can be regula the requirements of the most deli Made with a solid copper tank fittings, it is suitable for all spr tures, and is said to be a great ec time and liquid. The "Sedgwick made to fit any ordinary-sized w and its rubber hand-bellows will th tinuous jet for upwards of 12 fe one nozzle, which is adjustable fro jet to a fine spray. It is usef disinfecting purposes.

The "Heel" and other greenh and apparatus will be shown b Bank Iron Co., Ltd.

It is safe to predict big and

; for the "Little Wonder" hedge-
o be shown by J. Hansen, Ltd.,
iterally, has made child's play of
pping. A hedge 10 feet high can be
the ground by turning the wheel of
ie labour-saving machine.

Olliset" will be very popular with
s or anyone doing light gardening
s. It consists of a water-can (with
spout, rose, and lid), trowel, hand-
ss shears, and wash-leather. The
enamelled in brown and is supplied
er-bound canvas cover. This is the
of the Ollis Portable Garden Set

C. Associated Industries, Ltd., are
—(1) Chequerboard fencing, a new
f light fencing of woven wooden
hin a stout frame. (2) Willow-
cings, an entirely new adaptation of
en osier, but having a more rustic
aps artistic appearance. (3) New
sier shelters and garden furniture.
nalet" gives just the comfortable
uired for four people and a tea
its overhanging eaves give shade
or those hot summer days when
ath of air is of importance; the
" is a quaint octagon shape and
many windows, and the whole thing
nd all—folds perfectly into an
gly small space.

ell-known "Garden City" and
vania" lawn - mowers and
" sprinklers will be shown by
loyds and Co., Ltd., Letchworth.

w Retro-cultivator will be demon-
Simar Rototillers, Ltd., who will
their well-known Rototiller now
ployed in the orchards of this coun-
road.

end and Sons will make an attrac-
y of horticultural buildings, rustic
uses, and furniture. Their old
le rustic arbour and Canadian log
rtain to be much admired.

garden label will be introduced by
hrysa Permanent Label Co., of
. It is known as the "Helichrysa"
egard to its lasting and legible
and consists of an embossed
name-plate held in a galvanised
r. It was originally designed to
ng-felt want by Mr. H. T. Weeks,
a most delightful rock garden at
near Tunbridge Wells, which we
lustrate and describe in the near

NOTES OF THE WEEK

National Carnation and Picotee Society

We have received a copy of the schedule of prizes to be offered by this Society at the two exhibitions, one on Tuesday, July 13th, at the R.H.S. Hall, Vincent Square, S.W. 1, and the other at The Carpenters' Hall, Throgmorton Avenue, on Wednesday, July 21st. The schedule is very comprehensive, and we are pleased to see that there are prizes for flowers shown in vases without collars in open classes and for amateurs. It is a step in the right direction to find that exhibitors are debarred from showing the flowers with collars, which was rigidly observed in days gone by.

Rosa Hugonis

This Rose was the first to open its flowers with me this year, this occurring on April 22nd. Others on the point of bursting remind us of the wonderful beauty of this family in store during the coming months. I have never been quite satisfied as to the hardiness of this Rose, for although it grows freely large pieces unaccountably die away each year, whereas other surrounding species never suffer. E. M.

Yellow Wood Anemone (A. ranunculoides)

A pleasing and most distinct little Windflower is this, which is now blooming freely at the foot of a sunny wall where it has been established for many years, striking a distinct note as it appears among numbers of the blue-flowered kinds. An Irish gentleman, seeing this one day, informed me that he had great thick masses of it growing beneath his flowering shrubs. E. M.

Euphorbia polychroma

A very attractive plant at the present time is this, which grows about 15 inches high, each plant forming a shapely rounded mass and each stout growth terminated by a rich golden corymb of bloom. A colony of this plant may be seen for quite a distance, and the effect is that of a mound of golden bloom. E. M.

Pernettya empetrifolia

Those who are looking for a dwarf and pretty shrub for clothing rocks, low walls, and banks should make a note of the above. It has small, thick, dark green leaves—which remain all the year—and is of a prostrate habit of growth. It comes into bloom in April, when little clusters of waxy white, pink-tipped flowers appear quite freely on all sides after the manner of the Arctostaphylos. I have grown it now for several years, and although it flowers freely I have yet to see the berries. G. M. S.

Scilla italica

Retaining its beauty for a longer period than some of the Squills, this charming South European bulb should be planted more freely. The flowers, borne on 10-inch stems, are of a beautiful pale blue with stamens of a deeper colour and deliciously fragrant. It is one of the most satisfactory bulbous plants I know for naturalising in meadow grass, but it does not object to partial shade in woodlands. A southern aspect, however, is preferable with shelter from north and easterly winds. There is much to be said in its favour for planting in the rock garden, where its early flowers are appreciated in advance of the volume of other blooms which appear during late April and May, this charming Squill being in full bloom by the latter weeks of March and effective throughout the early weeks of April. It is, however, seen to the greatest advantage when planted in good-sized colonies in the grass; indeed, it is remarkably beautiful so grown, and increases freely in this way even in positions baked by sunshine. A large colony here is delightful, and when occupying a slope facing south, the whole is a sea of soft blue arranged as if by its own natural increase in a most artistic manner. SUSSEX.

Pyrus Malus floribunda (Japanese Crab)

One of the most graceful and beautiful flowering Crabs we possess is the above, which comes into bloom during the latter days of April, the slender drooping branches at that time being laden with rosy-red buds and pale pink blossoms. Trees, both large and small, are remarkably effective, whether isolated on lawns or grouped in the rear of other shrubs. A group of three or five fully-developed trees 25 feet or so in height standing over grass, but free of all other vegetation, is a very imposing sight. The effect is greatest when only part of the flowers is fully open, the brighter colour of the unopened buds adding a richness which disappears when the tree is in full bloom. It thrives in any ordinary soil. For cutting it could scarcely be improved upon. Few small flowering trees have gained greater popularity than this in all classes of gardens, and although there are other varieties with deeper-coloured flowers the typical tree surpasses them all in point of grace and charm. E. M.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Gaya (Plagianthus) Lyalli

I SEE that a correspondent in your paper talks of the above plant as if it were not at all hardy, as he recommends it for a greenhouse or south wall or favoured climates, such as Cornwall and Devonshire. I may say that it flourishes in this very inclement climate and appears perfectly hardy on an east wall. I know of a plant 20 feet high on a south wall in Gloucestershire, where it has been for some years.

GUY FENWICK.

North Luffenham Hall, Stamford.

—— So many gardeners and amateurs have learnt to rely for guidance from the columns of this journal that one regrets to read such misleading advice for the treatment of this beautiful tree as that given by a correspondent on page 272. We are there recommended to cultivate it as "a greenhouse shrub," and are told that it would succeed in Cornwall if planted against a south wall. It is a native of the South Island of New Zealand, and, in fact, has proved itself as hardy in many parts of Great Britain as the common Bird Cherry. Being of rapid growth and attaining a stature of some 30 feet it could never be seen to advantage in a greenhouse of ordinary dimensions. It is one of the very few deciduous trees of New Zealand, and it is remarkable that, although its leaves are large and of soft texture, the foliage remains uninjured when exposed to buffeting by strong winds. The leaves of the typical plant are glabrous, but there is a variety, G. Lyalli ribifolia, in which they are downy.

HERBERT MAXWELL.

Monreith.

Daphne Blagayana

In a note on Daphne Blagayana, in GARDENING ILLUSTRATED, on page 275, the directions for its planting state that it should be given shade. While D. Blagayana can be grown well in shade, it is not necessarily a shade-loving plant, and I have seen it many times and have grown it successfully in full sun. It is a lime-loving plant, and some authorities recommend a sunny place for it. In nature it is frequently a moraine or scree plant. Many who experience difficulty in growing it will find that laying plenty of stones on its branches will satisfy it and induce it to grow and flower well. Its creamy-white flowers are very fragrant.

S. ARNOTT.

The poisonous properties of Primula obconica

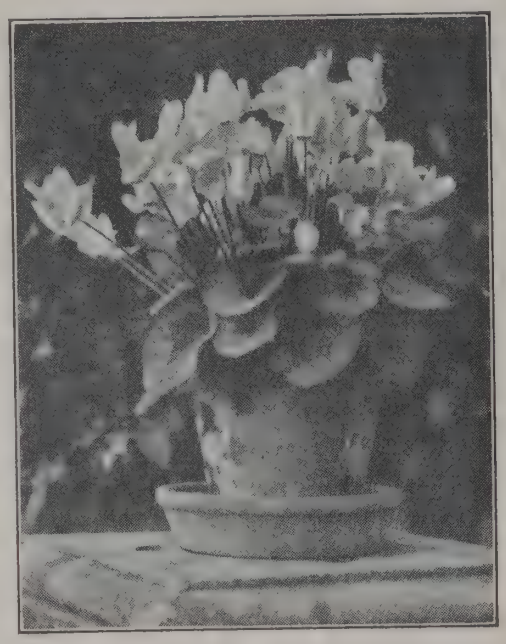
To the many reports on the above which have appeared in GARDENING ILLUSTRATED I venture to add my experience of the above. Finding that an irritating rash appeared on the back of my hands after handling this Primula, as a protection I tried wearing gloves in so doing. Next my eyes became affected. I had to give up reading and could not bear a strong light. I stated my case to a doctor, who said I was suffering from "gout in the eyes." He treated me for this complaint and kept me in a dark room for a fortnight or three weeks, at the end of which time I was no better. I requested him to accompany me to an oculist, who, having examined my eyes, decided that I was not suffering from gout. He inquired what plants I had in my greenhouse. I mentioned the P. obconica, etc. He firmly stated that I was suffering from contact with this plant, exactly as described by Mr. Biddiscombe. He and the doctor had rather a heated argument on the subject. He advised throwing away all the plants and using a prescription, both of which I adopted, and became perfectly well in a few days. If I remain in a room where these plants are, in a short time my eyes become affected.

A. I. PRESTON (Major).

Swainston, Kilmessan, Co. Meath.

Cyclamen in the cool greenhouse

I WAS interested in your recent note upon the after-flowering treatment of Cyclamen, because I had been accustomed to ripen off these plants on a top shelf in the greenhouse. Last summer, however, I stood the pots in a shady border out of doors, taking care that they never became dust-dry. This treatment proved very successful, and the plants have never before carried so many



Cyclamen White Giant from seed

blossoms and such abundant and healthy foliage.

The specimen, White Giant, of which I enclose a photograph, was obtained as a seedling from Messrs. Blackmore and Langdon three years ago. When it was taken, the plant had been in full beauty for over six weeks.

There are other plants which have been nearly, if not quite, as good, but some are now past their prime, and the pure white shows up best in the camera. L. L. Y. S.

Boughfield Cottage, Sidmouth.

An old Asparagus bed

In regard to "planting Asparagus," referred to in GARDENING ILLUSTRATED, p. 266, I notice these words, "one ought not to be dissatisfied if, after 10 years, the roots show signs of weakening." I have lately been shown an Asparagus-bed probably 100 years old which, I was assured, was as good as ever. The owner has known it for 60 years, and my own bed is at least 30 years old. During the war, and probably since, it has not had sufficient manure, and has been too freely cut the last few years, and has shown signs of deterioration in size and flavour. Last autumn it was much more heavily manured and treated with kainit spring, and now shows distinct sig covery.

I should be glad if any hints wh assist the improvement and to kn the general experience has been in r the length of life of an Asparagus-b

T.

Austrian Briars

I should like to support the ad your correspondent, "A. B.," f beautiful Roses. They seem to be little grown, especially when the colours are taken into considerat each side of that old mansion, Wynnyates, there are two glorious Briars, on the one side a copper on the other side a yellow, and to see t plants ramping over that old hous full bloom is a sight not to be forg one containing all the sunset rays, fire, and the other, as I consider, th purest pale yellow that I know situation suits them, for wheneve seen them at the end of May or in e they have been a mass of flower. I a journey to see those Roses only, it is remembered that in addition there is that renowned old-world well it is doubly worth while for an flowers and gardens. The family dence there much more than in old when in residence one cannot go historic old house, but on Wedne Saturdays the gardens are ope comers, and I love them so well and take all my friends who visit them.

Exhibition Roses

In your report of the spring sh National Rose Society you make th "Could anything have been more than the six blooms of the Rose, M Hobbs?" I am one of those who that a box of 24 or 36 exhibition the finest and most attractive way the Queen of Flowers. Many lov Rose are quite tired of the weedy s the loose and tumble-down varieti the shows much prefer to see a sm of fine blooms than the "barrica occupy so much room. Going bac we find what I thought quite a sma exhibitors in a National Rose membership of about 750—now 14,000 members—amateur exhib quite few. In this year's schedule the classes for specimen blooms than ever. This is not encou the small grower. To make an any size in the so-called decorative quires a very large number of pla from, and only a very few are able I hope to see again the exhibits of for amateurs (and nurserymen), wh be the blue riband of the Rose wor

Market Harboro'. G.

Queen wasps

May I once more sound my a of warning in connection with que Already, in the third week of begin to be numerous, and ove have been accounted for in these g cannot be over-emphasised that growers ought to destroy wasps opportunity. The annual damag these dangerous insects must be and every queen killed in spring m less to contend with later in the s present queens are heavy on the they are easily knocked down. quent vineries in which the Vi bloom, they appreciate the moist fernery, they may be attracted menting materials of which h made, Apple-trees on south wal

m, are certain to yield a few, and bedding plants seem, somehow, also t them. It is well worth while to queen wasps and to destroy the nests whenever these can be found.

W. McG.

'he rock garden at Kew

who has at all times derived much and interest from the rock garden at eel it almost a duty to any readers have been misled by " X.'s " letter sue of April 24th, to try and explain, ain extent, why flowers are lacking ion of that particular rock garden at nt time.

visit I paid to Kew a day or two to that of your correspondent " X." e, was a little disappointed at the of bold sweeps of flowers, but the as very apparent. Throughout the nonths extensive alterations have de at that end of the rock garden tant from the Cumberland Gate. hese alterations have been in pro- is safe to presume that the plants d and stored in boxes of soil or of until the pockets on the recon- area were available. These plants, ing replanted, would, in all pro- be trimmed up and possibly divided. ld mean, of course, that their season ing had been retarded, and when ." and myself saw them in the eek in April they had not become y adapted to their new quarters to ny quantity of bloom. I venture to in the space of a year or two, when have lost that new appearance and e plants have become absolutely d, there will be treasures in bloom and April on Kew rock gardens as on other rock gardens, albeit that space is used for plants of botanical one will never see the very large Aubrietia, which are often the main an amateur's rock garden.

" X." should extol the glories of h rock garden does not surprise me st, for it is truly a source of delight k garden lovers, but, in all fairness I think it should be pointed out that rock garden at Kew were con- stone for stone, in a correct repre- of that at Edinburgh, there would vast difference in the results, for spheric conditions prevalent at Kew means favourable to the majority

uly sorry that " X." was so greatly ted, but in consideration of the ad- ditions I do think we should ap- he fact that the authorities at Kew their best to cope with the difficul- arise. " An Old Kewite."

he writer of the article in your issue h, page 256, exactly voiced my of the rock garden at Kew when I about four weeks ago. I intended write and ask why this scrubbing- k and paths and the pricking out of s, especially of Aubrietias and Saxi- as been adopted of late years, not Kew, but at another very large and t rock garden which I frequently which, as it happens, was built by firm as my own, which is not to be in size. At this latter rock garden gone one better (or worse) than at they must have taken soap and a scrubbing-brush to get the rocks paths as clean as they were. Is a ten intended to look natural or not, there be masses of colour, as there at this time of year, if every plant into tiny morsels planted out like board?

" Bosmere."

Border Carnations from Seed

THERE is nothing more interesting or profitable where bloom for garden decoration or cutting is required than growing these plants from seed. Two things are most important to have success, and one is to obtain the best of seed from a Carnation grower who hybridises and specialises in these plants. Cheap seed from any source should be avoided. The single flowers are also acceptable for the mixed bowl. All scented varieties should be taken special care of. Plants grown in this way often produce 50 to 100 blossoms the second season from raising.

Sowing the seed.—To obtain the best plants that will form small bushes and produce huge quantities of bloom the seed should be sown during the second or third week in March and germinated in a warm greenhouse or frame. Shallow pans are the best receptacles to use, and these should be well drained and filled with fine, light, gritty soil that has been passed through a fine-meshed sieve, placing the roughest portion over the drainage. The seeds should be sown on a firm surface 1 inch apart, covering with the same material to the depth of ¼ inch, levelling, and watering with a fine-rosed can. The pans should be shaded and placed in a temperature of 60 degs. to 65 degs. In 10 days the young plants should be above the surface, the shading removed at once, and the pans placed close up to the glass. Keep nicely moist and grow on until large enough to prick off. This should be done into boxes 3 inches to 4 inches deep containing the same soil as previously described. Three inches apart is a good distance to prick off the plants. They should now be returned to the shelf, where they should remain until they are nicely established in their new surroundings, when they may be introduced to a cooler temperature and gradually hardened off previous to planting out during June or July in their flowering quarters.

Planting out.—By midsummer, when the Carnations are to be planted out, the flower-beds will all be occupied, so a site in the kitchen garden should be prepared for their reception. Carnations like deep soil, but it should be understood that unkind subsoil should not be brought to the surface. This should be kept in the bottom and enriched, and if on the heavy side lime should be added. The bed should be prepared when the plants are pricked off, and the soil will become settled by planting time. If possible showery weather should be chosen for the planting, and if the plants are allowed to be 15 inches apart in rows 18 inches they will have ample room for development. Firm planting is essential, and the bed should be well trodden. Occasional watering if the weather is dry, and the continuous use of the Dutch hoe to keep weeds down and the surface open, are all the plants will require. By the winter strong plants will be the result, and if allowed to bloom in these quarters so much the better. There will be no fear of loss, and the plants will be well rooted and will give a splendid return during the following summer. Seedling Carnations grown in this manner are not so liable to be attacked by the Carnation-fly as those grown later on in the season. Soot and lime are at all times beneficial to Carnations and will also keep away slugs, leather-jackets and other pests if scattered over the beds occasionally.

W. E. Wright.

Stockton House Gardens, near Rugby.

A portion of the rock garden at Kew, including the bog garden after reconstruction

The site of the old dripping well

Old beds of Pinks

Pinks when first set out are sometimes put in groups of two or three in a border and left. In a year or so the little cluster of plants has become a bed, possibly taking up room that should be given to other plants. In course of time, if still undisturbed, the flowers are not so fine as those in earlier years, and, what is more, the soil about the roots becomes sour, and canker sets in. It is always better, after Pinks have ceased to flower, to take what cuttings are needed, do away with old clumps, well digging and liming the soil they have occupied. Flowers from young plants are always finer.

Woodbastwick.

WITH THE GARDEN CLUB IN THE ISLES OF SCIL

MEMBERS of the Garden Club, whose headquarters are at 9, Chesterfield Gardens, Mayfair, make occasional excursions to the delightful gardens of England. Visits are usually confined to gardens in the Home Counties, but during Easter a visit was made to the Isles of Scilly.

One reason for selecting these Islands was that we might see the world-famous gardens at Tresco and at the same time have an opportunity of seeing methods of cultivation of Daffodils, Arum Lilies, and other subjects for the cut-flower market.

The Mesembryanthemums and Sedums clothing in careless profusion the cottage walls in St. Mary's were the source of interest, and one might almost say envy.

by Miss Phyllis Lambert, a member Garden Club party :—

What does this conjure up in the the "man or woman in the street daily admires the early spring flower add such a welcome note of colour to city streets?

"The Land of Lyonesse" once see soon forgotten, being, in every sense, apart, and having an alluring call who love the open spaces and wild c an "uncivilised" coast. Frost and not touch with their icy fingers the

The "Scillonian," owned by the growers of the Isles of Scilly, which has replaced the "Peninnis," is seen entering Penzance Harbour, and the view on the left is of Penzance as the little harbour is approached

We travelled to Penzance on the Cornish Riviera express, leaving Paddington at 10.30 a.m. and arriving at Penzance, after an enjoyable run through delightful scenery, at 5 p.m. those who are not aware of it may be surprised to learn that this is the longest non-stop run in the world. Such is the proud boast of the Great Western Railway.

On arrival at Penzance cars were waiting to convey the party to Ludgvan Rectory, where the Rev. A. T. Boscawen welcomed the party in his interesting garden. This garden is remarkable for rare specimens of tender shrubs, including Leptospermums, Boronias, Euphorbias, and Indian Rhododendrons, which flourish as in their native habitats. Notable were Telopea oreades and Anopterus glandulosus, the latter, a beautiful but tender shrub from Tasmania, was illustrated in our issue of May 1st.

We were hoping also to have visited the gardens of Col. Bolitho at Trengwainton, where Embothrium coccineum, a well-known shrub in Cornish gardens, attains unusual dimensions, but time did not permit, and early next morning we left Penzance on our voyage to the Isles of Scilly.

The crossing from Penzance to St. Mary's has an evil reputation, as so many passengers can bear witness. Happily, the modern steamer, "Scillonian," is a great improvement on the old boat. Within three hours of leaving Penzance we were close to the Isles of Scilly, a little cluster of small rocky islets set like teeth in mid-ocean. The islands are so grouped that they afford considerable protection to each other, and they are so conveniently arranged that any one island may be reached by motor-boat in half-an-hour or less from St. Mary's.

At the time of our arrival most of the Daffodils were over. There were, however, a few late fields of Horace, and at Tresco we saw some really fine blooms of the red-eyed Firetail, which bids fair to be the market flower of the future.

We were particularly fortunate in making friends on the Island of St. Mary's.

One evening Mr. C. J. King, the noted sea bird photographer, who resides on the Island, gave us a lecture on sea birds and seals of the Isles of Scilly. The lecture was remarkably well illustrated by lantern slides prepared from direct photographs. The pictures of puffins, cormorants, shags, razorbills, and other sea birds on and around the Island of Annet were extremely good. One of the most striking pictures was that of the tern in flight.

Under the guidance of Mr. Gibson, an artist and antiquarian of St. Mary's, we were taken for an enchanting excursion on the downs around the Island, in which our guide drew attention to stone caves, tumuli, and other burial places, signs of early inhabitants, presumably of the Stone Age.

We were also indebted to Mr. Alec Gray, who showed us over Mr. M. Watt's nursery at Parting Carn, where Narcissi, Arum Lilies, and Stocks are grown by the acre to supply the cut-flower market. On this farm that handsome shrub Pittosporum crassifolium is used as a hedge plant; it is also so employed at Tresco.

Two visits were made to the enchanted garden on the Island of Tresco, when Major A. A. Dorien Smith, the Lord Governor of the Isles, very kindly conducted the party round the gardens.

By the way, Tresco has been aptly described as "Kew with the glass off."

For years past we have seen plants from Tresco at the Chelsea Show, and we have also seen many treasures at Kew from these famous gardens.

We found the islanders very quiet and friendly. That they are law-abiding is borne out by the fact that there is only one policeman for all the islands, and he, a labourer by day, takes on the *rôle* of constable only in the evening.

HERBERT COWLEY.

The following impressions of our visit to the Isles of Scilly have been kindly written

islands, nor do the cutting winds find their way from the east. B abound on the sheltered slopes, th being protected from the Atlantic hedges of Veronica and hurdles. H harvest of blooms, which, gathere willing hands of the helpers, is sen fully and well by boat and rail to o towns.

In the heart of Tresco, one of t islands, flourishes a garden bel envied by many a gardener.

Trees and plants seem vigorously their life there; as though in gr those at the Abbey who own and t the blazing riot of colour met wi quently is a joy-giving sight.

St. Mary's, Tresco, St. Agnes, Martin's are the largest islands. inhabited by home-like and happy being always up against Nature, l reliance.

From their early youth the peopl farers, otherwise communication be groups of islands and the outer wo be infrequent. It is a common si the villagers, old and young, women, launch their village boat a ing it, embark for another island, enjoy some rural treat.

The botanist, naturalist, and an to say nothing of the artist, can fin interest in this region.

Annet, a particularly rocky isle, the home of hordes of many spec birds, who enjoy an almost unmo there.

Energetic strangers may penet landing from a small boat upon slip deters many, those eventually landi to return within an hour by ord authorities.

The Scillonian coast is roc buttresses of granite rising as a against the ocean tides. Many o lightful bays (some fringed by a rib whitest sand) are strewn with

THE ISLES OF SCILLY

2. In the tropical gardens at Tresco.
Potato grower in the little island of St. Agnes.
ee Ferns from New Zealand in a wood at Tresco.
rocky headland, St. Agnes.
avenue of tall Cupressus macrocarpa leading to the gardens at Tresco.
7. Fields of double white Stocks, St. Mary's.
8. Two members of The Garden Club party find a lost child in the Abbey Gardens at Tresco.
9. Echiums from the Canary Islands convert the walls of Tresco into a mass of blue and purple flowers.
10. The flowering of a handsome specimen of Dracæna indivisa.

witness to the awful severity of the winter's gales.

Near these headlands one can see numerous signs of ancient burying-places, sometimes marked by stones, relics of the barbaric tribes who peopled Scilly in bygone days.

For glorious sea and sky scapes the artist will not lack here, nor will he sail away without some sketches of the quaint corners of the harbours with their small craft.

The crossing, though at its best trying to some, is far more possible nowadays, on account of the s.s. "Scillonian," a new boat provided by the islanders themselves, which will bring the voyager safely back from his adventures to the port of Penzance.

REMINDERS FOR THE WEEK

Southern and Midland

Kohl Rabi

This is a very useful vegetable during the summer, when Turnips are apt to become hot and stringy. The seed should be sown in drills 15 inches apart and the plants thinned to 9 inches when large enough to handle. The bulb has a peculiar flavour pertaining to the Turnip and Cabbage.

Beet

Now is a good time to sow the main crop, and no better site can be found than that from which the latest crop of Broccoli has been taken. This should be dug over without the addition of animal manure, and if the soil is poor it may have a dressing of superphosphate worked into the surface previous to sowing the seed. This is best if dropped three seeds at every 6 inches or 8 inches along the drills, which should be 1 inch deep and 15 inches apart.

Brussels Sprouts

Plants raised under glass should now be fit to plant out in their permanent quarters. The soil should have been previously prepared by trenching and incorporating in the bottom a good supply of manure. Two feet 6 inches between the rows is none too much, while the plants should be not less than 2 feet from one another.

Tomatoes

This is the usual time for planting Tomato plants in their fruiting quarters in cold houses. It is well not to give too large an amount of soil at first as the plants do far better and are more healthy when occasional top-dressings are given. Care must also be taken not to over-water the plants. Plants for outdoor culture should now be large enough to place in a cold frame. Plants setting their first truss should be fertilised each day and must not be allowed to become dry or many of the blooms will drop. The same applies to plants that are grown in a large quantity of soil which is kept continually saturated.

Raspberries

By this date suckers from the roots will be throwing up in abundance, and three or four of the best should be selected from each stool for next year's stock and the remainder pulled up in their young stages. Where the plants have not received their summer mulch this should be given at once.

Spraying

It is a mistake to allow fruit, Roses, or any other kind of tree or plant to become infested with aphis or other pests before spraying is resorted to. At the first appearance of these enemies a good insecticide, such as Abol or XL All, should be used without delay.

Peaches

No fruit suffers more from dryness at the root than the Peach, whether grown under glass or in the open. A properly prepared border cannot be over-watered. Disbudding and thinning of fruit should be continued when required.

Lawns

Tennis and other lawn games will now be in full force. Constant rolling and mowing are conducive to healthy turf, and if this is at all open a dressing of good clean sand swept well in will do much to help matters.

Cuttings to take now

It is not generally known how easy it is to increase stocks of Arabis, Aubrietia, Alyssum, Iberis, and other spring-blooming plants from cuttings inserted about this date. Growths averaging 3 inches in length are most suitable, and these should be inserted in cold frames or under handlights in beds of sandy compost, keeping close until rooted.

Cyclamens

Seedlings raised from an autumn sowing should now be fit for the flowering pots. Five-inch pots are to be preferred, and the compost should consist of three parts good loam, one part old rotted cow manure, with a liberal supply of sand, old mortar-rubble, or ground oyster-shells. Pot firmly and grow the plants on in a cold frame facing north.

W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Vegetable garden

Those who still follow the wise old system of sowing a bed of Onions out-of-doors will now require to devote some attention to the seedlings. Onion maggot may be troublesome, and frequent dustings of soot will go far toward keeping this pest in check, while a light dressing of nitrate of soda will hasten the young plants past the critical stage. To maintain a regular supply of Peas careful regulation of the sowings is desirable, although, of course, abnormal weather conditions—too hot and dry or too cold and wet—may upset our calculations to some extent. Cauliflowers can be freely planted, and those in frames or under handlights will be benefited by a top-dressing of some good material when the plants cannot be earthed-up in the customary manner. Saladings, Carrots, Turnips, and the like in frames must be freely ventilated, and watered according to their requirements. A few lines of French Beans can be sown in a warm border, although, frankly, it is a speculation. Horn Carrots do not need much, if any, thinning, as the roots can be drawn for use when of a profitable size, and, by regular drawing, room is left for the development of the remainder.

Hollyhocks

Seedling plants of the current season's sowing may now be planted out, mulched, and watered until growth is visible. The majority of these seedlings will bloom during the summer, and young plants are always more reliable than old stools which may have survived the winter, these, very often, falling a prey to the Hollyhock fungus just as the spikes show.

Biennials

Many make the mistake of delaying their sowings of biennials until the season is further advanced, but these (and perennials) may be sown early in May. This gives the seedlings an opportunity t plenty of roots when the time arriv they must be transferred to their fl quarters.

Fruit trees

Young fruit-trees which may ha planted in late autumn or early wint now to be headed back so that the each may be furnished and the futu tree, to some extent, assured. N however, if rather large specime planted, the necessary heading bac be done in the nursery, and such t not require the drastic treatment smaller trees. In the majority of removal of the unripe tips will suff large trees are in question. Such tr not to be permitted to bear fruit in following planting. By allowing fruit the future of the tree is prejud the case of established young trees i necessary to thin the fruits, for su being vigorous, do not cast superfluo as old orchard trees generally do.

Details in the vineries

Where there are several vineries always plenty to do at this time. tying down, and the removal of s growths require constant attentior down must be carefully done, for th are brittle, and they are easily spli snapped. I think it better to remov any sublaterals which form below t and, if possible, to leave two leaves above the bunch. Those who know have no difficulty with the thinnin berries, and, as a rule, can com work at a single operation, alth course, a few small berries may a have to be removed. In thinni berried varieties, such as Gros Colm Maroc, and the like, quite two-thir berries must be cut out of each bunc thinning is completed stimulants given with a free hand. Close at fr to 5.30 p.m. (summer time) so that mometer may be helped by the su saving of fuel.

Fernery

Ferns are now in full growth an some assistance in the way of liqui The old-fashioned brew from the believe, much more valuable for F any chemical fertiliser in solution. of sheep-droppings put into a coars immersed in 40 gallons of soft wate the best aids to Fern-growing whic Any Ferns which require repottin attended to at this time. Save for pieces, pots of 7 inches are large e the majority of Ferns. Seedling of the commoner kinds, as well a Pterises in variety, are easily growr ful pieces without much trouble.

Fine foliaged plants

Those who may be making a grad to the cultivation of a few of the leaved things of former days will Dracænas very useful and not too e their requirements. Crotons, too without value, and small plants pots can be very effectively employe there are a few old plants a supply is always available, and with bottom heat these speedily root a quickly grown to a servicea Sanchezia nobilis variegata is a plant; so, too, are the Marantas a discolor. Plants, nowadays, are merely to embellish the stove, the available for room decoration, a pieces, quickly grown, have supp old specimen plants.

W. Mc

Mabie Gardens, Kirkcudbrightsh

ıerarias for the Cool Greenhouse

have been making our first trial of ese easily-grown plants, and have en delighted with the results. At ent of writing (April 27th) we have e plants all raised from seed, each large trusses of rich, velvety blooms shades of blue, purple, and ," besides others with blue or ırgins to their white petals. eatment, with some syringing with er in their earlier stages, seems to sfied their unexacting needs. Your "A.," issue April 24th, page 269, opportunely, also, for us. me of these plants that I perpetuate, and had been find any authority for the at you advocate and by kers for next year's bloom- s may be obtained. The m full of vitality and are ew growth at the base of ıves. We have had prac- ıo green-fly this year, we have never been able the house completely of fly pest. L. L. Y. S.

eld Cottage, Sidmouth.

at the Cineraria is still a greenhouse subject is the number grown each by the admiration a well- oup of plants in flower ıws from onlookers. The e brightly coloured and ıig trusses high above the The growth is dwarf and making them useful as ts. Add to this the fact ıloom in winter and early ıd the reason for their will be apparent.

ıay be sown in boxes or any time during April or e a compost made up of loam, one part each and sand, passing the whole fine sieve before using. Use crocks, and water the soil before seeds, which require only a cover- compost, say enough to bury them ep. Cover the top of the pots or a sheet of glass to conserve the also shade from the sun. When gs develop three leaves transplant y to small pots and remove to cold ll shading from strong sunshine. oots fill the small pots transfer to until the flowering size is reached 6-inch pots. About October re- to greenhouse, placing near the ive liquid-manure twice weekly plants are in flower. A steady e of 45 degs. or 50 degs. is advised the winter. No special difficul- connected with the culture of and healthy growth should result e directions are carried out. The lesome feature is that the foliage its seems to offer a special attrac- n-fly. Once these pests get a hold ply with surprising rapidity, and the plants look sickly. Examine sides of the leaves, and as soon as ire seen vaporise. Do this when in the frames. Two fumigations lays of each other are usually suffi- stroy all insect life and do not in arm the plants.

ed hybrid sorts offer a good choice of colour, together with hand- ned blooms. They are a fine class ers and present no difficulty as re- ring. The blooms are in various arlet, white, pink, blue, light blue, crimson, and fringed. There are also one or two double forms.

In C. stellata we have a class known as the Star Cineraria, with pretty sprays of flowers in pleasing shades. The variety is very popular and can be recommended as a good grower. Hybridists are always at work, and rarely a season passes without the introduction of some new colours. L. J. D.

A new Cineraria of intermediate habit

In this strain of many colours the leaves and flowers are about midway between those of the large-flowered and stellata classes

Beautiful Balsams

In sounding the praise of these attractive greenhouse annuals I am faced with the fact that the mere mention of the name of Balsams arouses little or no enthusiasm in the minds of the average owners of greenhouses. Their unpopularity is due, I think, mainly to the flowers being quite useless for cutting, and, therefore, owing to this handicap so many pass them by. Last summer, when visiting an exhibition, I noticed three plants of Balsams staged for competition. They were of good size, being in 7-inch pots, full of waxy-looking blossoms, and excited quite a lot of admiration from spectators, some of them having a greenhouse, yet, apparently, knowing little of so charming a flowering plant. Seed can be sown in pans of light soil in the warmth of a greenhouse in February or March, and finally given pots from 5 inches to 7 inches if so desired. Balsams delight in a rich compost consisting of old loam, leaf-mould, and cow dung, and thrive in a somewhat humid atmosphere.

TOWNSMAN.

Plumbago capensis

If there are any old plants of the above on hand not likely to be required either for the greenhouse or as pyramids in the flower garden they can be utilised for the outer part of raised beds, and if planted just inside the piles, or whatever material is used, will droop over, make a good covering, and grow and flower profusely. Some old potting soil can be worked in to give them a start. If plants of a Heliotrope of a somewhat similar shade are on hand the remainder of the bed can be filled with them, when one will have a glorious mass of blue. I always think the Plumbago is at its best like this in the open rather than trained in pyramidal form; in the latter it looks as if it were always trying to escape from its bondage. E. BURRELL.

Notes on Billbergia nutans

It is only within quite recent years that our greenhouses have been brightened with this odd and graceful plant. Some 10 or 12 years ago it was comparatively rare, but the ease with which it is propagated and its indifference to uncongenial conditions give its advance an aggressive mien.

The Bromeliaceæ or Pineapple family to which it belongs is confined to the American tropics, and most of the 400 species have mounted to the shoulders of the forest giants and so, as lofty epiphytes, secured their place in the sun. Their hanging and clinging vases form a very characteristic feature in our tropic jungles—far more so than the Orchids which, while far superior in variety, are inferior in numbers. The vases serve to catch and hold the rain, and from these reservoirs the plant obtains its moisture. Scaly absorbing hairs are immersed in the liquid—engaged in transferring the water to the storage tissue within the leaf—the true roots serving principally as holdfasts.

Practically all are quite tropical—as all the higher epiphytes are—but the one exception is very striking, dominating the landscape of an entire region. The most characteristic and ever-present feature of our Southern States is the Spanish Moss (Tillandsia usneoides) hanging in grey weeping festoons from every branch and twig and swaying to every breeze.

The Billbergias belong to the same section of the family as does the Pineapple, the fruits of both being berries. In Dyckia the fruit is a dry capsule and in Tillandsia the seed is hairy.

Billbergia nutans was found in European gardens about 1868. Its native country is not known, for it was brought to the notice of botanists after its introduction. It is probably wild in South and Central Brazil, for this is the headquarters of its closest allies.

The individual plant consists of eight to 10 leaves arranged in an open, vasiform rosette capable of holding water. The leaves are ½ inch broad at the base and 1 foot or more long, tapering to a recurved point. The margins are minutely toothed or smooth. From the base many stolons arise creeping outward a short distance before unfolding. Thus the colony enlarges until great clumps are formed. The graceful nodding flower-spike arises centrally, terminating the growth of that particular crown. The raceme curves airily over the vase brim, weighed down with its burden of pendent green and blue bells. From this nodding habit the plant receives its specific name. The bracts clothing the flower-stem are bright, clear pink and form a striking bit of colour. The general effect of the inflorescence is of a subdued and airy elegance.

In cultivation they thrive under varied conditions. Planted out in damp shady corners or in the Fern-bed they are quite at home and during the winter months when they are in flower attract much attention. Wired to Palm trunks they make splendid specimens, increasing in beauty yearly. Propagation is by simple division, separating the young stolons after they have made leaves and are well rooted.—HARRY JOHNSTON, in "California Garden."

VEGETABLES

Making hot-beds

THE building of a hotbed may appear a simple matter; so it is, but there are right and wrong methods of carrying it out. Quite recently I saw, in an amateur's garden, some hotbeds. Only two small frames were used, the object being seed-raising. The frames were duly placed in position, and the owner, no doubt, considered his hotbed a success. I happened to visit the same garden a few days later, and found that, of the two frames, one tilted badly to the north and the other to the west, and not only this, but the amateur had to hastily remove his seeds and plants, because the heat had become so violent. The cause of all this trouble was due to the fact that the manure, though neatly built, was not made firm; indeed, it was probable that no thought was given to the treading of the bed. Built loosely aided the violence of the heat, and the consequent shrinking of the bulk, an invariable result in the hotbed when it is not made firm. The fact cannot be too widely known that the firmer the bed in reason, the longer is the heat retained, without that excess of steam which had called for so much concern in the case just mentioned. In the country, where a supply of tree-leaves can be obtained, great advantage follows their use, mixed with the manure to almost any extent. Tree-leaves of themselves set up a very even and lasting heat when sufficient bulk can be gathered and firmly packed together, but for frames and open-air beds something must be employed in conjunction, so as to obtain a shapely form. It is a mistake, too, to attempt to build the bed until the first heat is expended, by repeated turnings. Obviously, when plenty of tree-leaves can be obtained, and manure provided in smaller quantity, there is not the same violent heat, nor the shrinkage of bulk. It is much the best when manure for hotbeds is not subjected to heavy rain or snow, for this reduces its potency and after-value considerably. The site of the bed should be such that no surface-water can collect around it. If a firm surface on which water collects forms the station, something in the form of refuse, tree prunings, faggots, or anything similar, that will raise the manure, is advised. Built on the open soil of the garden, drainage is at once assured. In its construction, the sides should be "combed" down with the four-tined fork, so that water passes off freely, and its size need not exceed the size of the frame by more than 6 inches. When Cucumbers and Melons have to be grown on manure-beds it becomes necessary to add what are termed linings—that is, additions of manure round the sides of the existing bed, so as to sustain the warmth within the frame. Just the same care is required in the application of these linings as in the earlier stages of the work, and there is no gain in making the bed unduly high, for this tends more to extreme heat than a gentle, lasting one. R. A.

Cultivation of Lettuces

(Reply to Eugenie Strong.)

Two things are necessary in regard to the cultivation of Lettuces if the best results are looked for. The first is the soil in which they are to be grown. It should be such as has been liberally enriched with manure in previous years, so that growth may be rapid and vigorous. The other is to be careful to grow none but the best varieties of both the Cos and Cabbage types, of which there are many of exceptional merit to be had. With regard to a soil not answering to the above description much may be done to remedy matters by stimulating growth either by affording suitable artificial manures or liquid-manure, but the plot or plots intended for Lettuces should always be well manured during the winter or early spring months. Another important matter is always to keep the plants well supplied with water in dry weather, and even when it is not needed at the roots it is surprising what a stimulative effect a mere sprinkling of the plants with water in the late afternoon has on a hot, scorching day. A few hints with regard to seed-sowing, etc., are as follows:—

Plants for use during the end of April and the early part of May are usually derived from sowings made in mid-August and early September, the young plants being wintered in frames and planted out in sheltered positions during March. If frames are available in which to prick out the plants a sowing is ofttimes made late in January or early in February in gentle heat. These come into use after the autumn-sown plants when planted out, a good variety being Nonsuch. Then as early as weather conditions will allow in March sow outdoors in a sheltered position one or other of the Cabbage varieties named Golden Queen, Perfect Gem, and Golden Ball; also Nonsuch and one or two other of the best varieties of Cos. These, when ready, should be thinned to the proper distance apart, the thinnings being planted elsewhere to form a succession. At the next and following sowings some of the best of the Cabbage varieties should be included, as well as those of the Cos types. As the season advances sowing should be done thinly and somewhat oftener, as it is not much use planting the thinnings in the height of summer. It is also a good plan, when the soil is parched and dry, to soak the drills with water after they have been drawn.

As to tying, the Cabbage varieties do not need this attention, and some of the Cos sorts will also fold in or form hearts and become satisfactorily blanched without it. In regard to the forcing of Lettuces, the varieties which lend themselves best to this method of cultivation are those of the Cabbage type. Both the leaves and the hearts are naturally of a softer nature and lack the crispness usually found in Lettuces belonging to the Cos section.

Tomatoes under glass—the half-way stage

From an experience in growing Tomatoes extending over many years I am more than ever convinced that it is better to defer feeding the plants until after the first truss of fruit has set, not to overburden the roots with a quantity of soil at the start, but to leave space in pots or boxes for adding nutriment at the half-way stage, which we are now approaching. For this purpose one should have in reserve some old turf which may easily be pulled to pieces. These pieces can be steeped in liquid-manure and spread over the surface where the roots are now showing as if searching for food. A handful of superphosphate of lime to each pot, if introduced, will also be of value. Some amateur growers of my acquaintance appear to think it necessary for soil for Tomatoes to be light and fine, just as one would prepare for soft-wooded plants like Fuchsias, but they need something stronger, and, if I may use the term, more "substantial" than this, something that the roots can grapple with, like rough fibrous turf. Just give them enough to go on with and let them have another layer in two or three weeks, when, instead of animal manure being mixed with the turf, a little artificial manure can be introduced, as Tomatoes appreciate a change of food. Varieties are very numerous in these days, and when had experience of sorts on which he it is unwise to throw them over ent varieties unproved. I do not sugg other varieties should not be tried; contrary, it is sometimes worth whi other sorts with a recommendatio such I am trying this year. Toma stand plenty of heat, provided air admitted. Any water necessary sl given in the morning if possible. Midl

Garden Peas: A row for supply

In some quarters there is a certai of risk in sowing garden Peas for in autumn, and sometimes, one has owing to bad seasons disappointmen lowed. Notwithstanding this, a dis from one's own garden is such a vegetable that it is worth while sowi or two to come in during Septen taking the chance. A sowing should during May, if possible; at any r early in June, and the sunniest po garden affords should be chosen. is he who can sow near the shelter c wall, which acts as a weather sc favourable autumns I have gathered of Late Queen as late as Octobe would recommend the sowing of dv to taller varieties, as, for example, L The Pilot, or Little Marvel. It is any time to give garden Peas a few way of support, but in the case of t late crop it is doubly so. Rough w rain hamper rows of Peas a good de bit of support to keep them off th when loaded with pods always pays Le

Parsleys

Parsley is not a vegetable of first portance by any means, but it h gardener considerable value for g A coarse Parsley may do as well fo ing as a refined one, but, for garni more refined and deeper the colour Of all herbs, Parsley is the mo grown. There are many diverse Parsleys, but, after all, actual diff character are few. What these are it will be well to have clearly de It is in being absolutely true to ch that character be good, that any I comes meritorious. Generally Pa sown too thick. The rows should 2 feet apart, and seed sown quite that no thinning be needed or perfe is so important that the real nat stock should be seen, and, were done, evidence on that head wou wanting. If it were possible it woul vantage to get the treble-curled, leaved, and the stocks generally de garnishing, grouped together.

Cauliflowers

Owners of small gardens who a the above may be reminded that a successive sowings of some sm maturing variety of the Early type is the best for their purpose, as may be set fairly close (18 inches will suffice) and heart in very quicl the ground can be cleared for othe decided gain where space is lim soils where club is often troubl young plants should be dipped righ collar in a mixture (about the con thin mortar) of lime and soot bef them out. Late February in a fr April and early May are good tim successive sowings. E. I

EES AND SHRUBS

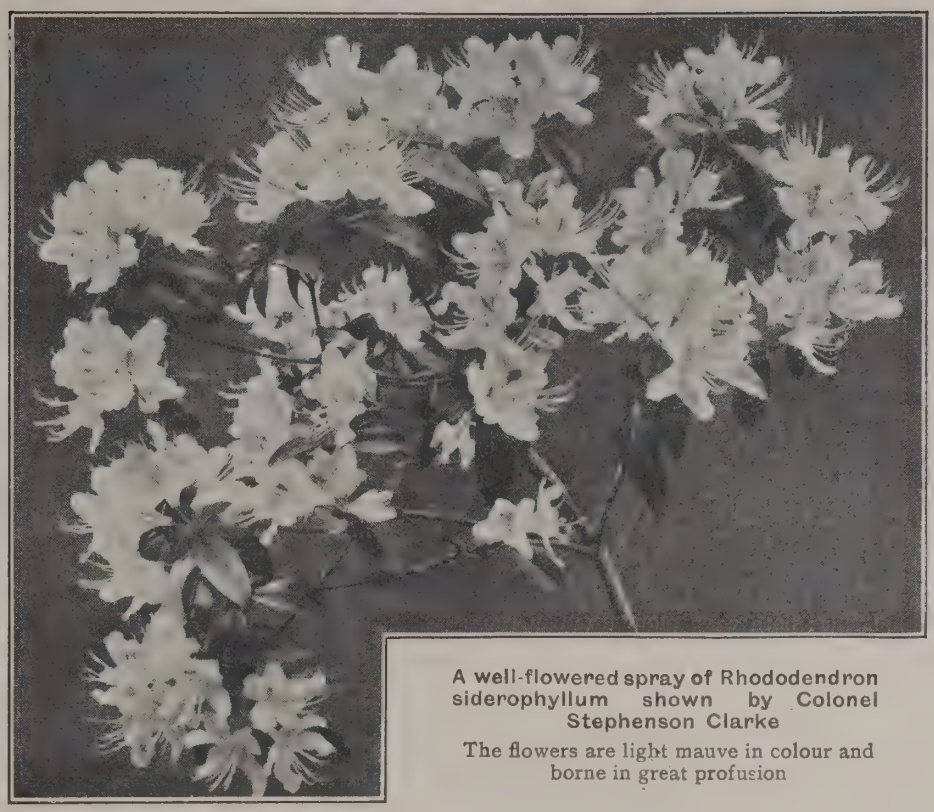
owering Currants (Ribes)

VE often wondered why these early g-flowering plants are not more fre- ly found in our gardens. They are the ers of spring, from early March well y, giving us such a wealth of blossom colours, some very distinct, thriving st any sort of soil, and, moreover, so ncreased by cuttings in the autumn. atively young bushes make the finest that a medium-sized garden ought to odate half-a-score plants as isolated ns, although grouped in threes or yard or so apart they are far more ous. There are a score or so varie- ing in height from 3 feet to 8 feet, e often than not they average about and while they thrive in almost any wth is more satisfactory, and flowers , when it is of good depth, so that it dry out too quickly while making owth during the summer. This re- ne what excellent subjects they are by er side, requiring but little pruning, ly treatment meted out to the Black suiting them admirably. Not only flower are they conspicuous, the of many turns a most lovely colour autumn, notably the varieties R. and Americanum, the latter bearing owers in early May, while the former, ame implies, is a pale yellow. The of R. sanguineum are the cream of ily, especially the one named R. uineum, which bears dark red Then there is R. King Edward VII., armine, very distinct; R. delicatum, ink; R. albidum, white tinged with ; and R. flore-pleno, with deep red lowers. R. Gordonianum must not ed. This is a very strong grower, red flowers tinted yellow. A beauti- id between R. aureum and san- has not come under my notice, yet spoken of. There are a few others, R. alpinum aureum, with golden about 2 feet in height, suitable as a v plant, or even on the rockery, and tre, bearing browny-red flowers of on appearance. J. MAYNE.

anting trees and shrubs

ting articles that have appeared re- GARDENING ILLUSTRATED on many d shrubs, both rare and common, e reflect on the proper places for gs and how one often sees them in which they are quite unsuitable. I the other day, in a small border by f a short carriage drive, a very large Berberis Darwini. It was a capital , but had been planted much too he edge, with the result that it was encroaching on the path, but dwarf- thing in its vicinity. In the same the largest Prunus Pissardi I have te a handsome tree but entirely out n its surroundings. The planters of a caucasica in close proximity to anges of vineries at Claremont had, , no idea as to the dimensions it tain to, but a tree with a very wide f branches and whose roots travel directions is hardly the sort of thing anywhere near Vine borders. The is a grand wall plant, but it is use- ting it if one has only a limited area especially if other things are re- the same stretch of wall. A note e taken of all evergreens, whether the form of common things, are are, or anything in the way of when planted near paths to deter- to the dimensions they are to be allowed to attain, and so planted that a lot of knifing will not be required to keep them within bounds. Naturally, if attention is bestowed right away from planting a tree of evenly-balanced growth can be well maintained, but most of us have had to deal at times with shrubs long neglected that have encroached on other things and on paths that have required rather severe pruning. Common things like Aucubas and Golden Privet soon recover, but the more rare things and some of the Conifers, like Thujas, Cupressus, and Cryptomeria elegans, show the effects of the knife for a long time. E. BURRELL.

Hardwick.



A well-flowered spray of Rhododendron siderophyllum shown by Colonel Stephenson Clarke

The flowers are light mauve in colour and borne in great profusion

Rhododendron fictolacteum

This very fine Rhododendron has, this season, bloomed in Captain Stewart's garden at Shambellie, in the Stewartry of Kirkcudbright. I believe I am correct in stating that this is the first occasion upon which the variety has been known to bloom in Scotland. The truss is very large, white, with a blotch on the upper petal of each flower. Rhododendrons, generally, it may be added, are not only earlier than usual, but are carrying a superb display. Many of the earlier varieties are already dropping their flowers. W. McG.

Mabie.

Rhododendron Vaseyi

A large group of this, now blooming with me, is admired by all on account of the fine pink of its flowers, in which respect it is surpassed by no other plant or shrub. Its home is the high valleys of the Blue Ridge Mountains, in South Carolina, and it is strange that such a choice and lovely shrub should have been overlooked until about 40 years ago, when it was discovered by Mr. G. R. Vasey. It has rather slender stems and irregular habit, reaching in its native home a height of 15 feet or more. The plants here (Sussex) commenced to bloom when scarcely a foot high, the flowers appearing in advance of the leaves. Plants raised from seed give quite a variety of pink colour shades, from the clear pink of the type to white, with just a suffusion of pale pink. There is a pure white-flowered variety, R. V. var. album, which is also a desirable shrub. Such a hardy and beautiful plant should receive more attention than it has done in the past. E. M.

A shrub for butterflies

While there is still time for planting, all those—and they are many—who delight in catering for the autumn butterflies should consider the merits of Eupatorium Weinmannianum. This is an excellent shrub for the mixed border or open woodland; for anywhere, indeed, that will provide it with a fairly warm soil and full sun. There it will make a shapely bush of some 4 feet, its upright, slender branches being crowned with broad heads of foamy white inflorescences. These, like most of the Agrimonies, are sweetly fragrant, and if there are any red admirals or peacocks about they will not fail to discover such copious sources of nectar whose whiteness makes such an admirable setting for the gay colours of these welcome visitors. Though not quite hardy, E. Weinmannianum will do in most places, for, like so many of the Fuchsias, it will break from the base even after being killed back by frost. In any event it is always advisable to prune the plant back to the ground in spring, and the base is easily protected by a mound of ashes. The flower sprays, I may add, are very beautiful when cut for indoor decoration.

A. T. J.

The Cornelian Cherry (Cornus Mas)

A maze of greenish-yellow flowers in early March are the groups of this early-flowering tree. I find it useful to associate with the Japanese Witch Hazels, and, if not so showy, it is quite pretty and effective. The Cornelian Cherry is of the easiest cultivation and has been grown in this country for centuries. It is usually a mass of bloom here (Sussex) during the month of February, and in some seasons produces quite a number of richly-coloured fruits. There is quite a number of varieties offered by nurserymen. G. M. S.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, 8, *Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

Rose Niphetos

(A. H. B.).—We could not detect any black spot on the examples sent, and without knowing the conditions under which the Roses are growing it is almost impossible to diagnose the cause. Some years ago we had a similar experience with Niphetos and Marechal Niel; both were planted out in the greenhouse, and the cause of failure was found to be at the roots, these having penetrated heavy clay soil. The roots were partially lifted and fresh loam added. Good quality blooms were produced during the following four years, and the plants may still be in a flourishing condition. Make sure that your plants are not dry at the base, and pay extra attention to ventilation. Avoid any great fluctuation of temperature, and leave the ventilators open an inch or so throughout the night. The cause is a cultural error, and if you give the plants plenty of air, keep the roots supplied with water, and the growth free of insect pests later blooms should develop properly. If not, kindly supply us with further details regarding the treatment afforded.

Lifting Tulips

I have two beds of Rose Gris *early* Tulip, and I do not want to pull them up when the leaves have gone, as I would prefer not to disturb the bed. Is it necessary to dig them up if they are to ripen properly?

LEAMINGTON.

[Your Tulips will be quite all right if left in the beds; indeed, they often benefit from being left alone in this way. The leaves should be quite yellow before removal.]

Crown Imperials

I should be pleased if you can tell me the cause of the enclosed Crown Imperials going off at the tips. We have a long row of them, and have been told they have been in the same place for 20 years and more. The last time they were lifted, I understand, was about 12 years ago. They do remarkably well except some that get the brown marks on the tips, as enclosed. I suggested having them replanted, but my employer will not hear of it. T. A.

[Judging from the rootless condition of the bulb of Crown Imperial you send for examination we are not surprised at the browning of the leaf-tips. Whilst agreeing that Crown Imperials should not be too frequently disturbed when once established, there is a limit to such treatment, and we strongly advise the lifting of the clumps at about every six years. There is bound to be a great accumulation of offsets by that time which will need room and nourishment. Overcrowding is bound to have a bad effect on the colonies and lead to disease, of which your rootless bulb is a first indication. As soon as your plants die down dig them up, sort the bulbs to sizes, and replant as soon as possible on fresh ground. Old hotbed manure and leaf-mould incorporated with the soil are a great help, and an annual dressing of manure is of advantage, as Crown Imperials, like many Lilies, make a set of roots from the annual stems above the bulbs and are greatly benefited by such feeding, especially in places where groups of these handsome plants are left undisturbed for many years.]

The Argentine perennial Pea (Lathyrus pubescens)

Kindly tell me about the cultivation of Lathyrus pubescens. I have several seedlings. W. R. J.

St. Ervan.

[This is one of the most charming of a race which includes many flowers of great beauty. It is easily raised from seeds, and some have been successful in propagating it from cuttings. It has pleasing pubescent foliage and racemes of lovely lavender-blue flowers, which are of moderate size. Seeds and plants may be purchased in this country, and the plants should have the shelter of a wall in all but the mildest districts, as the hardiness of this exquisite climber is not to be depended upon in some seasons. Early in the 'nineties of last century I raised some plants from seeds. As I had not room for more than one plant I gave several seedlings away to friends, and kept one, which I planted in light loam against the gable of an outhouse, which was of wood covered with zinc and with a wooden trellis on it. The exposure was as nearly as possible south. This plant grew and flowered well for several years and ultimately attained a height of about 7 feet. It produced one stem from the roots, and this was perennial, the flowers being produced on young shoots which grew from the hard main stem. In March, 1899, after being planted for five or six years this plant, owing to a mild early season, had made shoots several inches long. A severe frost in that month destroyed these young growths, and no others were produced in their stead, the plant dying off. My garden then was near the Solway, in the S.E. corner of Kirkcudbrightshire, and pretty well exposed to gales from the sea. "The Garden" published a coloured plate from flowers from my plant, and an excellent plate it was. In my opinion this Pea is almost hardy if planted against a wall in mild parts of the country. If protected in winter and early spring it should survive most winters in all but the colder parts of the country, but there is a danger that this protection may induce it to start too early, and late frosts would be liable to destroy the plant. On the same wall Calampelis (Eccremocarpus) scaber stood for many years.—A.]

Pardanthus chinensis (syn. Belamcanda chinensis)

(W. R. J.).—This is a monotypic genus belonging to the Iris family. It is a hardy tuberous-rooted herbaceous perennial requiring a rich, sandy, loamy soil and a sheltered situation in winter. It is e creased in spring from seeds or by The flowers are orange in colour spot purple-brown.

Lilium candidum failing

(H. King).—Your bulbs of Liliu dum have fallen a prey to the disea has of late years worked great harm beautiful Lily; so much so that in m dens it has been totally destroye disease is generally considered to b by a fungus, and numerous remec been tried, but none have proved su Perhaps your greatest chance of suc be to lift the bulbs immediately after and replant them in another par garden, taking care that before d all decayed matter has been Lifting the bulbs and shaking them bag of sulphur have in some cases remedy, while in others lifting and the sun and replanting almost on th in fresh quarters have also proved ef

Tropæolum speciosum

Will you, please, inform me if I Tropæolum speciosum in an exposed on side wall of the house, but shelte east and north, facing south? The very little sun. Virginia Creeper f but I want some colour. Close by i dwelling-house shading the wall wh pose putting the Tropæolum, an tunately, I have no other good place C. C.

[Possibly more disappointment experienced in an attempt to grow with any other hardy herbaceous cli roots are procured, these are best autumn, but the better and more rel is to purchase plants in pots in sp sent from a distance they should be d in pots and not turned out until plan Tropæolum loves to climb about t and branches, yet sometimes doin well on a wall, provided the position one—a north or north-east aspect best. It is to be found growing fre limestone abounds and moisture is I have seen its vivid flowers and foliage luxuriating on natural where water continually trickles. of GARDENING ILLUSTRATED in Sco scarcely need to be reminded that th also thoroughly at home in cottages a Highland glen, where the "soil more than peat. I have long sinc the conclusion that the moisture-la sphere of the Highlands has much its rapid, weed-like growth.—LEAH

[The finest display of this we seen was on a cottage on an emin looking Balmoral Castle. It was a narrow border at the front of t in what was evidently little be gravel. There was a walk in front tage, and the roots had found across this and taken possession of grass which formed a beautiful f flowers of the Tropæolum. It had its way over the roof of the cottage English visitors who had never plant were astonished at its vigou wonderful effect produced by the bloom.—ED.]

Lavender dying back

(E. Borthwick).—Your Lavende cut by frost, but if you prune it b lower wood, which appears to be the present time, the plants wil break into growth again. This dyi of frequent occurrence in the old hedges, and this from no visible you tear off side branches with tached and insert them firmly in

ity will root and form nice plants by nn, when they may be used to fill up which may occur in future. Pieces ıches in length may be used.

s for Roses and Gladioli

beneficial to give Rose-trees and nitrate of soda and superphosphate eparate or mixed? If so, is it best ı the dry state or in liquid form? lry state, how much should be given plant; if in the liquid state, how be mixed? —MIDDLETON.

-acting chemical manure for Roses ways be used with great care. The s held by the majority of Rose that good cow manure when well d added to the soil gives the best The manuring of an established depends to a large extent on the f preparation that has been given efore the Roses were planted. The t at least to have been double-dug ıre worked into the lower spit. It lso to add some bone-meal at the planting. Under the above condi- es ought to require little in the way e for the first two years. After the years a top-dressing of basic slag e of 4 ozs. per square yard would be This should be spread evenly on the soil and forked in. This should be ıtumn. In the spring a dressing of l farmyard manure should be given d in. This is best done as soon as s finished. Every third year the ɔf basic slag might be omitted and instead. We are inclined to think d-manure is better than manures e of soda or sulphate of ammonia. er, you have difficulty in obtaining ıure from a manure-heap you could an artificial one by using 8 ozs. soda, 8 ozs. sulphate of potash, s. superphosphate of lime dissolved ɔns of water. Give a gallon of this ɔ every four plants once a fortnight Rose shoots are 6 inches long. If to use superphosphate of lime in- ɔasic slag you could use the super -dressing at the rate of 2 ozs. e yard. It should be applied in f nitrate of soda is used at all for think it is best given dissolved in stated above. A good top-dressing ıli would be one part sulphate of one part sulphate of potash, and s superphosphates applied at the ozs. per square yard. One applica- d be sufficient.]

GREENHOUSE

ıiums failing

B.).—We carefully washed and ıe specimen forwarded, and found rong, the tissue being quite sound. band appeared to be caused by Decay does occur with Pelar- especially the variety Paul and if yours are affected to any ıt repot them in fresh soil and give ht position in the greenhouse. The was potted too deeply. With a ıg medium, careful watering, and ther the trouble will disappear.

Adiantum cuneatum

.—The ordinary Maidenhair (Adian- n tum) is naturally evergreen, but by drying the plants off in the autumn ıg them cool for a time they may ɔvn and kept cool and dry until re- start again, when, after having f a time, they will soon start into ɔwth if placed in warmth again. ould be used sparingly until the fronds are well developed, when they will naturally require more water; but over-watering is a common error. It is, however, quite necessary to avoid the other extreme.

As soon as well started, a little manure may be given from time to time, but this will be of no use if the roots are unhealthy. The best time to repot is after they are well started into growth. The lower portion of the ball may be cut away, and if the roots are much matted together they may be loosened out with a pointed stick, taking care not to damage them, and to save those with the bright fresh tips. They may be potted a little lower in the pots than previously. The compost should consist of good loam, leaf-mould, and sharp sand. If there is no fibre in the loam a little peat may be used, but with good loam the Maidenhairs will succeed better without than with peat. After repotting, the plants require shade and a close atmosphere for a few days, with a temperature of from 70 degs. to 75 degs. Later on, when established, they should be gradually exposed, and air given. In growing plants on, a temperature of from 65 degs. to 75 degs. should be maintained. Plenty of light and air should be given. It is a common error to grow these beautiful Ferns under too much shade and moisture. Even the beautiful Adiantum Farleyense may be grown almost fully exposed to the sun, and will be found to make fronds of better substance with a beautiful bronzy tint on the young ones, which will gradually turn to a bright green. Watering is the most important factor in the successful culture of Maidenhairs. If the soil gets soured by excess of moisture failure will ensue, and it is equally damaging to allow them to get too dry at the roots. When grown under good conditions Maidenhair Ferns may be used for house decoration and other purposes, lasting well even if the temperature falls as low as 40 degs. For cutting, the fronds will be more valuable when grown fully exposed to the light.

Plants for hanging-baskets

(Captain Saunders).—Baskets of fine-foliaged and free-flowering plants make greenhouses and conservatories attractive. Some plants, owing to their habit, are better fitted than others, and it is advisable to select only those that will cover the framework quickly. Under no conditions are Ivy-leaved Pelargoniums likely to show themselves to better advantage than when grown in baskets. Petunias are not usually considered in the light of basket plants, but if they are grown specially for this purpose by pinching out the leading shoot and encouraging the growth of laterals one may have well-furnished plants. The same remark applies to Verbenas. Fail to stop them and the result is never so satisfactory as when they are pinched in the early stages. One often comes across a good basket of Fuchsias, and few things look prettier. Young plants are indispensable. If a basket of fragrance is desired what can meet this better than Heliotropes? A plant or two will soon cover a basket. Of bulbous plants Achimenes are, perhaps, the least known by the owner of a greenhouse where small collections of plants are grown, yet at the warmest end of a house in a basket Achimenes are very effective. A plant also that delights in the warmth of a house is to be found in the Thunbergia. One thinks as well of some of the Tropæolums as Spitfire and Lobbianum. Diplacus glutinous is a straggling plant that may be grown in a temperate-house either in the form of a semi-creeper, a pot plant, or as a basket plant, in which position it is very pleasing provided it is given a receptacle large enough. Of white and blue flowers that may be grown in baskets it would be impossible to find any that are more popular or bloom with greater freedom than Campanula isophylla in its blue and white forms. There are Ferns in variety suited for baskets, as the Nephrolepis, while Asparaguses in variety are always fresh. For porches and places outdoors, where one would not risk the various forms of Asparagus for any length of time, we may have Ivies, the old Creeping Jenny, or the fretted golden-leaved Lonicera aureo-reticulata.

Red spider on Grevilleas

(Canon Grose Hodge).—Your plants have been attacked by red-spider, showing clearly that they have been kept too dry both in the atmosphere and at the roots. The Grevillea is a greenhouse plant and requires plenty of water when growing. The best way of destroying this pest is to use the extract from 6 lbs. of quassia chips, 4 ozs. of soft-soap, 2 lbs. of fresh lime, and ½ lb. of flowers of sulphur well mixed together and put into 5 gallons of water, paraffin emulsion, or Gishurst Compound. Spray the Grevilleas with any of the above, seeing to it that every leaf is thoroughly wetted.

FRUIT

Failure of Red Currants

(F. N. C.).—We are quite at a loss to account for this. We have looked up various authorities, but can see nothing bearing on the subject. We are not unacquainted with the phenomenon, as some years ago we had a number of bushes of the variety of Red Currant named "Cherry," which were more or less similarly affected, the point of each shoot being blind or minus its bud, as is the case with the shoots sent for inspection. The result was that the bushes never attained any great size, as hard pruning had always to be resorted to in order to ensure the production of a sufficiency of new wood each year.

Scalding in Vines

(Logwood).—We fail to find anything of a fungoid nature on the Vine leaves sent, and think the injury to be due to what is termed "scalding," which ofttimes occurs after a spell of sunless weather, when the foliage having become soft and flabby is unable to withstand the burning effect of a sudden outburst of sunshine and, as a result, becomes more or less burnt. The best way to avoid the trouble is to maintain a sufficient amount of heat in the hot-water pipes to admit of the top ventilators being kept slightly open at night as well as by day.

Gooseberry buds destroyed by birds

(Roy Patman).—The buds have evidently been destroyed by birds, and this is the cause of the wood being in a dying condition. In future defer pruning until the buds begin to break. You could also try the effect of syringing them with a deterring mixture after the fall of the leaf, such as is sold by sundriesmen for the protection of Plum-tree buds. Dusting the bushes with soot and lime throughout the winter will save many of the buds. The best remedy, however, is to enclose the bushes with old fish netting.

Storing Apples and Pears

What are the essentials for the effective storage of Apples and Pears? CHERRY.

[Apples and Pears are best stored in single layers on trays. The trays should be made to fit one above the other so that each layer of fruit is about 6 inches apart. Apples and Pears that are to be stored should not be picked until ready, and should at all times be handled as little as possible. Each tray should be lined with tissue paper which has one glazed side; the glazed surface should be placed uppermost so that the fruit rests directly on it. The room in which Apples or

Pears are stored should be one in which a steady temperature can be maintained; 35 degs. to 45 degs. F. should be aimed at. Sudden changes in temperature should be avoided because they cause the fruit to sweat. Covering the layers of fruit with tissue paper, or, better still, clean sun-dried straw, helps to keep temperatures even. The fruit-rooms should be aired once a week for 15 minutes. Apples and Pears are best stored in darkness. An earth floor is best for Apples because it maintains an even moist atmosphere. Pears are best under slightly drier and warmer conditions.]

The Persimmon (Diospyros Kaki)

(Persimmon).—The Latin name of this is Diospyros Kaki, and it has much the appearance of a Tomato. The flesh resembles that of an Apricot, the colour being similar. The fruit, when ripe, is delicious, and we wonder it is not more often grown for dessert in October, a time when good fruit is limited in quantity. The flavour is richest when the fruits are just becoming over-ripe; after that they have the flavour of a Medlar. The late G. F. Wilson used to grow it well in pots in his orchard-house at Weybridge, and the trees every year bore fine crops of fruit. The fruit should be gathered when it becomes rich red, but not eaten then, as it is then stringent. Keep in the fruit-room for some time, when it will become soft and transparent, and have a sweet though not marked taste. Those who have an orchard-house would do well to grow a plant or two as the fruit would be welcome during the winter. The Custard Apple (Anona) comes from the East Indies, and we fear impossible of culture in this country.

Vine roots inside

(T. W.).—The fact of your having planted your Vines inside is in no way detrimental, but quite the contrary, as they should, as a result of so doing, become the more quickly established, as an inside border is naturally warmer than one situated outside, consequently root-action is greater and growth more vigorous if the roots receive proper attention in regard to supplying them with the necessary amount of moisture. Outside borders, being subject to vicissitudes of climate, are ofttimes very wet and cold when the time arrives for starting the Vines. In a wet season, too, such borders receive a superfluity of moisture, whereas with one inside the supply is under control and can be regulated to meet the demands of the Vines at all times. Direct solar warmth will not, of course, reach the border once the Vines become established, but you need have no apprehensions on this point, because, as we have already remarked, the border, owing to its being inside, will always be much warmer than if it were outside the house.

Grease-banding fruit trees

Are liming and grease-banding of fruit-trees any real effective prevention of insect pests? In the case of moths they would appear to be useless, as these reach the tree by flying. If useful, at what season of the year should this remedy be applied? CHERRY.

[We consider both liming and grease-banding useful aids in the control of certain insect pests. Liming is a very old method of treatment for fruit-trees. The object to be aimed at is to coat over the tree, stem, branches, and buds with limewash, so that any eggs of insects which have been laid on the tree are mechanically sealed in. This, of course, prevents the eggs hatching. In addition, liming is useful to clear the stems of fruit-trees of Lichens and Mosses, under which many insects spend the winter. In our experience lime-washing is a great help in controlling aphis and certain leaf-eating caterpillars. Spraying with a soluble tar oil wash is a more up-to-date method of obtaining the above results. Liming should be done just before the buds begin to break in the spring. A tar oil wash should not be used later than the second week of February. Grease-banding is a method of trapping certain female moths which have only rudimentary wings. These moths cannot fly, and as they emerge from chrysalis in the soil they have to crawl up the stems of the fruit-trees to enable them to lay their eggs on the twigs. The three moths for which grease-banding is used are Winter, Mottled Umber, and March moth. The grease-bands should be in position early in October and remain until the end of March, when they should be taken off and burned. The main stems of the trees, from the height of the band to the ground-level, should be well lime-washed, because some of the moths turn back on reaching the "grease," and lay their eggs on the stem below. If these eggs are not dealt with many caterpillars will reach the foliage later on. If the trees are staked the stakes should be banded as well. Grease-banding is, of course, useless against the caterpillars, the moths of which are fully winged, such as Tortrix.]

Pollenising Cherries

What variety of Cherry-tree would you recommend as an effective polleniser to be planted between the self-sterile varieties, Black Eagle and Black Heart, to flower, of course, simultaneously? CHERRY.

[You do not state if you are prepared to plant more than one variety of Cherry; if so, Amber Bigarreau should give you good results with Black Eagle, Elton, and Black Heart. If you desire to plant one variety only we should advise you to use Elton.]

VEGETABLES

Beet failing

(Clyro).—The disease is, we think, caused by the fungus known as the Beetroot rot. It is said to attack the leaves in autumn and the roots after having been stored. It is, therefore, feasible that if the fungus can be dealt with and destroyed while present on the foliage the roots should remain free from attack. We therefore advise spraying occasionally in autumn with liver of sulphur solution. First dissolve 2 ozs. soft-soap in 1 gallon of hot water, then put in 1 oz. of the chemical, and when dissolved add water to make 3 gallons. Drawing and storing the roots somewhat in advance of the usual time are said to be a preventive measure. Burn all leaves removed from the roots and give the site a good dressing of fresh-slaked lime. It would also be as well not to grow Beetroot on the same site for two or three seasons.

NAMES OF PLANTS

The Boundary. — The climber with brownish flowers is Periploca græca, or Silk Vine. It is a desirable plant for covering an arbour or sheltered wall, which it does very rapidly.

The Lady Clonbrook. — 2, Deutzia Lemoinei.

Ellen B. Lacy.—Berberis Darwini.

J. Fleming.—2, The Cherry Woodbine (Lonicera alpigena).

William S. Harris.—1, Pulmonaria rubra; 2, Amelanchier vulgaris (Snowy Mespilus); 3, Anchusa myosotidiflora; 4, Euphorbia Cyparissias.

C. Jamieson.—Prunus japonica (syn. P. sinensis).

Caledonia.—The Rose is Homer, an old variety now seldom met with.

H. Downes.—Ribes Menziesii, from N.W. America. Yours is the rosy-red form. The type has white petals. It is dist from R. Lobbi by the stalked glar ovary and by the tapered anthers.

E. A. H.—The Japanese Cherry kura, one of the best in cultivation.

R. N. L., Auchlochan.—1, Spira multiflora; 2, probably Spiræa c Specimens arrived much shrivelle may be best to send No. 2 again flower.

Cherry.—Your Cherry is kn Hisakura.

Geo. H. Timmis.—1, Cytisus A very pretty, dwarf, rock garden E the Petty Whin, or Needle Furze anglica), a British wild plant quit ble in the rock garden. It is pro Planta Genista of history and the the Plantagenet Kings of England Cœur de Lion, etc., and thus of co interest.

S. H. B.—Ercilla volubilis (syn. spicata).

Walter Hill.—Please send fresh The one sent was quite dried up.

A Constant Reader.—Scilla peru

A new soil-testing outfit

Mr. A. E. Burgess, the Ho Superintendent to the Surrey Count recently brought to our notice a testing outfit by the means of w possible to find out in a few momen a given soil requires treatment The outfit, which is made by T Drug Houses, Ltd., Graham St Road, London, N. 1, is designed use in the field, and consists esser dropping bottle containing the soil a small porcelain boat for holding of soil, and a small spatula suppli venience in transferring the so porcelain boat. Full instructions, perfectly simple, are issued with The soil indicator has been prep reaction test. Red indicates a ver orange or yellow indicates an acid indicates a neutral soil, and blue soil. This outfit is a great adva old system of testing a soil w chloric acid for the presence of li over, by the new method the acidity in the soil is recorded termed Ph. nomenclature. By me simple test soil sourness may be re healthy crops and better productio

Obituary

J. T. BENNETT POË, M.A.,

As our pages are going to pre with deepest regret of the death friend and contributor, Mr. J. T. B an aged and well-known amateu whose great interest in life was tion of rare and beautiful plants. years he was a well-known figure nightly meetings of the Royal H Society. He was a Trustee of W dens, a member of the Library and Scientific Committee at Vince for many years he was also a me Floral Committee, and at one tim member of the Council. For a years he held the amateur champ for Auriculas. He was also succe cultivation of Daffodils, Nerines more especially Cypripediums, in took a profound interest. For the or four years he had been confined with illness, and he passed peaceful his London house in Ashley Pl minster, on Friday, May 14th. ment took place on May 17th Green, and among those presen brother, Col. Bennett Poë, Miss and Walter E. Ledger.

Chelsea Show—Full Report

Gardening ILLUSTRATED

FLOWERS · FRUIT · VEGETABLES · BEES · GARDEN DESIGN
TREES & SHRUBS · THIS WEEK'S WORK IN THE GARDEN

VIII.—No. 2464 Saturday, May 29, 1926 TWOPENCE

JUN 16 1926
UNIVERSITY OF ILLINOIS

"Whereas this Iris she outvieth man's excellent artistry."—ROBERT BRIDGES.

Iris and Rhododendron Time

Lilium regale

We welcome Visitors to our Nurseries

at all times, and especially in June, when the slopes will gleam with many thousand Iris spears and shafts and the famous Rhododendron walk is at its full glory of colour.

WALLACE'S

are World-famed for

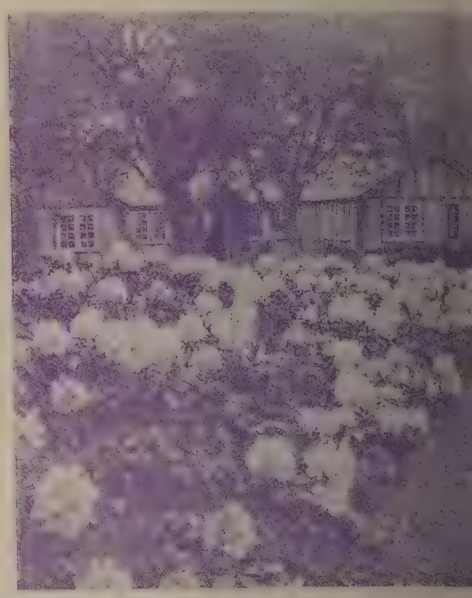
LILIES, RHODODENDRONS

including many Fine New Varieties and Species

Irises, Flowering Shrubs, Hardy Plants, Japanese Maples

and for

Design and Construction of all manner of ROCK, WATER, WILD, PAVED, and FORMAL GARDENS



The Old Gardens in June

Chelsea Show, 1926.

GOLD MEDAL for FORMAL GARDEN, and also
GOLD MEDAL for SHRUBS, HERBACEOUS and BULBOUS PLANTS.

R. WALLACE & CO., Ltd., THE OLD GARDENS, Tunbridge We

A

WHITELEGG Rock Garden

can be adapted to your own site, and will give that abiding pleasure and distinction inseparable from expert craftsmanship in stone and first-hand knowledge of rock-loving plants.

Rock garden by Mr. G. G. Whitelegg, for which the "Graphic" Cup was awarded, 1925.

See also at CHELSEA SHOW

RARE NEW IRISES & FLOWERING SHRUBS

CONSULT WHITELEGG for Rock, Water, and Formal Gardens anywhere.

GEORGE G. WHITELEGG, The Nurseries, CHISLEHURST, K

GARDENING ILLUSTRATED

64—Vol. XLVIII. MAY 29, 1926 [Prepaid Annual Subscription to any part of the World, 15/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

pina 305
e border ... 312
SHOW, ... 313
IELDS OF SWITZER- 311
Flower pots, broken ... 303
Garden, the architect in the 304
Gean, the double-flowered (Prunus Avium var. flore pleno) 308
Garden, the rock, at Kew 305
JOHN T. BENNETT-POE 312
Pasque Flower (Anemone Pulsatilla), the 311
PLANT HUNTING IN SIERRA NEVADA 310
PLANT NAMES, MISTAKEN SPELLING IN 305
RHODODENDRONS IN A SURREY GARDEN 306
Rhubarb renewals from seed 304
SAXIFRAGA ARCO VALLEYI 303
Shooter's Hill Park 312
Tomato, a barren ... 305
Vegetables, exhibition v. general utility in 304
Wisley, notes from ... 308

Broken Flower Pots

reaking of flower-pots is probably mmonest accident that happens in n routine, unless, perhaps, it be the n two of worms, and yet how we regard the two events. The when he digs a worm in half, refectly calm, reflecting, if he reflects t he has caused two worms to turn one had turned before. Am I, by iologically correct in believing that worm becomes two worms? I told so, and have taken it on trust. touches on the question in his erefore and the Why," but I should pinion of The Rev. Hilderic Friend tter. The feelings of the gardener garden owner are quite otherwise reaks a flower-pot. Flower-pots—s—belong to that class of cheap icles that a man hates having to when he breaks them he will so far nself as to say tush in his heart. n boy, on the other hand, keeps a r lip and throws the pieces under And the garden boy is right every gh don't, for pity's sake, tell him d so. He has converted a useful t one hated buying into an exseful article which no one would m of buying. "Crocks for the f pots" you say. Well, yes, that is hough it is not what I am getting a curious fact that nothing half so broken flower- ever been indraining whole t the demands ge have never pace with the industry of ys. Probably will. And so -heap grows, a wicked waste the most valuerials in the horticultural œia. Make the broke the pots , cause them to ng properly and crocks to grit r, and you will of the grandest edients for potures. I have the conclusion extraordinary at my late fore- Cecil Davies, growing a Saxifrages when he was with me prior to 1914, was largely due to the free use he made of flower-pot grit in his soil confections. In those days we had a special machine like an enlarged coffee grinder for grinding up our crocks. It was a special job for wet days, and we produced, and used, it by the barrelful. It was a wonderful machine, though turning the handle was tedious work. I have always felt that its presence on the nursery exercised a restraining influence on the too light-hearted handling of pots. In the course of time the steel molars of the grinder became worn, and it could no longer do its work properly. I have made several attempts to get it fitted, so to speak, with a dental plate, but without success, and for some time the use of crock grit has lapsed. Recently I saw a similar machine advertised and bought it, but it is not efficient. By an enormous expenditure of boy power only a feeble output of material is achieved. If anyone can introduce me to a really efficient crock grinder I shall be extremely grateful. When only small quantities of grit are needed it is possible to smash up enough crocks by hand, or, rather, by hammer, or, on a rather larger scale, with an iron-headed rammer. For this hammer or rammer work the crocks should be broken on a hard flat surface. A flagstone is excellent. A useful size for crock grit is from the bigness of split Peas down to dust. The dust may well be used, though the sharp grit is what one aims at. Its action in a potting mixture is, of course, almost, if not entirely, mechanical, but I know of nothing so good for making a compost free, and sweet, and open. When the right amount is used the soil will grit sharply in the hand with a curious feel which the gardener knows is good.

When crock grit is plentiful I like, too, to put a generous sprinkle of it over the drainage crocks at the bottom of the pot. I think it makes the drainage super-perfect, and the roots of a plant like to get down and quest among the sweet porous grit. I trust that all who read this article will, when they break a flower-pot in future, remember that they have taken a step in the direction of a valuable potting ingredient, and so refrain from saying tush—even in their hearts. And if a rule be made that he who breaks a pot shall reduce it even unto grit, then plants will benefit and the crock-heap will remain a reasonable size. CLARENCE ELLIOTT.

Stevenage.

NOTES OF THE WEEK

Saxifraga Arco Valleyi

THIS charming hybrid is still very new to cultivation, and is but seldom met with or even heard of, although it is one of the neatest and prettiest of the Kabschias. It was sent out by Sundermann some few years ago, and only a few weeks ago it distinguished itself by being awarded the A.M., R.H.S., where it was to be seen in splendid form and character. It makes dense hummocks of small grey rosettes, on which, in February and March, sit numerous large solid round flowers whose petals overlap well and so cut out that starry appearance that often spoils a good plant; indeed, its flowers are of the same size, quality, and shape as in the superb S. Faldonside. Sometimes the flowers are almost stemless, and very rarely rise more than half an inch. Their colour is their chief point of beauty, it being the most delicate flush of a

Saxifraga Arco Valleyi
One of the prettiest and neatest of the Kabschias

soft rosy-lilac. Apart from being a nice plant to look at, it is a plant that can be grown, being free, although rather slow compared with many others of the same group, and easy in a good, thoroughly drained and gritty compost in a light, open position. It is one of those plants that are specially well adapted to grow on as specimens for the alpine-house.

F. BARKER.

The Architect in the Garden

ALTHOUGH I am in agreement with the writer of the article "The Architect in the Garden" when he deprecates the laying out of a garden by an architect without a fairly practical knowledge of the culture of flowers and trees, there are, I feel, certain of his statements which are liable to be misleading.

He suggests, for instance, that "many American and Italian gardens" are so arranged "that they may be seen all at the same time." Of American gardens I know nothing at first hand, but I have visited a fair number of the most celebrated Italian gardens and I can remember nothing which answers to this description. They are literally packed with carefully-considered varieties of effect. A good example of variety and surprise is the manner in which a fine distant prospect is used in the garden of the Villa D'Este at Tivoli, near Rome. Here the view is constantly being presented from a new aspect. One sees it first from the centre of the top terrace on entering the garden. After that one comes upon it repeatedly as a surprise at the end of a narrow hedged walk, or through an opening in the trees which crowd up to the balustrade of a terrace. A less capable designer might well have squandered all the pleasure derivable from the far off glimpse of Rome by having it visible from any point of at least half the area of the garden.

I am not sure whether I am mistaken, but it seems to me that I can detect in the very temperate article in question a note of restrained antagonism to the idea of Italian gardens generally. If so, let me say at once that the "crayfish" patterned garden is not typical. The chief charm of good Italian gardens is the skilful blending of the natural with the artificial. In them the architect merely, so to speak, enlarges the house and conducts its inhabitants by gradual stages to the surrounding hills and woods. I can imagine few "Nature lovers" being wholly dissatisfied with a well-kept Italian garden of the best kind. They have, it is true, their clipped trees echoing the architecture, but they have also their naturally-grown ones. In the Villa D'Este are some of the finest Cypresses in Europe. It is the subtle combination of the two, the tended and the untended, that is so attractive. I see numerous English gardens of the "natural" order in which evergreens are regularly clipped into the shape of sugar loaves and even balls. Nature provides none of these; nor does she show me gravel paths edged with meticulously-trimmed grass. The Nature lover is, as a rule, practical enough not to find these features, some of them necessities, too jarring to his sensibilities when they are in close proximity to the house. For my own part I think a clipped hedge is logically no more out of place than an accurately-cut turf verge, for they can each be regarded as a connecting link between the architecture of the house and such of Nature as you may have farther afield. Most of the gardens throughout the world are, however, small and confined within walls or fences, which define a strictly formal plan and, in effect, actually carry an architectural feature round the boundaries of the complete property. In such circumstances it is very difficult—almost impossible—to get Nature to appear at home. The small garden seldom looks anything like a landscape. Even "Capability" Brown would have been beaten by the task of making it so. Surely if this is the case nobody can be blamed for facing the facts and deciding frankly on a plan which has at least a touch of formality in it.

But if such a decision is to be made, if the architect is to be admitted, let him face the problem in terms of the garden. Let him provide a scheme which will enable the gardener to grow to the best advantage plants which are suitable to the local conditions. I believe that where he does this few gardeners complain of the setting in which their treasures are displayed. If it were always done there would soon be no more heard of the lack of agreement between the Nature lover and the architect.

Without the guidance, direct or indirect, of an architect attempts at formal gardening lead to many incongruities and absurdities. Innumerable formal gardens designed by amateurs seem well enough until a full-sized human being enters them. Then the minuteness of the scale is revealed, and one is reminded of Gulliver in Lilliput. But it is only fair to say that amateur attempts at the "natural" landscape effect are frequently not less ridiculous. There is a belief that a curved line is essentially more natural and beautiful than a straight one, and this belief is the assumption that curls and twists that can be introduc stretch of path the more picturesq be. I have actually seen a short gr along the side of a small house so that only a very sure-footed toper really happy on it, and I have se 18th century avenue of Yews lea fine 18th century house "natural two gravel paths which took windi in and out between the trunks on One could almost hear Nature laug —or was she weeping for her lost

It is, perhaps, worth while to ad partnership between gardener and is not unknown even in the forma of Italy, which are, on the whole, m of architecture rather than of gar the English sense, though they a ideas which we could follow and ad needs. Isola Bella is, perhaps, formal of all. The garden occupi the whole of an island which was solid rock, and horticulture was possible by colossal building operati provided a great series of terrace taining walls capable of holding u soil. In this soil may be seen g amazingly varied collection of tre ing shrubs, and other plants gath all quarters of the world. While four centuries the garden has been sightseers as a remarkable (thoug tirely successful) specimen of ar planning, it is also essentially a gardeners and has attracted many of these, too. And the importan that but for the architect the garde never have had a look in.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Exhibition *v.* general utility in vegetables

IN a recent issue "A Surrey Gardener" gives it as his opinion that modern exhibits of vegetables are superior to those of former days. The writer may be right, or he may be at fault. The average gardener is content to leave the production of "exhibition stuff" to the specialist, and to concentrate upon sound, useful, everyday vegetables of good quality and plenty of them. Exhibition vegetables are not, as a rule, conspicuous for table quality. I have but to mention the overgrown Leek, the huge Parsnip, the Carrot which is more remarkable for size than for quality, the unwieldy Vegetable Marrow, and the Onion which, although a giant among its kind, does not, and cannot, possess the keeping qualities of others of more modest dimensions, to show that this is so. Nor does the production of such imply any special degree of horticultural skill. Exhibition vegetables are the product of early sowing, artificial heat, specially-prepared soil in a favoured quarter, plenty of manure and of chemical fertilisers, *plus* constant attention in the way of watering and so forth. Given these requirements the merest novice can (and does) at times meet the gardener on his own ground and trounce him thoroughly. One of the favourites of the exhibitor is Celery. Will anyone, save an exhibitor, tell me that the coarse, overgrown, half-blanched specimens which are too often seen are of any service save on the show bench? Who, save the exhibitor, desires Celery in September? Or Leeks? Essentially winter or early spring subjects they are, unfortunately, appraised by judges, who ought to know better, at a far higher value than they my opinion, the majority of gard have to maintain a constant and ply of vegetables throughout the tw are well advised to leave growing tion severely alone, for, when all done, ordinary produce of me quickly grown, and full of quali ferred in the kitchen and at the t the exhibition stuff (if it ever ar from the show) is put on the r or consigned to the pig's pail. I d at random. I know what I a about.

A REFORMED E

Rhubarb renewals from

In view of the recent notes by and Mr. W. E. Wright on the ab my experience may be of interest 1924, I sowed seeds of the followi of Rhubarb on a south-east b Myatt's Victoria, Myatt's Lin Glaskin's Perpetual. Germination and by October I could have pu stalks as thick as my finger variety. Glaskin's continued to in the season than the other tw also commenced to throw up stal as February in the following seas in any quantity, and had I pul believe I should have lost the crow On March 31st, 1925, the roots and planted on a north border been trenched and manured durin vious winter, but otherwise it is n The crowns were left almost throughout the season 1925, and growth, but the stalks had very l This spring they have already sent of flower-spikes and there is little

f-stalks and the flavour is very poor. hree varieties, Myatt's Linnæus has strongest growth, Myatt's Victoria econd, with Glaskin's Perpetual a third; in fact, several crowns of the ety have already died out. Those e left are very weak and of poor so if it has proved a success with he has been more fortunate than I. wo varieties Linnæus and Victoria, of the crowns appear to be true to My seeds were obtained from two of ng seedsmen in this country, and, as oing notes will show, have had good t, but unless any, or all, the varieop colour and quality with age they sed for forcing and thrown out. Few s grow Rhubarb from seed, and unsmen can guarantee seed true to results will not justify the labour lost. T. C.

can confirm the estimate of "W. F." in connection with Glaskin's Perhubarb. It is, as he says, easily om seed, and it is quite a good judged by its cooking qualities. " too, is quite correct in stating that ible to pick stalks within six months te of sowing—but here I part comh him. Only under the pressure of essity would I allow stalks to be that age—not that they are not quite , but because it is against the future f the plant. Let Glaskin's and all edling Rhubarbs grow unchecked he first season and the gain afterill be correspondingly great. Even ase of division of existing roots no hould be permitted the first season; re, then, is it needful in the case of nths' seedling. W. McG.

aken spelling in plant names

E are two names of garden plants, from the German, which appear, in the best of our nursery cata- some kind of mangled form. There named Pfauenauge which appears uenage." Pfauen means peacocks, ye. There are two sounds of "g" n; it is quite hard at the beginning d or syllable, but elsewhere, as in it is throaty, something near the the Scottish "loch"; it never has as in "cage," which is suggested mis-spelling as "Pfauenage." The mple of mistaken spelling is a still ggle. There is a Rudbeckia named ne. Herbst is autumn, sonne is is commonly appears in our cata- "Herbstone"; in that of one of irms it even assumes the disguise of ne"! G. J.

he rock garden at Kew

ving had time to visit Kew this m unable to pass any opinion on the f its rock garden this year. I am, certain that many readers of the by "X," in your issue of April 24th, ore than a little astonished at his I have heard and read criticisms ck garden before, but never one so damning as this. Moreover, unething radically wrong has tranring the past year I cannot think it l.

ry occasion on which I have visited ave been so overwhelmed by the nd success of the plant life estab- the rock garden that I have had no dle regrets for things that I did not . If certain plants have not been to the same advantage that one pect in a well-kept and cared-for arden I have remembered that Kew is first a *botanic* garden and that the first interest of its caretakers is to present as complete a collection of plant life of all sorts as possible. The cultural successes and keenness of Mr. Irving and his staff are far too well known to warrant bricks being thrown at them by indiscriminate and anonymous writers. If "X." wants to see broad ramping masses of Arabis, Alyssum, Aubrietias, and such other plants that would be flowering about the time he mentions I do not think he will ever find them at Kew. Nor would a discriminating public with any knowledge or love of a rock garden tolerate it. The choicest gems of the alpine world can usually be found there in plenty, and if these are not always quite as happy as one would wish, I think a perfectly reasonable excuse is the fact that London and all the cultural disadvantage it brings is creeping much too near Kew.

Having in all sincerity thrown my bouquet I must follow it with a very small brick, not aimed at the *personnel* of Kew Gardens, but at the conditions under which they have worked and are working. I rather think my brick will be cheerfully caught and approved by those most closely connected with the rock garden there. The construction, looked at from the point of view of what a rock garden should be, is very bad indeed. To-day it is a far, far better thing than it was a few years ago. Portions of it have been reconstructed with something approaching that presentation of picturesque formation that alone satisfies the æsthetic sense. Unfortunately, these portions are so pronouncedly better than others that there is no sense of cohesion in the conception of the whole scheme. The plain fact is that it will never satisfy all desires until it is entirely reconstructed on a concerted plan. Such reconstruction should be undertaken with a view first to producing that nearest approach to Nature's picturesque formation at which all good rock garden constructors aim. By doing this every possible position for the cultivation of rock plants would be provided automatically. The plantsman could then choose positions for his large and interesting collection, and the very fact that such positions were correctly chosen would ensure that harmony of association that makes for beauty. There is certainly no reason why Kew should possess a rock garden inferior to that at Edinburgh. There is every reason why it should have one much superior. Or I can at least hazard a reason. Is there not the question of economy of expenditure on public works much to the fore just now, and is it not possible that this question has always been very much in view at Kew Gardens? Probably this is why the course I have suggested (and I am not alone in holding this opinion) has not been adopted before this. GEORGE DILLISTONE.

Mistaken spelling: The autumn-flowering Rudbeckia Herbstsonne assumes the disguise of Kerbstone!

A barren Tomato

In a rather large batch of Tomato plants, the sowing of which, on the label, is marked 14-1-26, I have a plant which is, plainly, barren. Not a flower, nor the sign of a flower, has it shown. Other plants of the same batch show three well-set trusses. All have received precisely the same treatment. Yet this particular plant expends itself in producing stem and foliage. Is this an unique case? I would be glad of the experience of others. Possibly, were I to "top" the plant the side-shoots might be fruit-bearers, but I consider it to be more interesting (and instructive) to give this abnormal plant the routine cultivation. I have, in my time, grown many thousands of Tomatoes, but this is the first occasion on which I have found a barren plant. Possibly, ere growth ceases, it may make an endeavour to produce flowers; if so, I shall record it in these columns. W. McG.

Anemone alpina

"W. McG." (issue May 1st, p. 278) has done well to emphasise the point of the failure of this plant owing to the roots sent out by some of the dealers. It cannot be expected to do well from roots mutilated in the way your correspondent mentions. Raising from seeds is undoubtedly the best way of securing a stock of A. alpina. Many years ago I saw several hundred plants of A. alpina in a field in a Scottish nursery which had been raised from seeds. In full flower this made a glorious sight, and it was interesting to observe the differences in the extent of the blue on the outside of the flowers which constitutes such a pleasing feature of the plant. Although a limestone plant in its native habitats, L. alpina in gardens does not appear to require lime. A. a. sulfurea, a granite plant, is equally beautiful, and the remarks of your correspondent would apply to it also. S. ARNOTT.

RHODODENDRONS IN A SURREY GARDEN

By George Dillistone

I ENVIED the Editor of Gardening Illustrated. A first visit to a really interesting garden, and one full of attractive plants and pictorial arrangements of them is one of the most pleasurable sensations life can afford. To know such a garden intimately is a privilege not to be lightly regarded. To have watched, as I have, its gradual evolution from the dull neglected condition of a few years ago to what the said Editor described with palpable and genuine enthusiasm as "one of the most interesting and beautiful gardens I have ever seen" is one of those favours that are bestowed upon us sparingly, and are therefore numbered amongst the grateful memories of life. But a first visit adds the piquancy of the elements of surprise, and this was his experience when we visited "Cannizaro" together in late April. Added to this we had left a dull grey atmosphere at Waterloo and knew it was a bare 30 minutes away, and yet here we were, "Not in the busy world, nor quite beyond it," but certainly "far from the madding crowd." As we stood upon the terrace, away to the left, the sunlight touched to gold the tender foliage of Ash, Oak, Chestnut, and Beech, beneath which the sight of placidly grazing sheep entirely obliterated any sense that the ever-growing octopus, London, had stretched its tentacles far enough to suck the life and beauty from this bit of rural Surrey, although we knew the General Omnibus Company's vehicles passed less than five minutes' walk from the entrance gates.

It was, however, the Rhododendrons we came to see, and if we did give many a pause to other interesting and beautiful shrubs it was excusable. I had planned the walk round to make a detailed survey of the remarkable collection of Rhododendrons that is growing up in this garden, but overlooked the fact that at every step other attractions would be calling attention.

I must mention here that Rhododendrons are no recent introduction to the gardens. An old foreman in the employ of Messrs. J. Veitch and Sons (both the foremen and the firm have now passed out of our ken) told me that years ago, long before the pollen had been transferred from Aucklandi to Fortunei, and other crosses that produced the wonderful Leonardslea hybrids, he had planted the very best collection of Rhododendrons here that his firm could then produce. Grafted on Rhododendron ponticum and neglected they went the way of so many others, and there were in 1921, when the present owner came into possession, literally acres of the stock growing rampantly, with here and there a survival of the hybrid. Drastic clearing and a remodelling of the gardens has gone on steadily, and, inspired by the enthusiasm of his employer, Mr. Allison, the head gardener, has gathered round him a collection limited only by the climatic conditions of the locality. Large already, and chosen with a nice discrimination of what is best, it is steadily growing.

Our walk led us first past a group of varieties not yet at their best, amongst which Loder's White, that wonderful product of a union between Fortunei and Aucklandi, a union that has produced other beautiful varieties, was just opening a f delicately-tinted flowers. Near i group of Mrs. Kenneth Wilson, w more ways than one a surprise. raiser wished to name it he describ deep pink. Its first opening buds an error, and it has now proclaime vivid scarlet with, in its early sta cided tone of orange in its compos was only just opening when we sa

The new Heather-bordered Rhodo walk at Cannizaro

Rhododendron Duchess of Portland in the new Rhododendron walk

neither memory nor comparison varieties in flower could attribute t else quite the intensity of colou variety. Such older varieties as A liant and Luscombe Scarlet appe dull beside it. Incidentally both th ties were represented by 10 feet specimens aglow from base to sum yards further along the walk. P most thrilling experience at this st survey was to be suddenly confron group of the glorious yellow hon species Campylocarpum. There incredible depth of colour in its p waxy flowers as seen against a d background that lit up a dull corr blaze like sunlight streaming thr woodland. There are now many this species in existence, but none t seen have the sterling purity and quality of the parent. A little farth a fine specimen of a yet unname which, I understand, is a cross white Arboreum and Campyloca was flowering all through March, high perfectly-shaped specimen, on mass of primrose-coloured flowers. and at its very best, was another specimen, the results of crossing and Thomsoni. Marvellously free of deep silvery rose-pink, this was ing among many of the best of have been honoured with a name.

Passing slowly on and lingering there to admire objects of interest a

The honey-scented yellow-flowered Rhododendron campylocarpum

A fine unnamed hybrid—Fortunei x Thomsoni

Rhododendron Loderi at its best

RHODODENDRONS AT CANNIZARO, WIMBLEDON, THE HOME OF E. KENNETH WILSON, ESQ.

Rhododendron Loderi in woodland at Cannizaro

with a cursory inspection of one of, if not the finest, tree of Sassafras officinale in the country, we at length reached the new Rhododendron walk. This is a woodland path cleared and planted during the past season. It was a little early to see it at its best, a fortnight later would have been better—five years later better still; but the photograph here reproduced will give a very fair impression of how the sombre woodland has been illumined with drifts of glowing colour. Its smooth Moss-grown and Heather-fringed walks, the sunlight flickering fitfully between the trees, touching here and there some colour mass to a ruddy glow or bestowing rippling motion on a softer tinted group combine to hold momentarily the æsthetic sense in a state of ecstasy.

The Camellias are now over, but have been very good this season. Two fine specimens of Rhododendrons—cinnabarinum and its better form, Roylei—have been in flower for weeks and are still beautiful. Perhaps, however, the greatest attraction of the day in this walk was a bold group of Rhododendron Duchess of Portland, with its flowers like creaming foam, throwing into delicious contrast the brown boles of tree and undergrowth beyond.

Many others there are, species and varieties. Thomsoni was over. Cornish Cross at its best. Loderi just ready to burst its brown-pink buds; Combe Royal in rude health and vigorous proportion. The little hippophæoides that never seems to be without one or more of its blue-purple flowers, and many, many others, some that have now passed, others that have yet to develop their full beauty, whilst there is now just that wave of colour throughout the whole that never seems too much, never too little. These are the pleasant memories of an afternoon among the Rhododendrons at Cannizaro.

The double-flowered Gean (Prunus Avium var. flore pleno)

In our admiration for the Japanese Cherries we ought not to overlook the superb qualities of this beautiful European tree, a native of our own country and coming into bloom a little in advance of the Asiatic kinds. This tree will bear comparison with the best of the latter and is vastly superior to many of them. A specimen here (Sussex), from 20 feet to 25 feet high and through, and of perfect shape, is a mass of lovely semi-double flowers. Its greatest effect is revealed when the trees are planted in front of some tall evergreen, such as Holly, Yew, or Cypress, and its heavily-laden but slender branches are very useful for the filling of large vases indoors. It appears to flourish in almost any kind of soil or situation. I consider it one of the most beautiful flowering trees in cultivation, and a nice specimen, the branches of which are absolutely laden with drooping masses of pure white blossoms, is worth going a long way to see.

G. M. S.

Notes from Wisley

During late April and May grow
been greatly retarded, and is not so
vanced now as the period of good we
Easter would have led us to expect.
rock garden many interesting gr
plants are now at their best. A large
Saxifraga irrigua is particularly
This native of Asia Minor is one of
plants of this section of the numerou
foil family, growing about 9 inches hi
much-divided palmate leaves and larg
flowers. It is an old garden plant r
met with. On a more prominent po
a bold mass of the ever-welcome
spermum prostratum Heavenly Blue
by all visitors. The part of the rock
recently renovated is beginning to ta
more furnished appearance, and ma
stronger-growing alpines are giving
tions of bold masses. Amongst them
mentioned a group of Phlox pilosa
large flat clusters of purple flowers s
placed in a steep valley between th
and also Phlox procumbens, with its
dark green foliage and crowded
lilac-blue flowers. Cheiranthus
Park is most effective in a large grou
higher ground. Campanula Allioni,
stalkless erect flowers, does best
position in moist, free, sandy loam.
saxatile and the variety Gemomus
same habit as the former, but wi
flowers. Amongst Aubrietias none a
than Magician. Violas are represen
drift of the fine variety V. grac
Bowles. Amongst the smaller shr
are contributing to the embellishme
rock at present are Erinacea pungens
versicolor, and Genista hispanica.
alpine-house many of the early al
past, but good pans of Saxifraga lat
are to be seen. This is similar to S
a native of Spain. It produces a re
rosette of leaves and panicles
flowers. Amongst the encrusted se
fine variety S. cochtearis, best des

Azalea time at Wisley

he neatest and prettiest of this sec-
h its small rosettes of silvery leaves
y stems on which are produced
of white flowers. Others include S.
australis, from Southern Europe.
e foliosa, from the Himalayas, is a
plant for the alpine-house, free of
and bearing erect rosy-coloured
In the wild garden and by the sides
ols the Primulas are coming to their
resented by japonica, Bulleyana and
ids, pulverulenta, helodoxa Red Hugh, that most charming of all Cockburniana, and also the newer P. chungensis (K.W. 5740). Rhododendrons and Azaleas are adding their seasonal contribution to the flora of the garden, likewise many plants of a peat-loving nature in this part of the garden.

In the new shrub garden Cytisus of many varieties, including the newer hybrids, are in bloom. Heaths are represented at present by Erica mediterranea Brightness, E. arborea alpina, and E. australis. The latter is amongst the best of this family.

Herbaceous plants are represented by collections of Pæonies. The earliest are opening their first flowers, likewise the numerous varieties of Iris, including the trial of Bearded Iris.

The walls in front of the laboratory are gay with many of the commoner alpines, the deep cool soil behind the walls forming an admirable root-run for the various subjects used. RHINNS.

REMINDERS FOR THE WEEK

thern and Midland

eans

these plants are growing in open
they are apt to be blown about by
To prevent this it is wise to either
w Pea-sticks amongst the plants or
t twine attached to stakes along
le of the row. As the lower pods
swell the tips of the plants should be
ut.

tumn and winter plants will now be
ugh to plant out in their permanent
The ground should be rich and
n before setting them out 18 inches
apart. A sowing of a late variety
Iethven's June should be made about

le Marrows

raised early in pots may now be
rt, but should be protected for a few
cloches or large pots. Slugs are
ial to these plants, so they must be
until growth is well advanced.

beds were formed during March it is
to restrict the shoots, as much
cing crowns are produced when only
gest shoot is retained. The bed
kept free of weeds and constantly
his applies also to beds raised from

that have been hardened off may be
nted out now, but seedlings are best
week or so. The roots should be
n in the soil and soot or lime placed
em to protect from slugs.

ums

aluable plants now showing flower-
ly should be given frequent supplies
ater and liquid-manure. This will
help the present bloom, but will also
to provide an autumn crop.

g plants

ises and other climbers are now
freely, and attention in training is
, otherwise the shoots will become
, and much damage may be done
he young shoots should be tied
the wires or other support as
proceeds. Rambler Roses should
young shoots at the base thinned
rcrowded, and those retained tied in
the supports. Aphis is generally
ne to plants growing against warm
o destroy these some good insecti-
d be freely used.

ornamental plants are very useful
house and room decoration during
ner and autumn, and to obtain the
irs they should not be grown in too
, pots 5 inches to 6 inches wide are to be preferred for the final potting. When these become full of roots weak soot-water is beneficial.

Freesias

Where these have been treated properly the foliage will now be turning yellow, indicating growth has been completed. The pots should now be placed on the sunniest shelf in the greenhouse to complete the ripening of the bulbs. Water should be gradually withheld.

Cyclamens

The earliest batch of seedlings—those raised during September—will now be in a fit condition for transferring to their flowering pots. Those of 5-inch size are large enough for this purpose. A good friable loam three parts and one part each of leaf-mould and thoroughly-decayed cow dung, with a liberal supply of old mortar-rubble and coarse sand, form an excellent compost.

Figs on walls

Tying in growing shoots—reducing these if overcrowded—should be attended to, and where the roots are restricted they must not suffer from want of water. Established trees are greatly benefited by regular supplies of liquid-manure. Mulching is also advantageous. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Scotland

Hedges

Those who have (unfortunately) Privet hedges to keep in order will be well advised to run the shears over them at this time, even though the growths are not very far advanced. When cutting is delayed to what may, perhaps, be a more convenient season, the wood is hardier, and the cutting leaves coarse and stumpy, obtrusive ends. Even at the expenditure of some time it is always sound policy to trim hedges of Privet three times during growth. Hedges of Arbor-vitæ, too, will be improved if they are lightly trimmed meantime, leaving more serious handling until the middle of August.

Rock garden

The rock garden ought now to be very gay and interesting. Bare patches can be furnished with plants of summer duration, such as the dwarf blue Lobelia, dwarf Ageratum, colonies of Nemesia, or similar things. After all, it is not rarity, but effect, which is desired, though when both can be combined it is certainly worth striving after. Weeds begin to be troublesome, and, in general, there is nothing for it but hand-picking.

Flower beds

As soon as Wallflowers, Forget-me-nots, Tulips, and Polyanthi begin to look shabby they ought at once to be cleared out. Tulip bulbs, of course, will be laid in in a comparatively shady place to complete their growth and to ripen off. As these spring flowers generally exhaust the soil the wastage of nutriment must be made good in some way. Manure, if possible, but, failing that, well-decayed leaves, bone-meal, or some good chemical fertiliser should be freely used. Well-hardened plants may now safely go out —Calceolarias, Antirrhinums, and so on. More use might be made of the Tufted Pansies and Violas, which, if spent blooms are regularly picked off, will maintain a display till autumn is far advanced. It ought to be unnecessary to say that the more tender bedding plants should not be put out until quite the end of the month.

Grape thinning

The thinning of Grapes now bulks largely in the routine work of vineries. It is preferable to do the work on cool, cloudy days or early in the forenoon before the sun gains power. Thinning can only be learned by practice, but experienced hands, well acquainted with each variety, can speedily overtake the work. When thinning is completed the borders may receive a dressing of Clay's or Thomson's, which should be watered home with tepid water. This will give the young Grapes a fillip, and aid them to swell away freely. For a fortnight or three weeks after thinning it is wise to allow, say, 5 degrees more heat during the night, and to see that there is abundance of atmospheric moisture at all times.

Other fruit houses

The pinching of the current growths of Figs should be done timeously, and trees which are carrying good crops are worth assisting. Nitrate of soda, judiciously used, gives good results, so does liquid-manure. Tie in the young growths of Peaches and of Nectarines as becomes needful. Nectarines are more liable than Peaches to overfurnish themselves, even when disbudding was well done. At the time of tying, therefore, any shoots which are obviously superfluous should be removed. See that there is always sufficient bottom heat in the Melon-house; if that be at fault it matters little at what temperature the house be kept. Always use water, in the case of Melons, at the same temperature as that of the house.

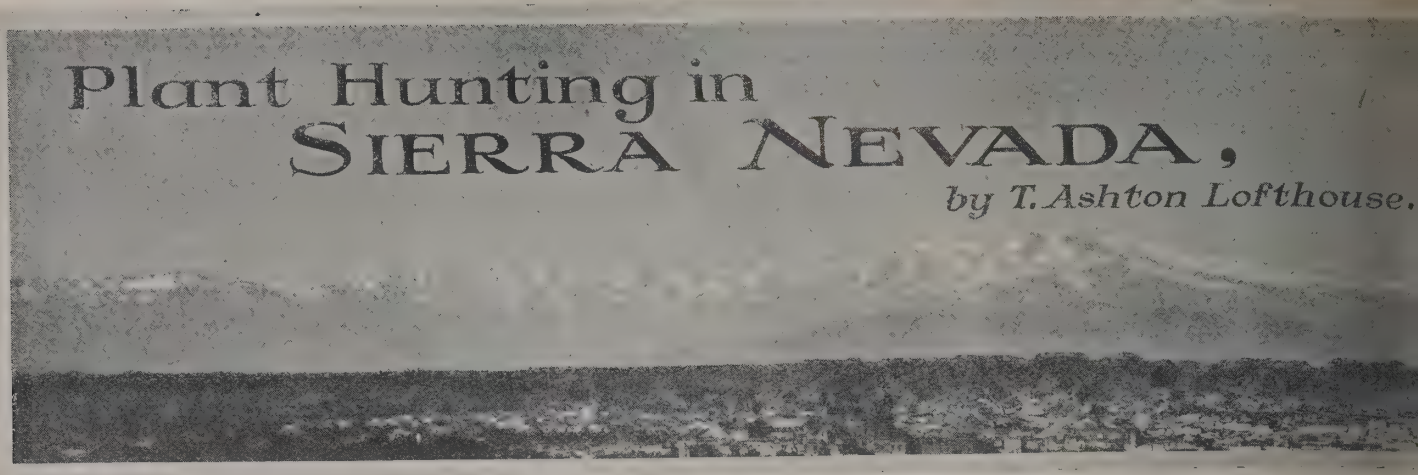
Kitchen garden

This is a busy time for the outside men, and unless foresight is used there may be congestion at a later date. Therefore stake Peas at the earliest possible moment, fork among and earth-up Potatoes, make successive sowings of Peas, French and Runner Beans, Savoys, Broccoli, saladings, with, perhaps, a penultimate sowing of Broad Beans. Plant out Brassicas freely, putting in a good breadth of early sprouts, which are, usually, useful. Sow the main crop of Carrots, get out a few lines of Beet, sow plenty of Turnips and Spinach or a Spinach substitute. Prepare carefully the sites for Vegetable Marrow plants, which ought now to be hardening off in a cold frame. Thin the seed-bed of Onions, thin early Turnips and Carrots, and sow and transplant plenty of Lettuces. W. MCGUFFOG.

Mabie Gardens, Kirkcudbrightshire.

Plant Hunting in SIERRA NEVADA,

by T. Ashton Lofthouse.



WITH the intention of visiting the Sierra Nevada to see for myself some of the interesting plants in that region, information was sought as to species of plants, localities, and means of access. Very little was to be found. Murray's Guide to Spain, although old and out-of-date, gave some of the rarer plants and hints as to the localities, and also indicated routes to be followed at the Granada end of the Range.

Search through "Reginald Farrer's Rock Plants" revealed a considerable number of desirable alpines as inhabiting the region. A list of these was extracted and written into my "Murray." Interesting information was given as to many of the plants, but so far as I know, Farrer never visited these parts, and probably never saw many of the plants referred to. His information had no doubt been extracted from the valuable but very scientific Spanish Flora of Willkomm and Lange. He seems to have revelled even in extracting from it plants likely to be of use in our gardens.

Having a botanist friend at South Kensington, information sought in that quarter elicited that Willkomm and Lange's work was the most important. A hint that plants from the Sierra Nevada would be of use to the National collection resulted in many specimens being collected and pressed, and these have been valuable for verifying or determining many of the plants seen.

It was intended to work the Sierras from Granada and Lanjaron, using the little information given as to routes in Murray's Guide.

Mention of my prospective visit to a friend who, unknown to me, had, along with other friends, interests in iron-ore mines at the little-known eastern end of the Sierra Nevada, resulted in most of my time being spent in this part. Hospitality was kindly afforded me with the engineer at his residence at the mines, situate at an altitude of about 6,000 ft.

After spending a day (the first) at the 1924 Chelsea Show, Victoria was left the following morning at 10 o'clock, Madrid being reached about 9 p.m. the day following. After staying two nights at Madrid the journey was continued to Almeria, which was reached early on Sunday morning after about 14 hours' journey—about 48 hours from London travelling by express trains.

A day or two was spent in Almeria, where arrangements had to be made for getting up into the mountains. Almeria, although very hot, was interesting, the contrasts between the ancient Moorish quarters terraced up the hillsides, white walls, and flat roofs, dominated by the Alcazaba or Moorish fortifications, and the very modern buildings erected recently nearer the sea-front was quite striking, the former more picturesque and suitable.

On June 3rd the journey was made by rail from Almeria to Dona Maria, my starting-off place for the Sierra Nevada. Dona Maria is a small country place in the fertile valley along which the railway runs from Almeria to the North. These parts, with the many valleys branching off, being great Grape-growing districts, provide a large part of the Almerian Grapes well known in the London and other markets and of which very large quantities are exported from Almeria in the early autumn. Dona Maria, only 700 feet above sea-level, at midday was tropically hot. An escort sent down from the mines was awaiting me with mule and mare transport, much to my surprise, and more so when they expected me to mount the mare right away which was intended to convey me upwards to my destination in the Sierra Nevada, some hours away, at an altitude of about 6,000 feet.

To commence with, after negotiating a steep declivity the track was partly along a stream-bed with cultivated ground on either side planted with Vines, Fig-trees, and the pretty-red-flowered Pomegranates. On the wastes near the station and village the alien Opuntia, or Prickly Pear, was noticeably at home. Leaving the village on the right and its church with unfinished tower—not an unusual feature in Spain, where it seems to be considered unlucky to have all complete, the winding track was rough and rocky.

The large magenta flowers of Convolvulus althæoides were seen by the wayside, also some Agaves, with noble flowering spikes, another instance of a tropical alien which is quite at home in many parts of Southern Spain and along the Mediterranean.

My only opportunity of botanising was when, owing to cramp, I had to slip off my mount for a short time, otherwise my time was taken up in guiding, so far as possible, my charger.

Some tall flowering spikes of Asphodelus ramosus were picturesque in the hot, stony wastes which the early part of the track traversed. Higher up a few bushes of Retama sphærocarpa, a Cytisus-like shrub 4 feet to 5 feet high, with lovely long pendulous sprays of bright yellow flowers were particularly attractive on the arid and sparsely-covered mountain side. At about 3,000 feet the path for some distance was up through a wood of Ilex or Evergreen Oak; prominent in the undergrowth was the dwarf shrubby Helianthemum polifolium, with white and pink flowers. After clearing this wood the track descended steeply to the narrow valley cut out by the Rio de Ohanes, and after the heavy climb up opposite, at an elevation of a little over 4,000 feet Erinacea pungens (Piorno negro) was reached, and continued up to my destination at the Minas de Beires, which was reached about dusk after and a half hours' journey.

A night's rest in most comfortable c was welcome after my varied and novel journey. My first day was s taking a survey of the position and e ment of my quarters. The residen situate on a calcareous schist outcrop outskirts of extensive ironstone mi large amount of shale and ironstone had been used in levelling for sites of cottages and various other buildings ing to the mines. Above the mine miles of ironstone and other shales, v tensive calcareous schists at the lower

The views to the east and south, various valleys opening out in the fore and the Sierras beyond, were very be The Sierras, for the most part, appe the distance, with the red soil dominan and burnt up, but very delightful in th lights and shades with the brillia suffusion due to the setting sun. Th capped highest peaks of the Sierra stood out magnificently in the Mulhacen, Alcazaba with Veleta known to so many travelling alo Mediterranean, standing out distinct parently near in the delightfully clea sphere, looking more like 10 miles than the 30 or more miles from this the crow flies, and a very different pro by the nearest route, as I found o when trying to reach them. From the higher points the coast of Afric 60 to 70 miles to the south, is at times but in the hot weather prevailing du stay a continued heat haze over the vented any distant view in that d Roads in these mountains are non and mule tracks few and far betwee stony shales and difficult to follow. sides of the tracks leading to and f mines were many interesting plants, i Dianthus brachyanthus, the Alpine these parts, with hard, short, grey-g curving leaves from which spring ou rose-pink flowers, usually of a good variable. This Dianthus seems to oc place that D. Carthusianorum does Swiss Alps and D. neglectus in the Ma At a higher altitude at a later peri much better dwarf plants with hard compact foliage and larger short-s flowers were seen, in all probability known as Dianthus nivalis. This only Dianthus seen during the visit previously seen this species in a frier den in England, with the very chara foliage, but the flowers were longer-s and smaller. The local Anthyllis Vu var. Webbiana, with woolly silvery le dark purplish-red flowers, is quite a plant only sparingly and seemingly

e calcareous schist. Convolvulus as frequent by the tracks and a weed rden, with its white, streaked red Linum suffruticosum, very similar of the better L. salsoloides, with its n pinnate leaves, woody stems, and f delicate satin white, black-eyed he eye due to the petals being tipped at the base. It was plentiful at the vel and very lovely fully opened out continuous sunshine. Erinacea (Piorno negro of Augustin—a most t native who was my guide and comuring the visit).—This interesting ush, aptly described by Reginald "a dense prickly hedgehog of very er-green spines," was abundant on round from about 4,500 feet to 6,500 is district. At the mine's level young ere springing up all over in the shale and stony refuse from the t was interesting in getting out quite nts to see at what a depth the roots w the surface. Acres of these little vere a sight to be remembered, ounds like tiny blue islands dotted the ironstone shales (not limestone) ting ground with masses of purplybloom as they were at the higher e bloom being over at the lower. ite-flowered mound was a delightful e higher level, and also within a few articularly good bright blue variety. re marked for seeds later, but, unly, they were not collected. A plant ecies on my moraine, which has been ears, while it has grown slowly and healthy, has never flowered. It owever, to flower well in the Camotanic Gardens and other places. observation it should do well on aps or positions made of such even in this much less sunny counosition likely to get the maximum h of material, and quick drainage be essential for success. This and he dwarf Genistas and Junipers are nsively for fuel in these treeless d natives with mules hidden under vere frequently met.

inacea-like yellow-flowered little s named Piorno blanco by Augustin, , on finding the before-mentioned ered E. pungens, I suggested "Piorno blanco" for the latter, he did not agree, saying, no "Piorno negro blanco. The description of Genista Loebeli seems to fit this shrub, which was very similar in character to E. pungens, although much dwarfer, with finer needles and smaller mounds. It seemed to be more at home on the calcareous schists and much more frequent, and clear of E. pungens altogether on the hot mountain sides to the south of the mines, and considerably below their level, the mines being its upmost limit.

Phlomis Lychnitis, with woolly leaves green above and tomentose-grey on the underside, with whorls of bright yellow flowers to a height of about 2 feet, was plentiful and very beautiful in the mine's screes. Aromatic plants were quite a feature, there being quantities of the curry-scented Helichrysum serotinum, a lover of dry arid places. A Thyme-like shrubby plant, Frankenia Webbi, with white flowers, was very plentiful; this was also seen at Almeria just above sea-level, and plants raised from seeds obtained. Lavenders included Lavendula multifida and L. lanata, the latter a lovely white, woolly-leaved species with violet flower-spikes peculiar to this region. Teucriums were plentiful, among them being Teucrium Polium aureum and T. Polium lanatum, a white, woolly-leaved plant, T. compactum and T. granatense, a nice, dwarf, small, grey-leaved species in calcareous schist. In one locality on limestone Lithospermum fruticosum was sparingly distributed, with hard prostrate woody stems and bright blue flowers, Sanguinaria of the Spaniards, a concoction made from the roots of this plant, is used as a blood reviver.

(To be continued.)

The Pasque Flower (Anemone Pulsatilla)

Well-cultivated plants of this are exceedingly beautiful about Easter, and to see the numbers of silky heads pushing through the soil and gaining strength each day until from a dozen to 40 handsome nodding grey and violet flowers meet the eye is a pleasing sight. A well-grown plant may possess as many as 60 blooms, and such plants are very beautiful. It prefers a calcareous soil. Nevertheless, it grows quite freely in heavy soil absolutely devoid of lime, and, under cultivation, becomes a more handsome plant than in its natural habitat. The Pasque Flower is one of the handsomest spring-blooming perennials we have and varies considerably in the colour of its flowers, many of which have been given separate names. I find, however, that quite a variety of colours may be obtained by raising this lovely plant from seeds, many flowering the second year after sowing. Nor does its beauty end with its flowers and prettily-cut leaves, for large heads of silvery seeds render the plant very ornamental for several months.

M.

An Alpine flower field near Champex

Primula farinosa near Champex

Flower fields of Alpine Switzerland

I AM sending two photographs taken near Champex during May of last year. The mauve flowers of Primula farinosa can here be seen growing in sheets like Buttercups in an English meadow, and all amongst them and in equal quantities are the brilliant blue stars of Gentiana verna, which, alas! the camera has failed to record.

East Yorks. RUTH BICKERSTETH.

John T. Bennett-Poë

THOSE who had the privilege of knowing one of the kindest and gentlest of men and most devoted of flower lovers will long mourn the death of Mr. Bennett-Poë. He was one of that remarkable group of horticultural amateurs of 40 years ago, of whom he was, till his death on May 14th, one of the few survivors. Six of these fine old gardeners were among the ranks of the clergy, namely, the Dean of Rochester, Canon Ellacombe of Bitton, Canon Swayne of Salisbury, the Rev. C. Wolley-Dod, the Rev. G. H. Engleheart of Daffodil fame, and the Rev. Henry Ewbank. These and others, notably Mr. G. F. Wilson, the former owner of the Wisley Gardens, Mrs. Davidson, Mr. E. H. Woodall, Mr. Henry Elwes, and Mr. Archer Hind, the writer of these notes had the happiness of counting as friends and as frequent visitors or correspondents. All but three have now been taken from us, but those who are gone are ever held in reverent, thankful, and joyful memory.

Of all these helpful and sympathetic garden friends there were two whose visits gave me the keenest pleasure; these were Mrs. Davidson, the writer of that capital book, "The Unheated Greenhouse," and Mr. Bennett-Poë. It was a happy day when we succeeded in bringing these two enthusiasts together as fellow visitors. They could hardly pass any plant without having an illuminating discussion on its ways and wants, its merits and use in garden practice. A slow progression round the garden in their company was not only a delight, but a source of valuable instruction, and their reasoned estimates of the beauty of each flower was a wholesome stimulus to still keener observation and closer critical appreciation.

Mr. Bennett-Poë was an all-round practical gardener with a wide knowledge of both hardy and indoor plants. Of those needing special frame or house culture the beautiful old florists' Auriculas and the more lately developed Nerines were among his special favourites, and among hardy plants Water Lilies and Daffodils. G. JEKYLL.

Mrs. Davidson and the late Mr. Bennett-Poë, from a photograph in 1886 at Munstead Wood

Shooter's Hill Park

The winter garden is at all times interesting, more especially in the spring, when there is such a variety of flowering plants in the rather small yet lofty conservatory from which you gain admission to the larger section containing giant Palms and Tree Ferns, interspersed with Clivias, Orange-trees, Sparmannia africana, and many flowering plants which are at their be early months of the year. In the firs structure there was a grand display baceous Calceolarias, well-flowere mens in 8-inch pots. Alongside was of the blue Cineraria stellata.

Around the fountain basin wer Lilies, Schizanthus Wisetonensis, obconica, P. malacoides, Genista f Clivias, etc., the whole providing a n display. There is a high wall due so of a good length where many so tender plants flourish, notably Ca californica, seemingly quite hardy, tetraptera with its curious yellow and Clematis The Queen, with of its pale blue flowers open. ternata was smothered with its H scented flower-heads, but Jasminum linum cut a sorry figure. Outside half-standard Crabs were at their b the white expanded flowers and pi yet to open formed a good contra Tulip Pride of Haarlem showed up one of the large beds. There is nursery here where trees and shru descriptions are grown for supplyi L.C.C. parks that have not the spac fresh air as afforded them in this trict. J. M

The border Auricula

Like all the Primula family, the demands frequent attention or it is a off, by reason of the fact that it grow of the soil, or so it is popularly sup do. It does not really do so, of co merely loses its lower leaves, th getting quite bare and exposed to dis vermin, thus appearing to rise up o ground. While the old alpine vari very beautiful, the finer sorts are m delicate for ordinary garden purpose is gratifying to lovers of the Auricu much hardier and very decorative been evolved which is known as th Auricula. The late Mr. Storrie, carse, Perthshire, was among those years, worked to improve this plant strain to this day is certainly one of The flowers are large and borne stout stems, while a considerable colours is included. Especially fin yellows, heliotropes, and browns. still be sown, although better resul think, obtained by starting in Febr plants thus raised being strong e flower well the following spring. plan for those having no suitable dation for raising in a greenhouse cure seedlings and prick these into bed of good soil under a frame or h or into boxes set in a frame. If k and shaded from bright sunshine th plants soon grow away freely, and b August are ready for their perman ters. The ground should be well b and a fair amount of quite rotten incorporated with it. Partial shad perative, the Auricula disliking bein by the sun. Those already having p wishing to increase their stock sh soon as the plants go out of flo divide, and replant on a fresh si none of the Primula tribe has occupi least three years. Before replan amine each piece, and with a sh remove any diseased roots or lower of the stems. In planting, place w in the soil and press it firmly arou To ensure a good display the plan be only some 6 inches apart. Sh weather set in water occasionally a if necessary, for a fortnight or so. C.

Preston House, Linlithgow.

THE CHELSEA SHOW

MAY 25th—27th, 1926

A scene of unrivalled splendour. In spite of transport difficulties, this is one of the most brilliant and successful shows on record

HAPS, after all, it was just as well the Chelsea Show was postponed. eek ago it was wet and very cold—so t workmen at Chelsea were digging oats. Since then London has been in sunshine, and the weather at could not have been better. Ex- at Chelsea have a great reputation ng their exhibits to reach perfection pening day. With them it is a fine we venture to think that the Irises aidstone, the Lilies from Tunbridge the Eremuri from Langley and , the Primulas and Meconopsis from , North Wales, and Moniaive, Dum- e, would not have been *quite* so l the show been a week earlier, and ertain that the pot Cherries, Peaches, ctarines from Sawbridgeworth and awberries from Bedford were never scious and tempting than they were pening day.

g the show as a whole it was of an exceedingly high standard. In spite of the many difficulties of transport it was the same old "Chelsea," and as good as ever. All through the troublous times we have recently been passing the exhibitors have shown determination to carry on, and this year's exhibition actually shows an increase in the number of entries over last year, and all space was well filled. Moreover, there are more rock gardens, and, we venture to think, better rock gardens than ever. They are more remarkable for good design and construction than for planting. Taken as a whole, the construction leaves little room for criticism, the rock gardens blend into one another, and the scene, as a whole, is reminiscent of a lovely alpine meadow aglow with gay flowers in varied hues interspersed with dwarf conifers from the high Alps. The programme of music, performed by the band of the Grenadier Guards, added not a little to the feast of good things provided by this year's Chelsea Show.

Shortly after 10 o'clock on the morning of the opening day the King and Queen, favoured by Royal weather, paid their usual visit to the show, and the great interest they display each year in the success of this great exhibition is appreciated by all.

Their Majesties were accompanied by Lord Lambourne, the President, and Sir William Lawrence, Treasurer of the Royal Horticultural Society.

The Society is still without a Secretary since the death of Mr. W. R. Dykes, and we take this opportunity of complimenting the Assistant Secretary, Mr. A. Simmonds, on the able way in which he has carried on the Secretarial duties.

Of the exhibits in the open the garden of reflections as arranged by Messrs. Carters was one of the most effective. It was a beautiful wild garden with Rhododendrons in full flower reflected in pools of clear water.

The King and Queen, accompanied by Lord Lambourne and Sir George Holford, inspecting the formal garden by Messrs. R. Wallace and Co. at Chelsea on May 25th

ROCK AND FORMAL GARDENS

A week ago we prophesied that the recent industrial upheaval, with its consequent effect of postponing the show for a week, would not have any serious effect on the show as a whole. Certainly the Rock and Formal Garden sections more than justify our opinion. They are good throughout, and in some cases no verbal expressions of ours can convey the admiration we feel for the way the various competitors have overcome all difficulties. If there were nothing else in this wonderful show it would be worthy of the best traditions of Chelsea. To attempt a formal or detailed description of each individual exhibit would be futile and involve a mere repetition of similar terms. Our comments must, therefore, be confined to a general review. Moreover, there are so many good plants in each that appear in all that we must leave it to our readers to visit the show and relieve us of the irksomeness, to them not less than ourselves, of compiling lists of plants. Let it suffice that every good thing in the alpine world is represented.

The Rock Gardens

Without hesitation and with no fear of contradiction we proclaim the fact that never in the history of showing has this attractive section reached the standard of excellence presented this year. The judges are not in an enviable position, for in making a selection for the premier award it is difficult, indeed, to find an all-round *best*. Differences there are, as there will always be, but there are several exhibits that need the closest scrutiny to find imperfections. The judges' task inevitably turns on, not in what certain exhibits excel, but in the minute details in which they fail, and on this ground only could they say that one exhibit is better than another of the several that are in the front rank.

Take the excellent example produced by Mr. Herbert Brook. From start to finish it is good. The selection of the stone, the conception of the theme, handling the rock, and the restrained (if not always *quite* correct) planting. Every stone is a picture and every one picturesquely used. The bold cliff background, through which breaks an ample cascade, is Nature herself in her most pleasing form. The stream that rambles down the miniature hillside is exceedingly well managed, and as the water tumbles from ledge to ledge throughout its course, turned hither and thither by jutting rocks, it carries the mind forcibly back to the moor and hillsides whence Mr. Brook gained his inspiration. The impression it leaves on the mind is that of a man who loves the stone he is using and uses it lovingly.

Adjoining this exhibit is another by last year's winner of the "Daily Graphic" Cup, Mr. George Whitelegg. It is a plain, unvarnished fact that whatever his exhibit of last season may have merited—and no one disputes the justice of the award on that occasion—this year he has far excelled that effort. He is using the now familiar rock from the Cheddar gorge formation. Not an easy stone to build with, he has tamed its violence into a pleasing semblance of rugged beauty softened by the touch of time. Nevertheless, it is bold and rugged at points, as is inevitable if the natural aspect of this stone is truly interpreted. His distance is particularly well handled, his main points beautifully composed, but the charm of the whole conception is amplified by contrast. Not the contrast of harsh colour, but the contrast between the turbulence of the gushing water and restless movement of the stream, and a delightfully peaceful little moraine that dips below the level of a suggestive valley. Being at a lower level than the watercourse, a damp moraine is suggested, and this he has effectively planted with numerous enchanting little subjects, making this bit of idealised Nature a wild garden in the truest sense of the word. Much might be said of the plants he has used, but it would be invidious to mention a few where there are so many good things. Perhaps the happiest æsthetic touch is conveyed by the water weed and rushes, of no commercial value, but of great artistic worth, in the lower pool.

Another exhibitor who is using the Cheddar stone effectively is Captain Symons-Jeune. If anything violent can be beautiful (and it can), then this exhibit is beautifully violent. A bold bluff of rock gloriously faithful to its natural formation springs majestically from its Mother Earth. Escoriated by 10,000 years' exposure to the elements, blasted and riven from summit to base, it has become in the exhibitor's capable hands a poem in stone. Not a single, soothing poem of soft and pleasant things, but a rude emphasis of the effect of some violent catastrophic upheaval of Nature's forces. One could hardly have conceived that so typical an example of strength, force, and natural beauty could be presented in so small a space. This exhibit is more than a rock garden, it is an emblem, a symbol of all that is desirable in rock gardening for picturesque effects. To some its very majesty will be repugnant because the great strength of it will not appeal. As we stood before it we thought of gaunt and bare tree trunks against a hard, cold, winter sky in Flanders. And yet there is an ineffable charm that touches our sensibilities in a subtle, poignant way that compels a return to it again and again. Just so the morbid attracts humanity.

In Mr. Clarence Elliott's exhibit there is one little bit in the foreground that is an example in itself—a rocky mound charmingly clothed with a miniature forest of Juniperus hibernica compressa. A green garden, a blue sky, and this little bit were enough to content the soul of many real garden lovers. But it is only part of an excellent whole. Mr. Elliott's dream was of a deeply-channelled gorge through which tosses a turbulent torrent until it reaches a pool in which he has managed to convey the impression of immense depth. He has also achieved in the placing of his stone, the grey Westmorland rock, a sense of natural wildness that is unerring in its faithfulness to the chosen type, and idealistic in its realisation of a rock garden as a home for plants. Not that he has let any slavish idea that a rock garden is a home for plants *only* mar his construction. Having seen many of this exhibitor's efforts this must be indubitably classed as his best yet. There is one other good thing about this exhibit, a critical survey could find no plant out of its proper place. Wrong; there are two little tufts of Lilium rubellum wedged between rocks, where they might be by accident, but would very rarely find a natural home and establish themselves. With this exception it is pleasant, but in no sense necessary or gratifying, to find altitudes, and the personal preferences of the plants so carefully studied. Primula Sikkimensis would never grow on top of a dry, rocky ledge as some exhibitors would lead us to believe, but it would grow in the lush meadow he suggests as its proper place. The air of verisimilitude conveyed by correct planting is an important point that many exhibitors would do well to take cognisance of. The advertising display of six little ant-hills in the immediate foreground of what is otherwise a genuine picture is amusing.

Of a different type to any of those hitherto mentioned is the production of Messrs. Pulham and Sons' efforts. Nothing could be more consistent than this firm's interpretation of the geological formation known a fied rocks. Here Nature has becom and ordered. Not a stone seems out In fact, the whole effect is so peac spite a lavish, possibly too lavish, that one almost wishes there woul accident and some of the rocks bec placed. It is a compliment to the e of Messrs. Pulham's work when I s minds me of the good little boy at sc gets called a prig; it is so very, very g displays in its every part the un fidelity of the firm to its ideals.

Messrs. Hodson's have an exhibi altogether attractive, but perhaps er side of too devoted an attention to form. The stream and cascade are fully treated. The planting is genera but faulty in parts. Not enough has been paid to the natural require the plants. Also each stone and its tion seem to be just a little too n counterpart of that opposite it. No c say that the stone is incorrectly u merely that Nature never does the th is attributed with here, and tidies up in this spick-and-span way. It is a den that many people would enjoy, justifiably so, but one feels that the of an avalanche of minute proportio give a note of realism that is now la

Mr. Gavin Jones has a bold hill crop, much of which is excellently A water-worn path cuts transversely the exhibit, and is so well executed redeems the whole from the accu tameness. There are many good the exhibit, but not always in the be for them. Primula Sikkimensis and Cneorum would, neither of them, s the obviously dry ledges where placed. Nevertheless, it is a very in exhibit.

We cannot help expressing our with the disaster that has befa Crewdson Day. One of the catastrophes of the Great War, duri he lost a limb, he had scarcely ma excellent start on his rock garden was compelled to relinquish his w undergo an immediate operation. sults of his work do not appeal to us be grossly unfair to criticise it, and should be counted to him as the sacrifice.

One rock garden there is that attraction for us. The name of the did not appear upon it at the tim visit, nor could we ascertain to ascribe it. It was in absolute contr others in that it was formed of harsh grit stone. It was profusely always judiciously planted. For villa garden it would probably be a addition.

Formal Gardens

We are sorry we cannot speak in high terms of these as is compelle excellence of the rock gardens. generally, rather a sameness of that becomes a little monotonous. evitable garden house, usually in t able position at the end of the ex usually also raised on a little terr end, the likewise inevitable pool wit out a water-spout in some form or and this year the universal use of Az Rhododendrons as the main mot planting scheme, do rather pall on t as one passes through them. O there are differences, and some disti

Messrs. Wallace and Co. have p very attractive exhibit with the thatched garden shelter, very new- thatched dovecot and a bird-rest. latter in a real garden would proba somewhat of a nuisance to the

hem, but they certainly give a note of ness to a wonderfully well-furnished The design is unique in the show it consists of ovals within ovals. Of gns for such a scheme the oval is the fficult to handle successfully. An oval an oval multiplies the difficulties four- t is so easy to get the impression inner lines fail to conform with the This fault is not altogether absent in stance, but the firm has certainly d a satisfying result. We would have mething less new and smart-looking coping used round the central pool, is a fault that time would soon over- the actual garden. The choice and he planting in this exhibit are far be- ose of any other in the show. Plants d where they would grow naturally. llection of choice Rhododendrons is of more than passing notice. Glori- sses of such things as Rhododendron m Park (a deep blood-crimson), MacEwan (a rich cerise-crimson), orge Paul (a soft silver-pink), and old Cynthia are noticeable. Azaleas represented in the best modern varie- ne of the most attractive shrubs in ders is Enkianthus campanulatus in colours, from deep cream to a dis- ddy colour that is almost red. Many rubs are here, also Lilies, amongst ve noticed the rare Lilium cernuum, n species that looks like tenuifolium opens its flower, although the leaves ger. When it does open it is realised have almost a pink counterpart of ium, the reflexed sepals being spotted ep red-purple. Lilium Krameri, now as japonicum, is also shown in fine of good stature and vigorous growth. lief to the intense glow of colour in lers surrounding the garden the centre and pool are refreshingly quiet. s, Rodgersias, and a few grassy-leaved st break the regularity of line with- racting from the form of the pool. will linger in this garden to note the cellent shrubs in its borders.

s. Cheal and Son have a formal gar- a central path leading to an octagon its extreme end in which there is an al pool. Beyond this is a stone seat. t frankly confess that at the time we he effect looked rather arid and un- This was probably due to the un- le surroundings. Azaleas, Brooms, s, and other shrubs are lavishly used.

rnest Dixon again produces the truly n garden. Square instead of his proverbial octagon, it is nicely and freely planted with hardy plants n. There is something that looks so ly suitable in this planting that it is g after the ultra rich colour of so hododendrons used elsewhere.

s. Vernon Bros. have developed a amatic effect. This garden, with its surround, sunk centre, twin canals at s, paved court of mixed stone and nd trellis enclosure, is well executed wingly planted, but gives the im- of a fine stage effect at Drury Lane an a living garden.

s. Baker's have the prettiest garden in the show. Built of stone on a errace, it only merits one adverse , the roof is too flat, and, in prac- ld probably be rather leaky, as stone h as are used for the roof require a rp pitch to clear water during heavy The garden itself is of simple, design. A sense of gratifying is gained by the trim Yew hedge ling it. The balustrade that encloses ace that is lifted somewhat above central portion is effective, but the uld have been more attractive if the curves introduced on either side had been less pronounced. Hardy plants in season are well used in the borders under the hedges and on the terrace.

Messrs. Gaze have indulged in a quite unique idea in that they have surrounded the lawn in the sunk portion of their exhibit with a sort of moat. Uncomfortable, but nevertheless picturesque cobbles are used to form the principal paths. One is inclined to wonder whether the gardener who had to attend to the borders beyond the moat would not soon acquire an undesirable proficiency in profane language. An excellent garden house is provided to terminate the scheme. This is a tiled roof supported by classic columns. Probably because the eave tiles are not brought down low enough the roof has a sort of detached appearance that is not quite pleasant. In reconstruction this defect could easily be modified. Rhododendrons, Ivies, and Lupins form the main planting.

Messrs. Wood and Son have constructed a pergola approach to a really good reed-thatched shelter, the best bit of thatching in the show. There is also a pretty lead fountain figure pleasingly placed, and colour is provided by Rhododendrons and Azaleas.

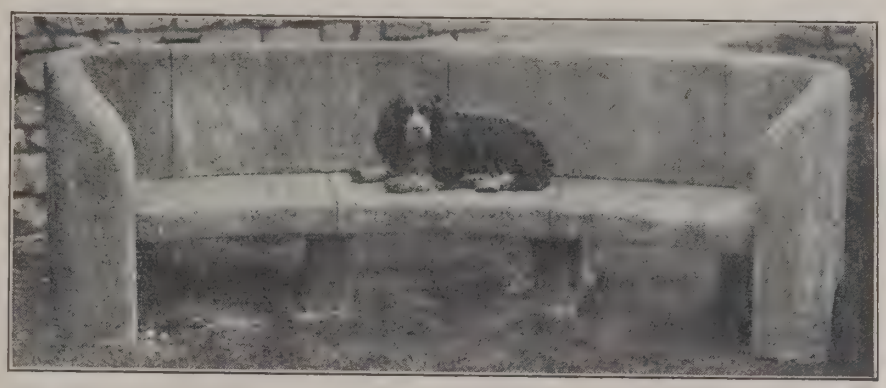
From the renowned Horsecombe Quarries comes a collection of the now famous stonework. Bird baths, well-heads, seats, plant bowls and vases, here and there a lead figure, stone balustrade, and paving are the most attractive features. A stone that attains the appearance of antiquity very quickly, it is particularly suitable for garden work because plants love it.

Messrs. Carter and Co., with a sublime indifference to anything conventional, have made a formal garden on absolutely informal lines. What our old friends the "formalists" in gardening would say to this effort would probably be more scathing than pretty. Nevertheless, it is a garden, and a garden conceived on a very beautiful idea. A rock cascade half hidden, half revealed, in a little woodland background issues into a winding stream flowing between grassy banks that die away into glowing masses of Rhododendrons used in rich profusion.

Mr. Macdonald, "the grassman," has once again produced an effective effort. It is astonishing what ingenuity is displayed by this firm in using the same sort of material every year and in producing such diverse effects with it. Every time it is grasses, and every time grasses used in a different way. Always, too, there is a faultless excellence in "finish" that reminds one of the drawing-room rather than even the most meticulously cared-for garden.

There is one thing in Messrs. R. Neal and Sons' exhibit different from all others. They have not organised their view-point from the approach, but from the cosy seat recess at the opposite end. Simple in design, just a paved central walk, a sunken circle at its end, with a circular fountain pool within it, a few steps leading up to the seat, and the most elementary planting, that is all. This exhibit has suffered from the postponement of the show, a fact that is obvious from the very advanced stage of some of the material used. The Irises, in particular, are rather a sorry lot, but this is the fortune of war—or strikes.

Home Industries have a Wattle enclosure within which are herded some Pansies, Daisies, and other flowers that do not look very happy in the Wattle baskets in which they are planted.



This low seat of Bath stone is shown in the formal garden made by the Horsecombe Quarries, Combe Down, Bath

SWEET PEAS

The firm of Messrs. Dobbie and Co., Edinburgh, were again well to the fore with one of their famous groups of Sweet Peas, representing some thirty-one stands and some thirty vases and bowls, and all the better and newer varieties of Sweet Peas at present in commerce. The arrangement of the enormous number of flowers is superbly done and leaves nothing to be desired. The use of Palms and Ferns was most judiciously done, and the cut fronds of Asparagus Sprengeri gave a charming finish. This group is set up in No. 1 Tent and is represented by such varieties as Magnet (salmon), Charming (cerise), Miss California (peach), Tangerine Improved (orange), Camelia (white), Jean Ireland (cream, tinted pink), Powerscourt (lavender), Renown (rich rose), Marcheta (rich cream), Wizard (orange), and such popular sorts as Mermaid, Hebe, Ivory Picture, Majestic Cream, Mrs. Arnold Hitchcock, Mrs. Tom Jones, Grenadier, Dignity, and Mary Pickford.

Sweet Peas were nicely shown by Messrs. Jas. Carter and Co. in four groups of nine bowls in each at the four corners of their group of greenhouse plants and annuals. The individual sprays of blossoms are very good and the varieties are represented by such sorts as Peggy, Marjorie, Superb, Orion, Princess Patricia, Grenadier, Geisha, Duchess of York, Enid, Supreme, Crusader, Wizard, Venus, Powerscourt, and White Perfection.

A most striking group of Sweet Peas is shown in No. 2 Tent by Messrs. Robert Bolton and Son, Birdbrook, near Halstead, Essex. Superb quality is represented in this display, and the flowers are arranged in most pleasing and artistic fashion. We have a distinct preference for the following varieties: Magnet (salmon-pink), R. F. Felton (pale mauve-lavender), What Joy (cream), Royal Mauve (deep mauve), Gold Crest (orange terra cotta), Powerscourt (pale lavender), Wizard (rich orange), Model (white), Colorado (deep orange), Peggy (scarlet), Valentine and Picture. Stands, baskets, bowls, and vases are all usefully employed in this group.

ROSES

At the Embankment entrance to No. 1 Tent a large, superb group is set up by Mr. Elisha J. Hicks, Hurst, Berks. Standards, dwarfs, and climbers are shown freely, each representing the respective sorts quite satisfactorily. Considerable taste is displayed in the arrangement of the plants, and all types and many varieties are shown. There are also stands of cut Roses displaying popular varieties. Clovelly, Lady Hillingdon, Mrs. H. Stevens, Mrs. H. Winnet, and many others. This is a fine effort.

Messrs. A. J. and. C. Allen, Norwich, have a circular group in the same tent, and very pretty it is. All types of the Rose are shown in standards, dwarfs, weeping standards, climbers, and dwarf polyantha forms. Of the latter, Else Poulsen, Superba, Lady Reading, Ideal, Queen Wilhelmina, and Orange King are a few of the better sorts. Paul's Scarlet Climber, Havering Rambler, Chatillon Rambler, Excelsa, and Penelope are all very pretty.

In Tent No. 2 Messrs. Frank Cant and Co., Ltd., Colchester, show a pretty group of Roses, mostly standard and dwarf plants, all nicely flowered and in good order and condition. Noteworthy examples are Mrs. Henry Bowles, Mrs. Wemyss Quin, Capt. F. S. Harvey Cant, Molly Sharman Crawford, Mrs. Foley Hobbs, Roselandia, all beautiful Hybrid Tea sorts worthy of mention.

Very excellent is the table group of cut Roses from Messrs. Ernest Paul and Co., Cheshunt, Herts. Stands of well-grown Roses are shown in this collection. Such popular sorts are shown as Golden Ophelia, Covent Garden (grand), Ophelia, Los Angeles, Molly Sharman Crawford, Mme. Abel Chatenay, Richmond, Mrs. Henry Morse, Hoosier Beauty, Westfield Star, America, Mme. Butterfly, and Florence L. Izzard.

A few Roses are shown by Mr. Alfred Dawkins in his table group in Tent No. 2. Dwarf Polyantha Rose Edith Cavell and Superba, two good crimson sorts, are shown.

In the same tent Messrs. Benjamin R. Cant and Sons, Colchester, have a really magnificent table group of Roses. Very artistic is their display, the colours being very striking and noteworthy. Gorgeous indeed is the new H.T. Padré. This is a grand garden Rose and should be a great asset in the garden. The new H.T. Mrs. Beatty, a grand yellow, richer than Maréchel Niel, of good form and quality, is shown in splendid form, and well merited the Award of Merit it gained. Cecil is another new Hybrid Tea of merit. It is a single lemon-yellow flower, very pretty in the bud, and of distinct habit. There is a host of good things in this stand, which all rosarians should visit.

Mr. George Prince, Longworth, Berks, in the same tent, sets up a pretty table group of Roses. Lady Sylvia—a vastly improved Mme. Abel Chatenay—is shown en masse. So, too, is Mme. Butterfly. Roselandia is also represented splendidly, as are several Polyantha Roses of merit.

Tent No. 2 also contains a table group of dwarf and climbing Polyantha Roses shown by Rev. J. H. Pemberton, Havering-atte-Bower, near Romford, Essex.

The dwarf sorts in this collection are among the best, and represent among others Chatillon Rose, Topsie, Juliana, Echo (very lovely), Queen Wilhelmina, Mrs. W. G. Koning, Ellen Poulsen, and Edith Cavell.

Messrs. Wm. Cutbush and Son, Barnet, showed Roses in their large mixed group; as a matter of fact Roses preponderated. Climbing and dwarf Polyantha sorts are largely in evidence. Dwarf sorts are seen in the beautiful Mme. A. Kluis, a grand rose-coloured sort, La Reine Elizabeth (rich crimson), Golden Salmon (bright salmon), Orleans Rose, and the new Locarno (bright, rich rosy-red)—a gem. There is a charmingly diverse lot of other sorts, all worthy of notice.

Messrs. Chaplin Bros., Ltd., Waltham Cross, Herts, have a great semi-circular group at the Embankment entrance to Tent No. 2. Standard weeping climbers evolving out of a groundwork of dwarf Polyantha Roses form the background, and the broad margin to the group is arranged with dwarf Polyantha Roses, such as La Reine Elizabeth, L'Ideal, Girlie, and others. A large number of Hybrid Tea Roses in pots also comprises the margin to this group, some of the best sorts being J. N. Hart, Geraldine, Ophelia, Mrs. Henry Bowles, Mrs. Herbert Nash, Ethel Chaplin, Westfield Star, Maud, and Mrs. Atlee—all well exhibited.

STOVE AND GREENHOUSE PLANTS

Mr. H. J. Jones, Ryecroft Nursery, Lewisham, staged another of his inimitable groups of Hydrangea representing well-grown plants in grand form and condition, and embracing not only the better of the older sorts, but a beautiful array of new and choice varieties. The display is most impressive; it is not only large, but the colours are so pleasingly diverse. The arrangement of the group leaves nothing to be desired, as with stately Palms, etc., and an edging of Ferns and grass, a neat and pleasing finish is given to the group. The more noteworthy sorts are Blue Prince, Yvonne Caylax (a beauty), Helge (lovely), Peer Gynt, Goliath, Niedersachsen, Parcival, Niege, Orleanise, Sensation, Maréchal Foch, Mme. de Vries, Elmar, and Rhinegold. This group is in the large No. 1 Tent.

Messrs. Godfrey and Son, Exmouth, in the same tent set up a useful group of Fancy Pelargoniums in pleasing variation of form and colour. The better sorts appear to be Lady Davy, Mrs. F. C. Huyter, Dazzler, John Innes, Rosalind, Cynthia, Cassandra, Joan, and Tugalia. The plants are exhibited in round baskets.

In Tent No. 1 also there is a group of Primula obconica of large size edged with Pteris and Moss, a really dainty display. The plants are described as varieties of the grandiflora type of Primula obconica and are represented in triangular blocks. These blocks display such varieties as Salmon King, Lilac, Fire King, Giant Delicate Pink (very handsome), Giant Crimson (striking), Giant Pink (very fine), Bright Pink (lovely), and Sutton's Blue. These came from Messrs. Sutton and Sons.

From the same firm also comes one of the most remarkable exhibits ever staged by this well-known firm. Here are to be found ideal plants of Gloxinia in wondrous shades of colour and of beautiful form, and the plants well grown, Schizanthus Wisetonensis flowering in prodigal profusion, also Schizanthus retusus in its free-growing forms all pleasing in variety and colour, laria profusa (Clibrani), and exce amples of the Herbaceous Calceolari senting this subject in ideal form a tion. The Salpiglossis is also w handsome sprays of blossoms in a array of colour showing this s its best. Streptocarpus, Cinerarias forms, all very artistic and pleasi bined to make a display second to set up by this well-known firm. Begonias, basket Begonias, and w plants of Clerodendron fallax com wonderful group. Palms here a used advantageously together with an edging of Moss, gave a beautiful this wonderful floral picture.

Adjoining Messrs. Dobbie and C burgh display of Sweet Peas in No. a group of exceptionally well-gro baceous Calceolaria described as " Perfection." The plants give ev good culture and are flowering in bearing large blooms of good wonderful colours in good condition

The group of Messrs. John Peed West Norwood, S.E., in the sam quite pretty and attractive. It is m a background of healthy-looking P Caladiums in variety with Liliu spersed for effect. There is also a Hydrangeas and two circular m front arranged with Gloxinias of and colour and a good strain of Stre The group, as a whole, is distinctly

At the Embankment end of N Messrs. Jas. Carter and Co., Ray London, have arranged a very larg annuals and greenhouse plants in t for which this firm of high reput come famous. The group is squa geometrical design. It comprises delightful subjects, such as Gloxinias Sir Julian Byng, Invinc Othello, Premier, Prince of Wales Duchess of Marlborough, Cyclo Queen, and Spotted. These arranged in circular groups at interv the outside edge of this vast group carpi are also shown in much fashion, as are also Nemesia. Stocks, Petunia Queen of Roses, and Spanish Iris are daintily exhi centre of the group comprises C varying form, wonderful Sch Salpiglossis, Antirrhinums, Static brum, Herbaceous Calceolarias, other beautiful subjects. At each the group, arranged artistically in splendid Sweet Peas in notewort and underneath, in the cool, beau It is, indeed, a beautiful effort praiseworthy.

In No. 1 Tent Messrs. Watkins son, Ltd., 27-29, Drury Lane showed a group of their remarkab Schizanthus grandiflorus maximu a handsome strain of these plants large and of bushy habit and car mous crop of blossoms of very charmingly diverse. This group close inspection as it compares with any other representation o in this great show. They also examples of Calceolaria Albert striking flower. The group is pleasing fashion, the large pots golden baskets.

A pretty oval-shaped group, Primula obconica in pleasing vari lepis, Coleus, Palms, and other jects, made a capital display at th of No. 1 Tent. This is shown b bury Mental Hospital, St. Alban Mr. J. Jennings).

The Messrs. Webb, Stourbri north-east corner of No. 2 Tent w of large size with masses of such

NOTICE TO SUBSCRIBERS

In view of the fact that it was impossible to publish GARDENING ILLUSTRATED on May 8th and 15th, all subscription contracts are put forward a fortnight; two weeks being added to the end of the contract. All subscribers, therefore, will receive 52 issues for their year's subscription.

a stellata, Cactus-flowered C. stellata, superb form of Cineraria, all well There are also giant Hybrid huses of good form shown in beauti-flowered plants. Herbaceous Calceo-double scarlet Clarkias, Primula and Gloxinias, etc., all combining an attractive display.

same tent Messrs. Toogood and d., Southampton, stage a table group subjects as Hybrid Schizanthuses, Nemesia in variety, Cineraria stellata owered, Spanish Iris in charming and a grand lot of Orange Giant te, all worthy of notice.

l table group of Zonal Pelargoniums in No. 2 Tent by Messrs. Jarman Chard. The cut blooms by which wers are represented embrace such as Capt. Holford, Ascott, Sir Thos. Uranus, Bombay, and Arabic (all The double and semi-double sorts hown.

same tent is to be found a small oup in which are shown Salvia r and Heliotrope Lord Roberts. es from Messrs. W. and J. Brown, ugh.

Embankment entrance to No. 2 Tent roup of Messrs. W. Cutbush and d., Barnet, are shown Hydrangeas, apanese Maples, and Roses. The dealt with elsewhere. Some of the eas merit attention. These are Foch, Gudrun, Blue Prince, Etincellant, Rubis, and Loreley. p, as a whole, is attractive.

same tent a triangular group of eas in white and shades of blue is the Studley College for Women, ng such sorts as Hortensia and uillère arranged on a groundwork nd edged with Ferns and sprays of

J. Jones again shows a grand group ngeas at the Embankment entrance Tent. It is another grand effort of and represents well-grown plants es already enumerated earlier in s.

ellaneous group in the same tent is y Messrs. Stuart Low and Co., Middlesex. This embraces a great f subjects arranged in far too crowded a fashion to properly appreciate their real worth. We cannot omit to mention such subjects as Amaryllis, Hydrangea, Azalea, Acacia hispidissima, A. pulchella, Boronia heterophylla, Leptospermum Chapmani, L. bullatum, and a host of other plants all most interesting.

Mr. Alfred Dawkins, Chelsea, S.W., showed new Spiræas Crimson King, Gloria, and Superba. He also showed Gladioli The Bride and G. Peach Blossom.

In Tent No. 2 Messrs. Godfrey and Son, Exmouth, Devon, showed a table group of dwarf, compact, profusely-flowered Schizanthuses. These are dainty plants that impress us with their value in the greenhouse. The colours are charmingly diverse.

Stands of Zonal Pelargoniums are shown in a table group in No. 2 Tent by Mr. R. J. Case, Taunton. Double and semi-double sorts are represented by such as Judith Gladel, Margery Slade, President Baillet, Emperor Nicholas, Dagata, Mrs. W. S. Lewis, Hermanos, The Speaker, and Baronne A. de Rothschild. Salvia splendens var. Harbinger is also shown.

A capital table group in the same tent is set up by Mr. Sydney Smith, 51, Falmer Road, Enfield. This comprises a really excellent collection of Cacti and Succulents, and represents these quaint and curious subjects most satisfactorily. Of the Cacti, Echinocactus Grusoni, E. chrysacanthus, Mamillaria perbella, M. sempervirens, M. Pfeifferi, and a host of other interesting plants are shown here.

A table group in No. 2 Tent made up largely of Senecio glastinifolius, a pretty pink Daisy-like flower borne on thin wiry stems, is shown by the Cheadle Royal Mental Hospital, Cheadle, Cheshire.

Close by a small table group of Cacti and Succulents is shown by Miss Worth, Holbeach, Lincs. There is much to interest the lover of these quaint plants in the dainty specimens exhibited.

Mr. H. N. Ellison, West Bromwich, stages in No. 2 Tent a table group of dainty little Ferns in great variety, all of which will please the Fern lover. Microlepia platyphylla, Lastræa lepida, Gymnogramma tartarea, Davallia tenuifolia Veitchii, and Adiantum gracillimum are a few of the better subjects of this group.

A very handsome and attractive group is made in the Orchid tent by Messrs. L. R. Russell, Ltd., Richmond, Surrey. This group embraces all that is choice in the stove and greenhouse, and represents a great variety of subjects. Caladiums, Azaleas, Dracænas, Alocasia, Crotons, and a wonderfully diverse collection of other plants all combining to make a noteworthy display. From the same firm come 17 New Zealand and Australian Tree Ferns, all in the pink of condition and very refreshing in the heat of the tent. These plants are set up in two beds at the Embankment entrance to the Orchid tent, and a very fine feature they are.

Also at the Embankment entrance to the Orchid tent is a large and attractive group of Caladiums set up by Henry B. Brandt, Esq., Nutfield, Surrey (gardener, Mr. H. Cook). Most of the plants showed high culture, and, considering the weather of late, were well coloured. Noteworthy sorts are C. E. Dahle, Sir Ernest Shackleton, Triomphe de Comte, John Peed, Barillat, Candidum, Pintato, and Capabaribe. Fine-foliaged plants as an edging and interspersed among the Caladiums made a pretty effect.

IRISES

Considerable interest is always centred around the Irises at Chelsea. By far the finest display came from Messrs. George Bunyard and Co., Maidstone, who filled a very large space under canvas as an Iris garden. This Iris garden was larger than anything of its kind hitherto attempted. The Irises were well grown, well flowered, and a picture of health in foliage. Here we saw for the first time the self mauve-pink Mme. Cecile Bouscaut, of good stature and branching habit. Other novelties were ochracea cœrulea, Titan, Tenebræ, Souv. de Letitia Michaud (looking much better than the lovely Mme. Schwartz), Mons. Hubert (of great stature), Rene Denis, Susan Bliss, and Aphrodite; the last is one of the best raised by the late Mr. Dykes. Of the better-known and older varieties that were exceedingly well represented special mention should be made of Ambassadeur, Magnifica, Alcazar, Ballerine, Medrano, Souv. de Mme. Gaudichau, Flaming Sword, Iris King, and Caprice, comprising the finest Iris garden we have seen at any Chelsea Show. Mr. Nor-

Arranging a mound of Primula obconica

a small portion of the group which gained for Messrs. Sutton and Sons the Sherwood Cup for the most meritorious exhibit in the Show

These three Lilies were beautifully shown by Messrs. R. Wallace and Co., Ltd.

L. tenuifolium **L. Martagon album** **L. Mrs. R. O. Backhouse**

man Bunyard, to whom all credit is due for this display, tells us that he has succeeded in crossing the Regelio Irises with the Bearded, but that the hybrid flowers do not at present show the remarkable reticulations that are a feature of the Regelio Cyclus Irises.

Messrs. R. Wallace and Co., Ltd., Tunbridge Wells, showed a great many interesting Irises, but in many cases the flowers were too small to judge of their real merits. Among the best varieties shown were B. Y. Morrison, Lent A. Williamson, Quaker Lady, and Souv. de Mme. Gaudichau. The collection included the beautiful Mrs. Valerie West, with dark crimson fall and almost black in bud, also Marsh Marigold, Col. Candilot, Dalila, Georgie, Prospero, and Benoni. Other well-known Irises from Tunbridge Wells included Marsh Marigold, Prospero, Susan Bliss, Quaker Lady, Dalmarius, and the little favourite Cingialti Iris Tomtit.

A delightful group of Irises from the Orpington Nurseries Co. gained the Society's silver cup. Many sterling novelties raised by the late Mr. Dykes were included.

The Irises from Mr. G. G. Whitelegg, Chislehurst, were all new seedlings under number and all cut from the open. We were attracted by a lovely variety with fawn standards and reddish-brown falls shown as No. 33a, also by the handsome purple bicolor 33b. No. 11, obviously an Ambassadeur cross, was very free-flowering. Many of these new seedlings are promising garden plants descended from such worthy parents as Magnifica and Ambassadeur.

LILIES

All Lily lovers at Chelsea gravitate towards the exhibit of Messrs. R. Wallace and Co. It is a curious fact that the position of this firm remains unrivalled, after many years, in the excellence of their Lilies. There is, we think, in no other section of the show the unapproached predominance of quality and variety so consistently displayed. We remember the Chelsea and Temple Shows for some 20 years, but cannot recall an instance when this firm's Lily exhibit was not superior to any other in the show. Although the firm must by this time feel that rivalry is possible, but highly improbable, it does not on that account slacken its efforts to produce the best that is possible on every occasion. This year's group is evidence of the fact.

The most outstanding group is that of the Regal Lily (Lilium regale), which is shown in excellent health and vigour. Near it one of its children, or rather the result of crossing it with Lilium sulphureum, is shown. This is Sulphurgale, but is hardly typical of the plant. It is better grown naturally out of doors, and flowers later than regale. Some fine groups of the orange and yellow forms of Lilium Thunbergianum (elegans) are in evidence. Orange Queen (particularly good), alutaceum, cruentum, sanguineum, and the deeper-coloured atrosanguineum are all noticeable. Of L. umbellatum also there are some fine forms. Golden Fleece is a sterling and outstanding variety; 2½ feet tall, of deep golden-yellow, it will take its place amongst the best of the early-flowering Lilies. L. umbellatum, Diadem, splendidum, and incomparabile are also very fine. A neat little group of the more hardy form of Lilium Phillipinense is included in this exhibit, known as Formosanum. It is wonderfully attractive on account of its slender tubular form and the purity of its white flowers.

A little group of various Martagons is attractive, including the somewhat rare Martagon album, dalmaticum, and Mrs. R. O. Backhouse. Lilium japonicum, perhaps better known in English gardens as Krameri, is very fine indeed. No surpass the delicate tint of this Lily when it is well grown, as it i pretty little group of Lilium rubell amongst Ferns and Maples in a c natural way. Lilium Browni numerous but very good. Lilium (slender and brilliant) warms up c with startling effect. L. pardalinum speciosum rubrum, and others ar but the real Lily lover will turn choice little group of the rarer cluding Kelogii, pomponium Duchartrei, var. Farreri, and other esting, which completes this really collection.

Other firms who show Lilies a Bees, with Lilium regale in g Messrs. Lowe and Gibson with variety, Mr. Alfred Dawkins w florum giganteum, and Messrs with Lilium testaceum (excelsun now rather scarce monadelphun anum.

CARNATIONS

Chelsea Show is an interesting the Carnation world. The Perpet tions are midway between their f ing period of early autumn, and a is known as their second crop, wh that from where flowers were c autumn the subsequent growth is r ing.

At this period of the year thos who plant out their Carnations in their best flowers now, whereas grow their plants in pots secure flowers in autumn.

Mr. C. Engelmann, Ltd., Saffro has always a magnificent lot a arranged and massed in pyramids countless flowers; such "big l

effective. These pyramids of flowers cking of tall sheaves of Carnations some 9 feet from the ground, formdes of flowers. Among a large cols novelties are Red Laddie (a sport pink variety), Rouge (a bright red), buff streaked salmon), Brenda (an form of Shot Silk and Vesta, dark nd Zorrow (a fancy with orangeround).

isons and Perpetual Malmaisons n the gardens of the late Sir Wm. Vargrave. Mr. C. Moore, the gar- be congratulated on his flowers of C. Knollys, a Perpetual Malmaison n-scarlet, many of which were over in diameter. Among Malmaisons, of Wales is still one of the best. His etuals were White Pearl, Baroness n, and Laddie, the whole of which wn growing on the plants, perhaps interesting way to exhibit.

Allwood Bros., Wivelsfield, generge their exhibits differently each Chelsea, the artistic effect being ith excellent results. By their light owded setting each vase can be seen st. For those who like the art hintz (a mauvy-white splashed with nd Shot Silk (a chestnut-brown with red) are unusual, while the ricot shade of Coral Glow is effecasses of the giant Laddie on stiff not be beaten as an exhibition effort. group filled the whole end and f one tent, a pyramid of the Scarlet Allwood demonstrated by the number s shown what they think of this at d. Beauty of Durham is a salmon-

modern type of the old-fashioned ver" is represented by Butterfly, a uvy-white stained with purple.

ng their main exhibit with an ap- background of hardy Conifers were ianthus Allwoodii. These now comh a variety of shades that one can eself to one's heart's content. Barvery pretty variety in this class and nother.

order Carnations from Mr. Jas. Bookham, have a charm all to s. Arranged in vases without an decorative effect they present a cool, group. The rounded petal so much fter in past generations is secured -day, while they have retained the in such varieties as Bookham Clove te Clove. The Grey Douglas is a shade, but Elizabeth Schiffner and ackleton are still among the most with orange and yellow ground with carmine and rose.

Stuart Low and Co.'s group of s from Bush Hill Park concentrated their recent developments of new nd sweetly perfumed varieties. For rs they have been working to get Old Clove perfume into Carnations, iderable success has rewarded their s instanced in the varieties exhibited, weetly perfumed being White Pearl, Sassoon (as large and as sweet as ut a much better grower), Winter rise), Lady Inverforth (salmon), and er varieties not yet named. The ue Sybil is a combination of a new ent in colour; also with a sweet per- The shade might be described as a olet, approaching that of the violet of Wales. Some huge flowers of l Malmaisons were included in the s well as the crushed strawberry- Prince of Wales.

H. Herbert's Perpetual Pinks from reen are always one of the features ass at Chelsea. Since he first raised he has made much progress. Queen one of the pretty ones, an old rosemauve with dark eye. Victory and Negress are crimsons, while for an old rose shade Mrs. G. Walker is hard to beat. As with both Border and Perpetual Carnations, these Perpetual Pinks now cover a large range of colours, and arranged in Mr. Herbert's own style, in the form of miniature bouquets mounted each on a separate pedestal, they are a very attractive group.

A small but choice table of Border Carnations is arranged by Messrs. Cartwright and Anderson, of Nazeing, from which one could select a complete collection. Mary Murray is a nice yellow, Snowflake a happily-named white, Skirmisher one of the best heliotropes. For a striking colour Bookham Rose is one to make a note of, and many were the notes made at this pretty group.

Cut-flower growers are catered for by Messrs. Keith Luxford and Co., Harlow, whose Carnations are mostly represented by market varieties. Thus one recognises such favourite old sorts as May Day (rosy-salmon) Enchantress Supreme, Aviator (scarlet), White Enchantress, and similar cut flower sorts.

PRIMULAS AND MECONOPSIS

Mr. G. H. Dalrymple showed a group of his Bartley strain of Primula pulverulenta, all shades of pink. Lady Thursby is a rose-pink with yellow eye and Hugh Dalrymple a soft pink with a crimson eye. These are most lovely and delightful plants and should be grown in masses.

Messrs. J. Waterer, Son, and Crisp, of Twyford, had in their rock garden exhibit on Table A good groups of Primula sikkimensis, the pale yellow Sikkim Cowslip, Lissadell Hybrid (rich orange-scarlet), japonica Etna, and pulverulenta.

Messrs. Bees, Liverpool, showed Primula chrysopa (a pale mauve similar in many points to P. Wardii) and japonica alba Bulleyana (rich orange-yellow).

Messrs. Maurice Prichard and Sons, of Christchurch, had in the alpine group P. Forresti (a deep yellow), Sieboldi La Lorraine (rich and vivid rose), sikkimensis, Lissadell Hybrid, Aileen Aroon (rich orange), and Scarlet capitata (rich purple flowers in round heads with mealy calyces), and in their herbaceous group were more Aileen Aroon and some of the pink Bartley strain of pulverulenta.

Carter Page and Co., London Wall, had in their alpine group P. Veitchii (vivid rose), Red Hugh (vivid scarlet), and pulverulenta (crimson-purple).

Messrs. Maxwell and Beale had good groups of P. luteola (large heads of yellow flowers), Lissadell Hybrid (orange-scarlet), rosea, and secundiflora (purplish flowers in hanging heads).

Messrs. Storrie and Storrie had a group which included their well-known yellow, white, and red Polyanthus, their coloured hybrid Cowslips, and Auriculas.

Messrs. Rogers, of Southampton, had some of the Bartley pink pulverulenta and good plants of sikkimensis.

Mr. G. Reuthe had an interesting collection of rare plants, and amongst the Primulas were chrysopa (pale mauve), obliqua (a yellow which looked like a small form of helodoxa), Cockburniana (vivid orange), Lissadell Hybrid, and sikkimensis.

Messrs. Rogers, of Pickering, showed good plants of P. chrysopa (pale mauve, not unlike Wardii), rosea, pulverulenta, sikkimensis, and the orange-scarlet Lissadell Hybrids.

Bakers, Ltd., Pam—apparently a Juliæ hybrid, reddish-purple—very free flowering, chrysopa, sikkimensis, pulverulenta, Wardii (pale mauve), secundiflora (drooping heads of reddish-purple).

Messrs. R. Tucker, of Oxford, had in their Alpine group Primula capitata (deep purple in round heads of flower), sikkimensis, and japonica hybrids.

Mr. Amos Perry, in his group of Iris and Ferns, etc., had fine plants of P. japonica rosea which looked more of a mauve shade than rose. Secundiflora, capitata, and sikkimensis were others.

Colesborne Gardens—Mr. Walters—has Meconopsis aculeata in a collection of rare plants; a deep blue with prickly stems.

Oliver and Hunter, Moniaive, have a glorious display of Meconopsis and Primulas. M. Baileyi (a grand blue), Prattii, Primulas Littoniana (giant form), coaspersa, flexipes (a form of sikkimensis), P. pseudo sikkimensis (pale yellow), Cockburniana, Red Hugh, Bulleyana (orange-yellow), Florindæ (the new giant sikkimensis), vittata (a purple form of sikkimensis, chrysopa)—altogether a rare and beautiful collection.

E. Scaplehorn, his alpine group, has P. capitata, Aileen Aroon (scarlet), and Meconopsis Prattii.

Maxwell and Beale show good groups of P. sikkimensis, luteola (soft yellow), Red Hugh, secundiflora, and rosea.

H. Hemsley, Crawley, has a fine group of P. helodoxa in his alpine group, with sikkimensis in good form.

W. Wells, Merstham, has P. sikkimensis and Red Hugh in his group, the former in very good plants.

F. G. Wood, in their alpine group, show P. Bulleyana, sikkimensis, secundiflora, Lissadell Hybrid, and luteola, all in fine form.

Lady Aberconway and Hon. D. Maclaren have a magnificent group of Primulas and Meconopsis, P. effusa (a pink flower, after the style of malacoides), Burmanica (rosy-mauve), big groups of Lissadell Hybrid, Red Hugh, various species of Kingdon Ward's under number, Mooreana (a round-headed purple), secundiflora, Veitchii deflexa, a purple muscarioides, Bartley strain of Pink pulverulenta, chrysopa, amsodora, Florindæ, the giant sikkimensis, Baileyana (a dwarf variety with lovely mauve flowers), and Littoniana, meconopsis, Prattii quinquinerva (lovely hanging bells of mauve blue), Baileyi (soft blue) and paniculata (yellow), altogether a rare and interesting group.

Wallace, of Tunbridge Wells, in their Lily

REMOVAL

On and after JUNE 1, the Address of "GARDENING ILLUSTRATED" will be

BOUVERIE HOUSE,
FLEET STREET,
LONDON,
E.C. 4

where communications, both Editorial and Advertising, should be addressed

Phone: City 0244 (10 lines)

group, have Primula Lissadell Hybrid and Bartley strain of Pink pulverulenta.

Cheal, of Crawley, have a good batch of P. japonica hybrids with a specially good pink form.

[Owing to exigencies of space we are compelled to hold over till next week our report dealing with Begonias, Lupins, Trees and Shrubs, Orchids, New and Rare Plants, and Vegetables and Fruit.]

OFFICIAL LIST OF AWARDS

CHALLENGE CUPS.

SHERWOOD MEMORIAL CUP, for the most meritorious group.—Sutton and Sons.

"DAILY GRAPHIC" CUP, for the best rock garden, Pulham and Son.

CAIN CUP, for the best exhibit by an amateur.—Sir Jeremiah Colman (Gr., J. Collier).

ORCHID CHALLENGE CUP, for the best exhibit of Orchids by an amateur on a space not exceeding 60 square feet. Only those may compete who employ not more than three assistants in Orchid houses (including the head gardener).—H. T. Pitt, Esq.

SUTTON SILVER CUP, for the best amateur exhibit of Vegetables.—Baron Bruno Schröder (Gr., E. J. Henderson).

PAINTINGS.

SILVER GILT GRENFELL MEDAL.—Miss W. M. A. Brooke, for paintings and drawings of flowers and insects.

SILVER GRENFELL MEDALS.—Mrs. N. Blacklock, water-colour paintings of flowers; Mrs. Edith Fisher, water-colour paintings of gardens; Miss E. Savory, pictures of flowers; Miss J. N. Williams, paintings of gardens and flowers.

FRUIT AND VEGETABLES.

GOLD MEDAL.—Hon. Vicary Gibbs (Gr., E. Beckett), for Vegetables.

SILVER GILT KNIGHTIAN MEDALS.—Baron B. Schröder (Gr., E. J. Henderson), for Vegetables; and Sutton and Sons, for Vegetables.

KNIGHTIAN MEDAL.—Guild of Blind Gardeners, for Vegetables.

SILVER GILT HOGG MEDALS.—G. Bunyard and Co., Ltd., for Fruit: Laxton Bros., for Strawberries.

SILVER HOGG MEDAL.—Rivers and Sons, Ltd., for Fruit Trees in pots.

IRISES.

GOLD MEDAL.—Bunyard and Co., Ltd., for Irises and Herbaceous Plants.

SILVER CUP.—Orpington Nurseries Co., for Irises.

SILVER GILT BANKSIAN MEDAL.—Barr and Sons, for Bulbous and other flowering plants; De Goede Bros., for Irises and Anemones.

SILVER BANKSIAN MEDAL.—G. G. Whitelegg, for Irises.

SHRUBS.

SILVER CUP.—J. Waterer, Sons, and Crisp, Ltd., for Shrubs, Rhododendrons, and Herbaceous Plants; Hillier and Sons, or Ornamental Trees and Shrubs.

SILVER GILT FLORA MEDALS.—R. and G. Cuthbert, for Azaleas; M. Koster and Sons, for Rhododendrons; R. C. Notcutt, for Lilacs Cytisus, and other Shrubs.

SILVER GILT BANKSIAN MEDALS.—G. Reuthe, for Rhododendrons and other Shrubs; Donard Nursery Co., for Shrubs; W. Fromow and Sons, for Japanese Maples; L. R. Russell, Ltd., for Trees and Shrubs; Hosea Waterer, for Golden Yews, etc.; W. Cutbush and Son, for Trees in tubs; A. Charlton and Sons, for Shrubs; R. and G. Cuthbert, for Flowering Shrubs.

SILVER FLORA MEDALS.—Hosea Waterer, for Azaleas; Hollamby's Nurseries, for Ornamental Trees and Shrubs; J. Cheal and Sons, Ltd., for Ornamental Shrubs.

SILVER BANKSIAN MEDALS.—T. Lewis, for Rhododendrons; Robert Green, Ltd., for Bay Trees; John Klinkert, for Topiary Work.

FLORA MEDAL.—Hollamby's Nurseries, for Conifers.

BANKSIAN MEDALS.—M. Koster and Sons, for Azaleas; R. Gill and Son, for Rhododendrons.

ORCHIDS (AMATEUR EXHIBITS).

SILVER CUP.—Sir J. Colman, Bart. (Gr., J. Collier), for Orchids.

SILVER GILT FLORA MEDAL.—H. T. Pitt, for Orchids.

ORCHIDS (TRADE EXHIBITS).

GOLD MEDALS.—Charlesworth and Co., for Orchids; J. and A. McBean, for Orchids.

SILVER CUPS.—Sanders, for Orchids; Cowan and Co., for Orchids.

SILVER GILT FLORA MEDALS.—Armstrong and Brown, for Orchids; Stuart Low and Co., for Orchids.

SILVER GILT BANKSIAN MEDALS.—Black and Flory, for Orchids; J. Cypher and Sons, for Orchids.

SILVER FLORA MEDAL.—Mansell and Hatcher, for Orchids.

SILVER BANKSIAN MEDAL.—Sutton Bros., for Orchids.

FLORA MEDAL.—H. Dixon, for Orchids.

ROCK GARDENS.

GOLD MEDAL.—Pulham and Son, for Rock Garden.

SILVER CUPS.—B. H. B. Symons-Jeune, for Rock Garden; G. G. Whitelegg, for Rock Garden.

SILVER GILT FLORA MEDAL.—H. Brook, for Rock Garden; Clarence Elliott, Ltd., for Rock Garden; Hodsons, Ltd., for Rock Garden.

FLORA MEDAL.—Gavin Jones, for Rock Garden.

SWEET PEAS.

SILVER CUPS.—R. Bolton and Son, for Sweet Peas; Dobbie and Co., Ltd., for Sweet Peas.

CARNATIONS.

SILVER CUPS.—Allwood Bros., for Carnations; C. Engelmann, Ltd., for Carnations.

SILVER GILT BANKSIAN MEDAL.—Sir Wm. E. Cain, Bart. (Gr., C. Moore), for Carnations.

SILVER BANKSIAN MEDAL.—J. Douglas, for Border Carnations.

BANKSIAN MEDAL.—Stuart Low and Co., for Carnations.

TULIPS.

SILVER GILT BANKSIAN MEDAL.—Dobbie and Co., Ltd., for Tulips.

SILVER FLORA MEDAL.—H. G. Longford, for Tulips, Pansies, etc.

FLORA MEDAL.—Barr and Sons, for Tulips.

BANKSIAN MEDAL.—E. Paul and Co., for Tulips.

ROSES.

GOLD MEDAL.—B. R. Cant and Sons, for Roses.

SILVER CUP.—E. J. Hicks, for Roses.

SILVER GILT FLORA MEDAL.—Chaplin Bros., Ltd., for Roses.

SILVER GILT BANKSIAN MEDAL.—A. J. Allen and Co., for Roses; G. Prince, for Roses.

SILVER BANKSIAN MEDAL.—F. Cant and Co., for Roses.

BANKSIAN MEDALS.—E. Paul and Co., for Roses; J. H. Pemberton, for Roses.

FORMAL GARDENS.

GOLD MEDAL.—R. Wallace and Co., for Formal Garden.

SILVER CUPS.—Bakers, Ltd., for Formal Garden; Vernon Bros., for Formal Garden.

SILVER-GILT FLORA MEDALS.—J. Carter and Co., for Landscape Garden; J. Cheal and Son, Ltd., for Formal Garden; W. H. Gaze and Son, Ltd., for Formal Garden.

SILVER-GILT BANKSIAN MEDALS.—R. Neal and Son, for Formal Garden; Wm. Wood and Son, Ltd., for Formal Garden.

SILVER FLORA MEDAL.—E. Dixon, for Formal Garden; James McDonald, for Grass Garden.

ALPINES

SILVER CUP.—M. Prichard and Sons, for Alpines.

SILVER-GILT LINDLEY MEDAL.—Lady Aberconway and the Hon. H. D. McLaren, for Chinese and Tibetan Primulas.

SILVER GILT FLORA MEDALS.—Oliver and Hunter, for Alpines; R. Tucker and Sons, for Alpines.

SILVER GILT BANKSIAN MEDALS.—Clarence Elliott, for Alpines and Dwarf Shrubs; Bakers, Ltd. for Alpines; J. Waterer, Sons, and Crisp, Ltd., for Alpines.

SILVER FLORA MEDALS.—Maxwell and Beale, for Alpines; Bowell and Skarratt, for Alpines; F. G. Wood, for Alpines.

SILVER BANKSIAN MEDALS.—W. E. T. Ingwersen, for Alpines and Dwarf Shrubs; Carter Page and Co., for Alpines.

FLORA MEDALS.—R. V. Rogers, for Alpines and Dwarf Shrubs; W. H. Rogers and Son, Ltd., for Alpines; J. Cheal and Sons, Ltd., for Alpines; H. Hemsley, for Alpines; Jeans and Trowbridge, for Alpines; Gavin Jones, for Alpines; G. Reuthe, for Alpines; W. Wells, Junr., for Alpines.

BANKSIAN MEDALS.—Central Garden Supplies, for Alpines: Hodsons, Ltd., for Alpines and Dwarf Shrubs; Miss Hopkins, for Alpines.

MIXED GROUPS.

GOLD MEDALS.—R. Wallace and Co., Ltd., for Shrubs, Herbaceous, and Bulbous Plants; Sutton and Sons, for Greenhouse Plants.

SILVER CUPS.—L. R. Russell, Ltd., for Stove Plants; H. J. Jones, for Hydrangeas; Blackmore and Langdon, for Begonias; G. Jackman and Son, for Clematis; James Carter and Co., for Flowering Plants; Amos Perry, for Herbaceous Plants.

SILVER GILT FLORA MEDALS.—Wm. Cutbush and Son, for Mixed Group of Roses and Hydrangeas, etc.; M. Prichard and Sons, for Herbaceous Plants; Bees, Ltd., for Herbaceous Plants and Alpines; Amos Perry, for Hardy Ferns.

SILVER GILT BANKSIAN MEDALS.—Stuart Low and Co., for Australian and other Greenhouse Plants; W. Artindale and Son, for Herbaceous Plants; Carter Page and Co., for Dahlias; G. R. Downer, for Lupins.

SILVER FLORA MEDALS.—Storrie and Storrie, for Aquilegias, Polyanthus, Primroses, etc.; Blackmore and Langdon, for Delphiniums; Toogood and Sons, Ltd., for Flowering Plants; R. H. Bath, Ltd., for Mixed Group of Flowering Plants; Bakers, Ltd., for Herbaceous Plants; W. H. Walters, for Miscellaneous Flowering Plants; J. Waterer, Sons, and Crisp, Ltd., for Herbaceous Plants.

SILVER BANKSIAN MEDALS.—H. B. Brandt, Esq., for Caladiums; Godfrey and Son, for Herbaceous and Pelargoniums; A. Dawkins, for Miscellaneous Flowering Plants; Watkins and Simpson, Ltd., for Schizanthus; Studley College, for Hydrangeas, etc.; G. H. Dalrymple, for Primulas; J. Douglas, for Auriculas; Wilson and Agar, for Herbaceous Plants; Hewitt and Co., for Delphiniums; Yokohama Nursery Co., for Japanese Dwarf Trees.

FLORA MEDALS.—J. Peed and Son, for Stove and Greenhouse Plants; S. Smith, for Cacti and Succulents: Jarman and Co., for Pelargoniums, Centaureas, Violas; G. A. Miller, for Herbaceous Plants F. Gifford, for Pæonies; J. C. Allgrove, for Herbaceous Plants, Alpines, and Shrubs; H. N. Ellison, for Ferns.

BANKSIAN MEDALS.—E. Webb and Sons, Ltd., for Greenhouse Flowering Plants; R. J. Case, for Pelargoniums and Salvias, etc.; Chalk Hill Nurseries, for Herbaceous Plants; B. Ladhams, Ltd., for Hardy Plants; Reamsbottom and Co. for Anemones; Reamsbottom and Co., for Anemones in the open; Wm. Yandell, for Violas.

LATE NOTES

Cancellation of a R.H.S. Fortnightly Show

Owing to the postponement of the Chelsea Flower Show, which took place on May 25th, 26th, and 27th, there will be no show at Vincent Square on June 1st.

Mrs. Edward Harding's Pæony Cup

The competition for this cup will take place at the Royal Horticultural Society's fortnightly show at Vincent Square, S.W., on Tuesday, June 15th. Entries should reach the Secretary, R.H.S., Vincent Square, S.W., on or before Wednesday, June 9th. The cup is offered for award for the best exhibit by an amateur of three flowers of each of six varieties of Pæony.

Answers to Quer

Frangipani

(E. A. S.).—The botanical name o Plumieria. There are two forms, th of the flowers of the typical form bein There is also a rosy form. The sp trees or shrubs with fleshy leaves gro tufts at the ends of the branches. found in Peru and other parts of S. P. rosea has the flowers so deliciously that it is called the Red Jasmine in t Indies.

Mulching

Is it an advantage to mulch as w keep the ground hoed around garde C

[You cannot mulch with litter or and at the same time keep the grou Both operations have somewhat t object, *i.e.*, keeping the ground n the surface of the soil is kept hoed a dry soil remains on the surface of This layer of soil acts as a "blan tween the air and the moist soil und The dry soil thus prevents the moistu soil from drying out so quickly. words, hoeing is an operation to moisture. If, on the other hand, sired to feed the trees as well, a laye rotted manure is placed on the to soil. This not only acts as a "blan the roots are fed at the same time. ing with manure should not be do the end of May. There are ma things to consider before one defi cides to hoe or mulch with manu depending upon the crop and type o

Gooseberry cluster cup fungus

I shall be much obliged if you ca what to do to my Gooseberry bush them of the red fungoid growth w started to attack both leaves and fru will see from the enclosed specimens never seen them affected like this b fear I am going to lose the greater p crop. I have tried hand-picking b very tedious and back-breaking jo there is any other cure I should b know of it. Will the growth attack Red Currants or Raspberries? Th growing together, or rather in groups. (Mrs.) E. B.

[Your Gooseberries are affec Gooseberry cluster-cups (Puccini sheimiana). This fungoid disease spasmodic in occurrence, but in ce sons is responsible for a good deal o Gooseberry cluster-cup is interestin it is one of the fungi which during history live in different host pla stage of P. pringsheimiana attacks of Sedges (*e.g.*, Carex acuta), the o attacks Gooseberries. The disease attack the other plants mentione letter. We should advise you to pi burn all the affected foliage and fru you have done this the bushes sprayed with lime-sulphur at strength. The lime-sulphur is be from a good fungicide maker according to directions. You shou note of the fact that the Ministry ture say that the following varieties berries are liable to be damaged b phur:—Berry's Early (syn. I Cousin's Seedling, Lancashire Crown Bob. For these varieties th of the lime-sulphur should be redu sulphur varieties of Gooseber Golden Drop—cannot safely be spra If there are any Sedges growin vicinity of your Gooseberries advise you to do away with them the hand-picking and spraying if

ARDENING ILLUSTRATED

65—Vol. XLVIII. JUNE 5, 1926 [Prepaid Annual Subscription to any part of the World, 15/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

lay (Podo-gmodi) ... 323
bed, an 322
moving ... 334
gastigma 334
utumn ... 332
SHOW. 333
mum seed, ... 334
... ... 332
Clematises, cutting back 334
Clock and the sun, the 322
DAFFODILS, LATE 324
Daphne Blagayana ... 323
Ferns 331
Flowers, hardy, for wreath making ... 329
FLOWER SHOW MIGHT BE, WHAT THE 325
Flowers, spring, the culture of 323
Fruit-trees, gumming of 331
Galtonia (Hyacinthus) candicans, the hardiness of 323
GARDEN IN SURREY, AN ARTIST'S 327
Hemp, the African (Sparmannia africana) 334
Herbs, pot 332
Kew rock garden, the 322
Leek, the 332
Lindera Benzoin (Spice Bush) 321
Melons, early 331
Narcissus capax plenus 321
Overcrowding 332
Paths and walks ... 331
Plagianthus Lyalli ... 322
PLANT HUNTING IN SIERRA NEVADA 328
Plants by post, alpine 334
Plants for back wall of greenhouse 334
Rhododendrons, layering 334
Shrub for butterflies, a 322
Shrubs of reputed hardiness, effect of frost on 323
Tomatoes, boxes versus pots for 332
Tomatoes under glass—the half-way stage 322
Vegetables, exhibition v. general utility in 323
Vegetables for exhibition, collection of 334
WATSONIAS, TREATMENT OF 321

Treatment of Watsonias

IT six weeks ago I potted up some sonia bulbs (five in a 7½-inch pot) they are now through about 1 inch hes in cold frame. Will they do ked out of the pots and put in the the same way that I grow Gladioli, y need greenhouse treatment? Are thing after the style of a Gladiolus 1 and bloom, and are they worth oing for another year?

sfield. G. A. Walker.

nias require much the same treat- Gladioli, but they are not so hardy. n gardens they do well in the open, rkshire they would doubtless flower ler glass unless they can be given sheltered border. These bulbous ich come from the Cape, are among beautiful of autumn-flowering n habit the Watsonia resembles the while the flower has been com- giant Freesia. In the accompany- ation Watsonias are seen flowering eltered border with herbaceous nd last autumn Watsonias in pink were seen flowering in great pro- Wembley Exhibition in the South garden in the open. Watsonia s the best-known species, it throws branching flower-stems 3 feet to n, carrying 50 flowers and more of and purest rivalling the Camellia alba of colour. It irable subject ng in the open corners of the rden or for house cultiva- e issue of lture" for 1 contains an of Wat- they grow in mates, show- es of flower- a garden at les, with the account:—

as East and West.

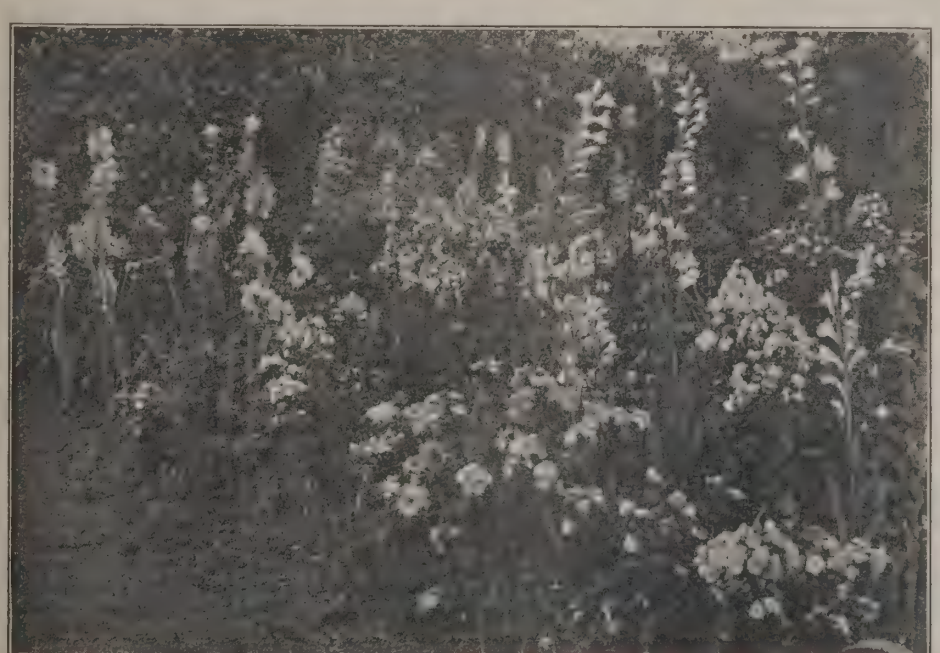
s of the Gar- of America ntly attended al meeting in arbara, Cali- became en- stic over the which they blooming on every side. Not a few of the members purchased bulbs with which they expect to experiment in eastern gardens.

E. O. Orpet, Superintendent of the City Parks in Santa Barbara, gives particular credit to Mrs. F. D. Bullard, of Los Angeles, for raising all the best named varieties. He explains that there is no doubt as to the proper names of the present garden varieties, but that there are two white kinds, one pure in colour while the other has a flesh-pink in the throat. There is a pink and a scarlet variety, also salmon shades, reds, and deep purples.

South Africa is the native home of the Watsonias, but seeds of hybrids received from there have not produced such good plants as those raised by Mrs. Bullard.

Watsonias flower within a year from seeds. Mr. Orpet points out that Watsonias when lifted for storing appear akin to Gladioli, but that they will not endure long exposure after being out of the soil. He also says that they will not last when grown as pot plants under glass, dwindling in size after the first blooming. There is no reason, though, why they should not be forced for one blooming period, like Hyacinths and other winter bulbs.

Our correspondent in Huddersfield will probably find, as others have, that the bulbs dwindle in size after the first blooming, but there is no harm in trying them another year. —H. C.]



Watsonias and Herbaceous Phloxes in a Thames-side garden

NOTES OF THE WEEK

Lindera Benzoin (Spice bush)

THIS shrub flowered profusely in April; indeed, I had never seen it so full of bloom before, almost every twig being clothed with clusters of little yellowish-green flowers. These are not showy, but when borne in such profusion the shrub is not unattractive, and if trained to a wall the effect would be of an even more pleasing character. The bushes here (Sussex) are growing in the open and are each about 9 feet in height. It is a native of the Eastern United States, and both leaves and shoots emit a strong spicy odour when crushed. The fruits are each about a quarter of an inch long and scarlet in colour. Mr. Ernest Wilson, in his new and recently-published book, "Aristocrats of the Garden," referring to it under its old name, "Benzoin æstivale," tells us that in its own country it is one of the first native shrubs to open its blossoms. E. Markham.

Narcissus capax plenus

Queen Anne's Double Daffodil, as N. capax plenus is called, does not appear to be at all plentiful. It is certainly a unique variety and its double six-pointed blooms are quite distinct. In my experience the variety does not increase at all rapidly, even in places which are favourable for the growth of Daffodils generally. I knew one clump for a quarter of a century, and at the end of that time I could not say that it was noticeably larger than when I first knew it. I saw the variety listed in a bulb catalogue a year or two ago. The price asked struck me as being rather a high one, but if N. capax plenus is slow of increase and, consequently, rather scarce, bulbs must necessarily be dearer than those of a more accommodating nature.

A Scottish Gardener.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The clock and the sun

THE disadvantages of interference with the clock become manifest in the garden. We now turn out at what is, in reality, 6 a.m., to find that, owing to heavy dews, it is impossible to put the lawn-mowers to work for at least an hour. This drawback is accentuated as the season advances, and makes grass rather a bugbear where there is a large area to cut weekly—in the case of tennis courts more frequently. Stopping time arrives at 5 p.m., which, after all, is 4 p.m., when the grass is in the best of order for cutting. Those who, like myself, insist that the machines must be thoroughly cleaned at the close of the day's work must be prepared to permit the workmen to stop cutting at 4.30 p.m.—in reality 3.30 p.m. Other aspects of the case are equally apparent. I have large ranges of span-roofed houses, both fruit-houses and plant-houses. The sun, setting in the west, just hits these ranges most powerfully at stopping time. It is obviously impossible to damp down and to shut up Peach-houses, Fig-houses, vineries, Melon-houses, fernery, stove, and greenhouses at the time indicated by the clock. Some must remain and work hard after the others cease for the day, and, nowadays, "hours are hours." This modified grumble must not be construed by Fellows of the Royal Horticultural Society and others into an attack upon Summer Time, which I believe to be of great benefit to the majority of workers. Gardeners and farmers, however, must work by the sun and not by the clock, and it is permissible to point out that what is a boon to others may be the reverse to horticulturists and agriculturists.

A SCOTTISH GARDENER.

An old Asparagus bed

In the issue of GARDENING ILLUSTRATED dated May 22nd, page 292, "T. G. W." asks what the general experience has been in regard to the length of life of an Asparagus-bed. It is not unusual for an Asparagus-bed to remain in health and produce good crops yearly for from 50 years to 100 years, provided it was properly made and given good treatment each year. A well-made Asparagus-bed like a Vine border repays the owner, and one of the chief items in preparing beds that are expected to live for a century is ample drainage, more especially where the soil is wet and cold. One foot of roughly-broken bricks is none too much to place in the bottom of the beds, and over these should be placed rough sods of turf, grass downwards. A good layer of partly-rotted manure should next be made firm before filling up with good loamy soil, that of a sandy nature being best. Well-rotted manure may be added to this in proportion and a 5-inch potful of ½-inch bones to each barrowload of soil, while old mortar-rubble is also beneficial.

The beds are best made during autumn and allowed to settle through the winter, when they will be in fine condition for planting during the following April. If the beds are made 5 feet 6 inches in width they will take three rows of plants comfortably. These should be 18 inches between the rows and 1 foot to 15 inches between the crowns, which should be either two years or three years old.

To give the newly-planted beds a good chance no cutting should be done the first and second seasons, and every encouragement given to the building up of good strong crowns which may be cut freely the third season.

AFTER-TREATMENT.—Commencing with the cutting season there are a few points to remember, namely, when cutting, the whole bed should be cleared and no Asparagus allowed to grow until this is discontinued, which should be about June 20th, thus giving the bed time to make strong growth between then and autumn, when the foliage will change colour. This should then be cut down to within 4 inches of the ground and not left to ripen berries, which taxes the energy of the plants.

Four inches to 6 inches of good half-rotted manure should be placed on the beds during November and covered lightly with soil from the alleys to prevent birds scratching it about during the winter. About the middle of March the coarsest of the manure should be drawn off into the alleys and dug in, and the beds given a dressing of agricultural salt. When in full bearing ample supplies of liquid-manure may be given, alternating this with Peruvian guano, Thomson's, or any other plant food. If the soil is dry it should be well watered in. This should be continued until September, and good strong produce will be the result. The beds should be kept free at all times from weeds, and care taken not to introduce in the manure or by other means any Couch Grass or other perennial weeds, as, once these get established, they are difficult to eradicate. To prevent the growing shoots from being blown about and broken by the wind a few stakes should be inserted on either side of the beds and a line or two of strong twine attached.

W. E. WRIGHT.

Stockton House Gardens, near Rugby.

A shrub for butterflies

Under the above heading, on page 299, May 22nd, "A. T. J." correctly describes the merits of Eupatorium Weinmannianum catering for Red Admiral butterflies. Another shrub that attracts these beautiful insects is Buddleia variabilis, its variety Veitchiana, and others. This family of shrubs is worth inclusion in every garden. They grow freely in practically all soils and situations, but should be pruned hard back during February. B. v. Veitchiana is a beautiful Chinese form, flowers being violet-mauve with an orange centre. When growing under ideal conditions the spikes will attain 20 inches to 2 feet in length and 3 inches through. The foliage alone is handsome as it is deep green and silvery on the under side. It may be used as a wall plant, where it will cover a large area in one season. The Buddleias are readily increased from cuttings inserted during autumn in a sheltered corner and make plants fit to move the following year.

W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Tomatoes under glass—the half-way stage

Surely the advice given by "Midlander" under the above heading is not practical when he states, on page 298, "A handful of superphosphate of lime to each pot, if introduced, will also be of value." Such a dressing as this would burn every root that it came into contact with and cause irreparable damage to the plants. Undoubtedly, superphosphate of lime is a valuable manure for Tomatoes, but if given as a top-dressing no more than a teaspoonful should be used at a time. The best method to adopt would be to mix a handful of superphosphate of lime with each bushel of compost instead of steeping each piece of turf in liquid-manure using as recommended by "Midl Apply this as a top-dressing, pressi down, giving liquid-manure in a we during the following week. When th have formed five trusses it is well to the top of the plant with the fifth t tached. A fresh shoot should then b up. This will cause the lower tru fruit to swell.

W. E. Wr

Stockton House Gardens, near Ru

The Kew rock garden

The writers of the articles in you May 22nd, page 293, and of April 24 256, forget that no two persons thin How can the Edinburgh rock garden pared with that of Kew when the conditions are so variable? Apart f important factor, Kew has not only for the student, but for the general pu The mere fact that thousands pass Kew yearly should make it quite c the broad path running the whole l the rock garden is absolutely n This, of course, takes away, to som the natural beauty of the rock garde one can see that the Kew rock gar tains many valuable plants which provide great masses of colour, but vide for the important botanical wor

No one with any common sens think of using a scrubbing-brush, s water for the purpose of making t work appear more striking to the "Bosmere" seems to suggest. Wh stone could be used with better ef the limestone used at Kew? Neith mere" nor "X." seem able to sugg building material. Has anyone ev newly-planted rock garden looking immediately after planting is compl first appearance the newly-formed pl may seem similar to a chessboard, portion of Kew rock garden, criticised by educated people, will different in appearance in March an next year, in keeping with the clima tions which prevail at such an early the year. With a rock garden of su sions as that of Kew it cannot be that great masses of colour dominant as in a small rock gard "Bosmere" and "X." have the a insinuate that the Kew authorities knowledge of the art of rock g Give praise where praise is due, so all praise to the Kew authorities.

T. D

Plagianthus Lyalli

There appears to be a misconcept the fact, in all probability, that which appeared on pages 272 and too brief to fully deal with thi Plagianthus Lyalli, I argue, is not successful on an east wall, and *generally* and from the point of reasonable specimen of the sh Herbert Maxwell is, surely, slightl as to its height. In any case I hav specimens in conservatories, al should have been made clear that the variety are more suitable from point of view, as P. Lampeni divaricatus.

BRUCE

Buriton, Petersfield.

—— I was interested in the note Hewitt, May 1st, page 272, on plant. We have two here in our Kilmary, Skelmorlie, doing remarl They have been here for at least and have increased in size every flowering most beautifully. They tips of their shoots during winter, to to speak of. It is certainly, as says, worth attention. It does w

ny soil not 20 yards from the shore, ıcreased from cuttings, and a quick
H. M.

Daphne Blagayana

prescription for the treatment of this ·irable little shrub (page 292) Mr. oes not refer to what I believe to be source of difficulty and disappoint- hich, in common with many other I have encountered in its cultivation. upplied by nurserymen are usually ɔn a stock of some other species and, g to my repeated experience, never vigorous; indeed, they have invari- ndled to extinction here. As there is ılty in propagating this species and ·um from layers, none but self-rooted ould be used. HERBERT MAXWELL.
ith.

of frost on shrubs of reputed hardiness

ɔte on above subject, page 273, issue makes me feel very glad I live on s of the Firth of Clyde. The shrubs d by the writer that have been in- frost have all stood here and all are n the best of health. Our climate be a good deal kindlier than that of The following list, I hope, will A. M. A. H. Rogers and other shrub Those are what one might call " here, that is, after they are well ed:—

angleyensis	Embothrium coccineum, 15 ft. high (a glorious sight at present)
nacrantha	
ubra	
hillipinensis	Eucryphia pinnatifolia
onard seedling	Eucalyptus in variety
dinensis	Piptanthus nepalensis
tii	Tencrium fruiticans
rodonta	Wistaria, blue and white (on wall)
la	
dentata	Lapageria, red and white
ulata	Veronicas—Of the varieties I have, nearly 30, Andersoni variegata is the only one I feel sorry for in time of frost. Hulkeana stock is young and still being cared for, so cannot speak for it yet. I could treble this list, but I hope this will be enough to satisfy the enquiries, at least from the Clyde district of Scotland.
ifolia	
Lyalli	
ifolia	
ıbosa	
rrestii	
ıgnifica	
nhoensis	
variety	
ıata	
a lanceolata	
terii	

ırlie, near Ayrshire. H. M.

ibition v. general utility in vegetables

issue of May 29th, page 304, there er by "A Reformed Exhibitor" s a gardener, exhibitor, and judge, I I must answer. Such a letter might harm to the small horticultural ex- because employers of gardeners bit see these letters, and, thinking deners are wasting time on growing they stop them from showing.

ident that "Reformed Exhibitor" ɔthing of the northern shows, as 90 of the judges in this part (who are gardeners) judge the exhibits on It is only at large shows like ɔ-on-Tyne that you see large, coarse s winning prizes.

ın exhibitor who took 72 prizes at ɔws last year, and I can assure ed Exhibitor" that I spent no extra vegetables for show, as I have not not having too much help and large house to supply, and I am only ɔores in this part who just try to rything well and show their best if vanted for the table, as with us in ict table is the first consideration, second.

t possible to have Leeks overgrown, well-known fact that the bigger the better the quality. My pot Leeks 8 inches to 14 inches in circum- as a rule, with no more attention than double digging, plenty of manure and water. Vegetable Marrows are mentioned. Now most of these exhibited here are from 10 inches to 18 inches. Surely this size cannot be called unwieldy.

As a judge I will tell "Reformed Exhibitor" that coarse, overgrown, half-blanched Celery is not seen on the show-bench, as Celery is always cut down the centre before judging (generally cut by the judges).

Celery and Leeks are used here practically the whole year round for flavouring, if for nothing else. My show vegetables always go on to the table and not into the pig-tub, and, what is more, are always appreciated.

What is to become of the shows if all are like "Reformed Exhibitor"?

Now, "Reformed Exhibitor," if you don't like shows don't try to do them harm; leave them for others who do like to see them.

WEST TYNE.

The culture of spring flowers

ALTHOUGH the grand spring display of flowers is only just becoming spent, it is quite time to make fresh sowings in readiness for next season. An early start means much towards a fair measure of success later on, as the young plants get a good start before the very hot weather and will stand transplanting without the risk of heavy losses. Furthermore, they will have developed into strong, healthy growths by the time autumn arrives, and be better fitted to withstand the rigours of the wintry weather. As to general methods of culture no special rules need be observed. The seeds usually germinate readily if sown in beds outdoors and the soil kept moist. However carefully sowing is done it is usually found that the seedlings come through too thickly, and when this is the case they must be transplanted as soon as they are large enough to handle. Further replanting will become necessary as growth develops until the permanent flowering quarters are occupied.

Below is a list of the most popular of spring flowers which may be raised from seed sown about this time.

WALLFLOWERS come first and are general favourites with all garden-lovers. There is now such a number of shades of colour that one has no excuse for growing only the old-fashioned red and yellow sorts. Mention should be made of that lovely, bright orange-coloured Cheiranthus Allioni, one of the finest bedding plants we have. C. Kewensis is also worth growing, while in C. linifolia we have a new introduction with delicate lilac-mauve flowers.

MYOSOTIS (Forget-me-not).—This has so many purposes in connection with spring bedding schemes that it is almost indispensable. As an edging to beds of Wallflowers or bulbs it looks well, and a small bed of Myosotis is extremely pretty when in bloom. Dwarf varieties are suitable for the rock garden and for carpeting beds of bulbs. The best sorts are Royal Blue (a grand bedding variety with flowers of the deepest blue), alpestris Victoria (azure-blue, good for rockeries or edging), and various unnamed kinds in shades of white, rose, and blue. I have almost forgotten to mention the sort known as Ruth Fischer, considered by some to be the finest of the Myosotis family. It has large flowers as big as a threepenny piece, and of a beautiful bright blue in colour. Being of a dwarf growth it is suitable for pots.

PRIMROSES AND POLYANTHUSES.—Primroses should be included as good subjects for raising from seeds sown at the present time. Harbinger is a lovely pure white sort, and in Beaconsfield mixed hybrid kinds we have a gorgeous selection of every known colour. Other distinct shades include crimson, the common yellow sort, and a new blue which is becoming very popular. Polyanthuses are among our most free-flowering plants and are now used very largely for massing, where they show up to advantage. There is a grand range of shades, including white, yellow, cream, lilac, crimson, scarlet, and purple, as well as gold-laced, yellow and brown, and other mixed colours all in delightful contrast. A feature of the cultivation of both the above-mentioned plants is that they require plenty of moisture and will not tolerate dry soil while they are in the seedling stage. When transplanting them select a shady border.

BELLIS PERENNIS (Daisies).—These are valuable as edging plants and are well worth consideration. Good double strains can be raised from seeds sown now in boxes or in cold frames. The prevailing colours are pink, rose, scarlet, and white.

Other equally useful plants for spring bedding are Arabis, of which the double form is considered the best. A variegated sort of this is in cultivation and should receive attention as the foliage is very ornamental when the flowers are spent. Aubrietia is another splendid subject for our purpose. Dr. Mules, a deep purple, is one of the finest, although there are now other sorts coming into prominence, all of which are worthy of note. Some of these are Leichtlini (rosy-carmine), Fire King (bright cerise), and deltoidea (lilac). Aubrietias may be grown from seeds, but the named sorts are best increased from cuttings of young shoots taken from the parent plants. This should be done during the autumn. The same applies to the double form of Arabis, but single varieties come readily from seeds.

DORONICUM is an early-flowering perennial and supplies good blooms at a time when they are most needed. It may be grown from seeds, although if wanted for next season's beds plants should be secured. L. J. D.

The hardiness of Galtonia (Hyacinthus) candicans

This is hardy in the greater part of the United Kingdom, and in numerous gardens has become established and flourished without attention for a number of years. In other gardens, even with a dry, well-drained soil, it is not at all satisfactory if left in the ground all winter. In two gardens which I have had, both well-drained and with a light soil, where the Galtonia was grown it did well the first season after being planted in March, but if left in the soil in subsequent years was dwarfed and less beautiful in every way. I believe that this experience is not uncommon, as I have heard of similar results. This is a great pity, as we have few more effective and highly beautiful autumn flowers in our gardens. S. ARNOTT.

The May Apple (Podophyllum Emodi)

This is a singularly beautiful plant and easily cultivated in almost any soil. It grows erect with ruddy stems each 1 foot to 2 feet in height according to the nature of the soil, and bears solitary pink blossoms arranged in a richly-mottled triangular whorl of leaves. The general effect of the plant is of a giant Eranthis, the flower nestling in a bouquet of leaves. It is a handsome-foliaged plant, and the fruit, hanging like a glowing pendent, adds to its attractiveness. The plant is not fastidious as to soil or position, but in a deep peaty medium it will grow twice as large as in a retentive soil. A shady nook where it can get moisture during the hot season suits it well. H. STEVENS.

LATE DAFFODILS

WHEN Shakespeare associated Daffodils with the winds of March he was no doubt thinking of late March, which, though March for him, according to the old calendar, would be the first half of April for us, according to the new. "That take the April winds with beauty" would, therefore, be a necessary adjustment for the bulk of British Daffodils in these days, when they are so bewilderingly numerous, various, and splendid, compared with the few forms known to Tudor times. But though the main inflorescence comes in April there is a by no means negligible number of varieties whose flowering season, in these northern latitudes at least, is early May or mid-May, when the Darwin Tulips are coming to a head. The garden significance of these late bloomers is brought home to me partly by limited numbers of the flowers in my own modest borders, and very forcibly by a lovely batch of blooms which has reached me from the Brodie Castle beds, varieties all more or less new, some named, some only numbered. Among the later-flowering Narcissi there is, of course, the "Poetic" section, not exactly "Daffodils" according to the letter, but made of the same stuff and members of the same family. No doubt there is a sufficiently large number of Poeticus varieties that bloom in April, but there is an appreciable proportion—and these, I incline to think, not the least desirable—that delay their flowering till May, though this note is written in a locality far enough north to make it necessary, perhaps, to take what is here said with the rectifying pinch of salt. A handsome "Pheasant's-eye" now bursting its cerements is "Dactyl," showing, on first opening, a perianth disc of a mellow ecru tint, to turn presently to the glittering frosty white characteristic of all "Poetics." "James Hogg" is a Brodie flower (O. Goldsmith x Hildegarde) now in perfection (May 10th), a fine variety of solid substance and exquisite shape, with a brilliant eye—a single Gardenia of great beauty. Another Brodie flower (progeny of Raeburn x Dactyl, and therefore of bluest Poet blood) not yet named, but only numbered, is of the James Hogg quality—less solid, perhaps, but neater, with more regularly-disposed segments, charmingly recurved, and with a brilliant rainbow iris. It is, however, not only Poeticus varieties that are numerously in evidence at this late date. There is also an increasing number of intermediate or peerless forms—Leedsii, Barrii, Incomparabilis, or what not, for it is not always easy in these days of infinite experiment to say where exactly one must place this or that new form. I should be glad to know, for instance, in which group to place Mr. Guy Wilson's lovely "Mystic," an exceptional flower of the month which might be described, perhaps, as a short-cupped Leedsii with a delicate rim of apricot. Not that one is anxious about the matter. Like "that which we call a Rose" Mystic is just as sweet class it how you will. A flower which hails from Brodie, as yet unnamed but numbered (offspring of Dactyl and a Barrii seedling), may possibly make classifiers hesitate for a moment when it comes before them. It is really a Barrii, of a striking, almost flamboyant type, with a medium-sized perianth of broad imbricating segments of a yellowish-cream colour. But the flamboyance is in the gorgeous orange-scarlet cup, ⅞ inch in diameter—not a cup at all in the strict sense, but rather a shallow salver which lies flat like a coin on the perianth. Then there is a series of intermediates with somewhat shallow cups ranging in colour from primrose, as in "Discus," or something deeper, till at last the colour peters out to something almost, if not quite, white, so that one gets the impression of a self-white Incomparabilis, which degree of absolute purity flowers fail to reach only because the cup of a Narcissus is always of more solid substance than the perianth, and therefore has a greater depth of whatever faint colouring matter may be there. "White Star" is one of these late forms now in bloom but fast passing away, a somewhat large and handsome stellate Daffodil with a primrose centre, and an ideal form for a vase by reason of its starry shape and long willowy stem. "Samaria," a Brodie seedling that has of late been in the limelight, is now in its prime, and a sheaf of its blooms is a sufficiently convincing proof that May has its Daffodils as well as March. Altogether, from what one sees, it is brought home to one that a somewhat new strain of Narcissus is now invading our borders—practically a "Pheasant's-eye" without the eye, which sounds like "Hamlet without the Prince," but is not in effect so questionable as it sounds. The crimson eye of the Narcissus is, of course, a lovely thing—nothing lovelier in all the Narcissus kingdom. But we have, surely, now a sufficiently large array of "Pheasant's-eyes" of superb brilliancy, and, among the many named varieties we already have, the difference between one flower and another is too often the difference between tweedle-dum and tweedle-dee. On the other hand, if one pictures to oneself a flower of the crystalline white of "Horace," with, instead of the crimson iris, a inner circle of Snowdrop-white, wo that be a consummation to be desire this, it would seem, is what recent is tending to and aiming at—a late-fl race of Daffodils with 75 per cent. of sap in their veins, ensuring a g whiteness of perianth, a late-fl period, and that fragrance which, for myself, I can never breathe bu carried instanter some 5,000 miles the home of the Nutmeg and the Clo instead of the crimson iris, a centr white, its purity not impaired, bu emphasised, by the shallow fu chrysoprase green, which clasps th stamen-knobs like an Acorn-cup. "G and "Moonbeam" come measurab the kind of flower one has in m there are already flowers that nearer, as I am reminded by th have reached me from the Brodie C and which it has been most inte examine at leisure and at close These, if they do not achieve a achievable in this Eucharis type come at least several degrees near "Samaria." Their genealogy is s well established for three or four g back (that is, Daffodil generatio years), but, as some of the ancestra mere numbers and not names, it w no purpose to give details further t that, starting with a seedling fro Mary x Constance, there have be infusions of late Leedsii, Poeticu

The pure crystalline white Samaria

A late-flowering seedling from Brodie Castle

in short, tending to the encourage-
late flowering. The three flowers in
are charming in their modelling and
colour, but they are shaped so much
ıme lines that I incline to think their
ıay find himself obliged ultimately,
s of old, to make his choice among
beauties. Three Aphrodites in the
uld be embarrassing. For myself,
ighing the pros and cons—that is,
prepossessions and prejudices—its
race constrains me to award the
198/24, for as yet, be it understood,
vers are unnamed minors, still in the
My Aphrodite may not have such
of petal as the other two, the seg-
eing shaped rather on the tennis
nodel, each blade with a handle to it,
ıe bases tend to let daylight through,
less, a feature which, I understand,

no conscientious Daffodil Committee could pass uncensured. In due course, I daresay, hybridisers will produce flowers with perianths of larger and more massive proportions, but I hardly think they can ever produce anything more exquisite than the cup of this flower, so pure and cool in tone, so prettily shaped and fluted—just the thing Titania would have chosen for a hip-bath had it been invented while Fairies were still extant. May-flowering Daffodils of fine form will soon be sufficiently plentiful, if they are not so already, to allow those who desire it to have well-stocked borders of these late flowers, but in order to enjoy their beauty to the full it will be necessary to give them a genial spot exclusively to themselves. Associated with early sorts of trumpet or peerless flowers that are past or passing, they are not seen to advantage. W.

hat the Flower Show Might Be

-The most beautiful thing in a
b show at Chelsea was Meconopsis
yi—the newest of "blue Poppies"—
ıls of a slightly grey Cambridge blue
ghtly flushed with a darker tint, and
of bright golden anthers. The tall
ith admirable pale green leaves stood
st Primulas whose names told the
d that they also were the spoil of a
ent expedition to Tibet. But they
shown from a celebrated garden in
they were mingled with garden
and there was no word to explain
gin, history, or surpassing botanical
graphical interest. Is it permissible
some reflections upon what is almost
absent from the shows, annual or
ly, of the Royal Horticultural

shows have become primarily—per-
essarily—trade shows, organised for

ost beautiful thing at Chelsea—
Meconopsis Baileyi
lue Poppy with golden anthers from
Tibet

superb display to attract customers. Nowhere in the world can the enthusiastic gardener be tempted more certainly to place orders in the hope that the garden next year will reflect the glories of this year's Chelsea. Nowhere can he see better displayed the amazing wealth of flowers brought from all quarters of the world, that can be persuaded or even apparently like, to bloom in English gardens as freely as on the Chinese border. But there are refinements in gardening that the shows of the R.H.S. do little to assist; and one of these is to garden with a little historical or geographical feeling. We owe the great majority of our introduced species to relatively few collectors, and an immense number of the finest recent things to a few parts of the world. Might we not see each fortnight at Vincent Square and each year at Chelsea in the spring or at Holland Park in the autumn, a combined display to illustrate the wealth of the Alps as against the Pyrenees, the Himalaya in comparison with the Andes, or the Cape Peninsula in rivalry with the bulbs and Heaths of anywhere.

Not, perhaps, so often, but from time to time would we see also a "one-man show" of the plants which horticulture owes to the courage and endurance of a great collector. Who can say how many of Reginald Farrer's finds are already lost, and which survive in cultivation? How great a show could be made of Purdom's introductions in a memorial exhibition! Or, to come to garden hybrids, let us propose for next May a collection of the Irises raised by Sir Michael Foster, and another of those newer and more magnificent which come from the skill of Mr. Dykes, so lately lamented.

It is easier to reflect on such possibilities than to realise them. The organisation would take a good man all his time. But the Society is rich and prosperous, with its thousands of keen members who cannot hope to fill the 200 square feet or 300 square feet of staging that seems nowadays to be almost the minimum for an exhibit that will be visible in the overwhelming company of the great firms, yet would be proud to contribute a plant or two to a Society's exhibit. Good labels would be essential, and good labels seem to be rarer than fine plants. "Men come to garden finely sooner than to write legibly" might be the motto of the Floral Committees of the R.H.S., as judged by their award cards.

These simple reflections are inspired by Meconopsis Baileyi, collected by Mr. Kingdon Ward and Earl Cawdor in the autumn of 1924 in or about the Gorge of the Tsangpo, named presumably after the Political Resident in Sikkim, raised by the skilful gardener

From a photograph by Lord Cawdor

Meconopsis Baileyi in its native habitat

It is a perennial species with stem-clasping leaves

of Lady Aberconway last year from seed that must have come home by post, and shown in its marvellous beauty at Chelsea without the slightest reference to its history or its geography.—Yours, etc., A. R. HINKS in *The Observer*.

The suggestions contained in this letter are interesting and provide food for reflection. We feel, however, that the proposed "one-man show" would be difficult to carry out with collected plants owing to the great variation in the times of flowering. With regard to the history and natural distribution of Meconopsis Baileyi and other blue Poppies we refer readers to the article, "Some Flowers of Tibet, VI.," by F. Kingdon Ward, appearing in our issue April 17th, page 246, from which we quote the following:—

"To take our Tibetan plants in order of flowering, then. The first to flower was the woodland blue Poppy, M. Baileyi, with large sea-green leaves, the radical leaves on long stalks, the stem leaves sessile, turquoise-blue petals, and golden stamens. It grows 3 feet high, flowering in early June under trees and bushes lining the banks of streams. Here the soil is a moist loam, rich and cool, heavily manured by yak and ponies grazing in the meadow, which come down to drink. It flourishes best in rather deep shade, and after three or four years will form magnificent clumps. This species, unlike many of the high alpines, ought to be perfectly hardy in an English wood. M. Baileyi, by the way, must not be confused with M. simplicifolia variety Baileyi, which is quite a different plant. The former, hitherto known only from a fragment collected by Major F. M. Bailey in 1913, has never been in cultivation.

"Flowering almost simultaneously with M. Baileyi, in the alpine region, were three other species, the sky-blue M. simplicifolia, which is deliciously fragrant, a yellow-flowered species like a large M. pseudo-integrifolia, and the Ivory Poppy, which is like a pallid yellow or nearly white M. simplicifolia. These are all found on the Rhododendron moorland."

AN ARTIST'S GARDEN IN SURREY

1. The old cottage from the barn
2. Figure of Pan contemplating the goldfish
3. Grass walk towards the woodland
4. Daffodils in the orchard

AN ARTIST'S GARDEN IN SURREY—I.

; 30 years ago a favourite shelter for ps and vagabonds was a derelict old cottage situated at some distance main road at Chertsey. The cottage as very old, having been built about 1560, and attached to it were three acres of farm land smothered in

rank Galsworthy, the well-known f flowers and gardens, happened to oss it, and straightway bought it, intention of turning it into a and secluded retreat. In this he ably succeeded. After clearing the eeds were sown, trees were planted, were made of earth and cinders, n became covered with moss. The owever, was not made all at once, ually, and much thought and on were given to the effect of future

hree years ago considerable addi- e made to the cottage, and this has not only improved the interior, a source of delight to those inter- ntiques, but has greatly enhanced ance from the outside.

id of the artist is apparent immedi- stepping out of the front porch, l of the usual pair of clipped ever- tubs, we see an informal but ranged group of shrubs in pots at

5. The old barn

6. Flowering trees on the southern side of the new building

f the entrance. These include the owered Viburnum Carlesii and a igustrum coriaceum.

g over the path are large mats of ite and pink Daisies, which in- apidly that difficulty is experienced them in check.

the front door and the barn (Fig. Mr. Galsworthy has converted into l studio and picture gallery, is a aceous border which contains many plants. Among them is an erect- eum with orange flowers, named h, some seedlings of Pulmonaria with particularly large blue nd plants of a purple-foliaged Clematis recta. Towards the back of this border is a dovecote, at the foot of which has been planted a very strong-growing and free-flowering Honeysuckle which came from M. Leon Chenault, of Orleans. This plant has lately been cut back because its long matted growths enabled a rat to enter the dovecote, with unfortunate results to the inmates.

There are some good Honeysuckles also on the house walls, including Lonicera sempervirens, whose young shoots bear Oak-like foliage, and a most useful early-flowering species which commences to bloom in April.

Other climbing plants around the house are Clematis Kermesina, Clematis tangutica var. obtusiuscula with orange flowers, and the real old-fashioned Jackmanii which trails over the porch.

Mr. Galsworthy has made a point of preserving as many as possible of the very old climbing Roses which grew on the original cottage, and several of these are still flourishing. He has also established plants of newer varieties, such as Rosa sinica Anemone, Dr. Van Fleet (a vigorous American variety), and Mermaid. The latter is on a south wall, where it does well, for planted out in the open it is almost always cut down to the ground by the winter frosts.

On the south-east side of the house is a rectangular brick Lily pool (Fig. 2), into which the water from the roof is turned. This contains, in addition to Water Lilies, which are mostly Marliacea hybrids, a large clump of the great Spearwort (Ranunculus Lingua), a British water plant with large yellow flowers and handsome leaves. The yellow Water Flag (Iris pseudo acorus) grew at one time in this tank, but it increased so rapidly that it had to be removed, and a variegated variety of the same species has been substituted. Its foliage is most attractive, but it seldom, if ever, flowers. Growing in the brickwork on the north side are some little Ferns (Asplenium Trichomanes) collected in Devonshire by Mr. John Galsworthy, the author and playwright, who sent them to his cousin, while another feature of this pool are the goldfish, which number at least 100, and which show interesting variations in colour and markings.

A double Cherry (Prunus Cerasus Watereri) (Fig. 6) overhangs the pool; when in flower the blossoms fall into the water as do those of the neighbouring double Peaches and the Pyrus floribunda. Among the latter is a tree of the darker-flowered variety atro-sanguinea, which was found to come in the way of the building when the plans for the alteration to the house were completed. Rather than cut the tree down, however, Mr. Galsworthy decided to have the new wing set 12 feet further back.

Among other attractive trees and shrubs in the neighbourhood of the house may be mentioned a weeping Wych Elm, a very beautiful deep purple-flowered Lilac named Mme. Kreuter, and a large plant of Ribes sanguineum with exceptionally bright red flowers. There is also a plant of Wistaria sinensis which drapes an old lead garden

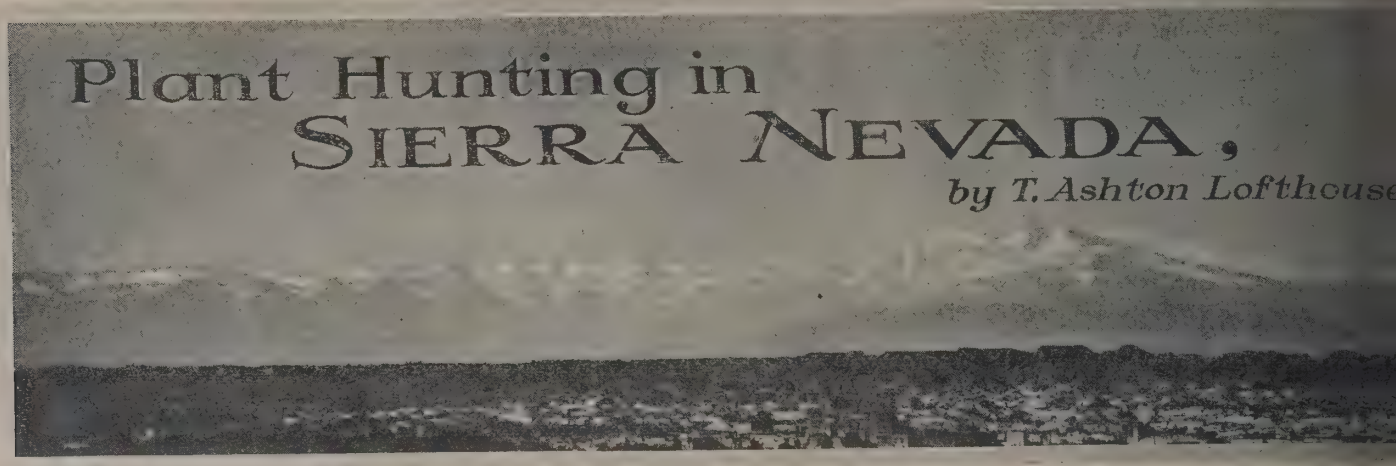
pump and runs to the very top of an old May-tree.

Stretching the whole way along one side of the garden is the orchard (Fig. 4). This was originally a large kitchen garden planted with fruit-trees, but grass has been allowed to grow under them and is now well stocked with a great variety of Daffodils, which are steadily increasing. Such plants as Bluebells, Scilla campanulata, Anemones, and Fritillaries are now completely naturalised, as well as some of the newer Crocus species, such as C. tommasinianus. Included in the Cowslips and Primula polyanthus growing in the orchard are some "hose-in-hose" varieties, in which the calyx has become petalloid like the corolla. Similar curiositie may be seen elsewhere in the garder Jack-in-the-green Primroses, in wl calyx has become leafy and formed of small leaves round the corolla. (flowered forms of this phenomer occur as a result of hybridisati coloured Polyanthus. J. E. GRANT-

(To be continued.)

Plant Hunting in SIERRA NEVADA,

by T. Ashton Lofthouse



(Continued from page 311)

SOME pretty Helianthemums included Helianthemum montanum alpinum, the white and pink flowered Cistus-like H. polifolium mentioned on my journey up to the mines, H. rubellum, H. lavendulifolium, H. Spachii, H. paniculatum, and a lovely dwarf, compact, woody-stemmed species with large yellow flowers. Other plants in the vicinity of the mines were Arenaria armeriastrum, a plant with short, stiff, grey foliage and clusters of white flowers; Cerastium dichrostoma, a sticky-leaved Chickweed; Ballota hirsuta, with tomentose-grey aromatic leaves and compact Hemp Nettle-like spikes with reddish florets in the axils; Ruta montana, Calamintha purpurascens, Corigiola teliphiifolia, Onopordon acaule, a fine stemless thistle with large silvery-leaved rosettes and flowers in the centre, usually a centre flower with a ring of flowers encircling it in much the same way as the Sempervivum montanum rosettes encircle a central rosette, commonly known as "hen and chickens"; Jurinia humilis, another grey-leaved dwarf thistle with pinky-blue headed stemless flowers, a plant quite suitable for a hot position in the moraine; Ononis antiquerra, a very woody spiny Rest-harrow on schist; Ononis hispanica, a small plant with yellow flowers, seen at a little higher level; and the pretty O. natrix, which was common on the hot, stony ground on the steep descent down to Beires Village. This would be quite good for the garden if it were not so liable to damp off in the winter, which plants that I have raised from seed obtained in Switzerland unfortunately did. Paronychia nivea, a creeping matted plant with silky silvery bracts and inconspicuous flowers, which together form extremely pretty silvery everlasting-like flower-mats on the dry, stony ground. Linaria supina var. nevadensis, an exquisite grey fleshy-leaved L. alpina-like dwarf Snapdragon which was sparingly distributed from 5,500 feet to about 7,000 feet up. It has lovely deep velvety mahogany-red lighter-tipped flowers, also some purplish-red and red yellow-tipped varieties were seen. Seeds of this were collected, and some have germinated and flowered beautifully last summer. It was one of the finest dwarf plants seen and would be an acquisition in the rock garden. Xeranthemum inapertum, a quaint thistle-like plant shooting up out of the screes with its peculiar, solitary, ovoid, pinkish, many-flowered heads on 2-inch to 3-inch stems. Probably an annual.

On a small farm situate in a basin at about 6,000 feet a little corn is grown, usually coming up very thin; also "Chick Peas" and other leguminous crops. The land, being very stony and thirsty, is only made possible for crops by constant irrigation. In this locality a few interesting plants were seen. A group of Linum narbonnense, the finest of the blue-flowered Linums, was very effective with its large deep blue flowers on a dry bank-side. Near by, on an outcrop of stony ground, a pretty flower effect was provided by an association of a Thrift, Armeria allioides, a fine white-flowered species on 12-inch stems, the bright rose flowers of the Sainfoin, Onobrychis sativa montana, and a quantity of white and blue flowered Linums. Vicia onobrychioides, one of the most handsome of the Vetch family, made a bank-side very beautiful with its mass of deep violet flowers, noticeable at a considerable distance. The pretty annual, V. pseudocraccæ, was frequent in the cultivated ground. A bulbous plant which occurred sparingly, with tall purplish-blue, Hyacinth-like, straggly flowers, was probably a species of Bellevalia. Some fine purple spikes of a Broom Rape or Orobanche were seen, also Helleborus fœtidus. Investigating the same locality a day or two later added Aquilegia nevadensis, a nice clump in a deep shady ravine of this Spanish alpine Columbine with its purplish-blue flowers, nothing like so fine as A. alpina, although somewhat similar to plants sometimes raised from A. alpina seeds. This was the only locality in which it was seen. On the drier sides of the ravine was an Onosma not unlike Onosma echioides, with pale yellow flowers. In similar positions the flowering spikes of Umbilicus pendulinus were seen. In damp places in the bottom the pretty Myosotis alpestris flourished luxuriantly, tall and drawn up in the damp and shaded position, very different to the lovely dwarfer-flowered plants little higher altitude in Switzerland yellow-flowered Ranunculus aleæ flower-spikes of Orchis laxiflora. dainty Viola canina in the bank-sid blue flowers with a much whiter c usual. This Violet was known to as Violetta espanola.

A look round these parts abou later found Linum narbonnense an Allionii with fully-ripened seeds, t ing hot days soon completing th these parts.

It was interesting to see N Dandelions the cosmopolitan weed small tortoiseshell butterfly which the former plant and was seen a feet, the migratory Painted Cardiu, which feeds on Thistles ubiquitous tiny Turnip moth, Plu ferarum.

Mentioning my intended visit t at the Chelsea Show, he sugges look-out should be kept for Cr densis, and a postcard followed m sketch of the distinctive leaf sectio my first questions put to Augustin was as to the occurrence of any " (Spanish for Crocus) in the neig As he said he knew of a localit expedition was in search of this nevadensis.

Climbing up gradually from the stony ridge forming the watersh lowed almost due west; the early track led through the higher par by Erinacea pungens in full bloom A very spiny Broom intermingle Piorno at this level and took its p outskirts of its limit, Genista B Sierra Nevada form of G. horrida name being very significant and though it might equally apply to plants forming spiny mounds in Arenaria pungens being anoth large grey-leaved spiky mounds white flowers. Two or three ha species of Mignonette were especially Astrocarpus (Reseda) prostratus, with delicate spikes Mignonette flowers on short

Erinacea pungens, "a dense, prickly hedgehog of very long silver-green spines"

the Piorno negro of the Sierra Nevada, where it grows at an altitude from about 4,500 feet to 6,500 feet. The prickly mounds of acres of these little shrubs were recorded by Mr. T. Ashton Lofthouse in his previous article, page 311, in last week's issue

sione echinata, with tall flowers tufts.

out three hours we dropped down ridge to damper greener ground guide had an idea the Crocus and d be. Viola nevadensis was soon ts pretty white, white flushed pale and slaty-blue petals all with dark local in shale; it was seen later in ilities at about 7,000 feet to 8,000 e; often one of the only plants in s which it ran about in, in much ay as Viola nummulariæfolia does tless stony wastes of the Maritime not so pretty as either V. Cenisia mulariæfolia, these being better d carried on short stiff stems, asantly up at the sun out of the es. Viola nevadensis straggles e, probably owing to the more nditions. In the higher, more exions it often pushes its flowers up e prickly mounds of Genista, ungens, Astragalus nevadensis, the shade of which the plants get rom the hot sun, and also, possirowsing goats and sheep. These ntly, with the shepherds, the only sitants to these high, out-of-the-regions. The shepherd boys were in their sheepskin trousers, carryn haversacks. They also usually ss-plaited slings much in the same bly, as in Biblical times. Stones d out of the slings just beyond eep to keep them together. It was interesting to see the picturesque variety of the herds of goats and the long-legged, sleek sheep quite at home picking up anything green, very often on almost precipitous rock-faces. After searching about, a few Crocus plants out of flower with short leaves were found which, at the time, were naturally taken to be Crocus nevadensis (the promised p.c. not having arrived; after seeing this, later, I had my doubts, which were confirmed). There were no flowers, and though it was found locally in one or two other localities, in only one or two instances were plants found with seed-pods. This Crocus has not been identified, but it may be Crocus granatensis, a form of C. nudiflorus, which, according to Maw, occupies a small area in the Sierra Nevada and opposite in North Africa. Gagea polymorpha, with dainty yellow flowers sparingly distributed, and a pretty R. alpestris-like flowered Ranunculus with Rumex acetosella-like shaped grey leaves, Ranunculus acetosellæfollius, one of the better species peculiar to this Range. This species was seen in several localities later, usually 7,000 feet to 8,000 feet up, where the melting snow was trickling down or had just left. A desirable plant for the moraine. Unfortunately, seedlings sent to England took so long on the way as to be useless on arrival.

Associated with the above plants was a pale, almost azure-blue flowered Veronica repens and the dwarf, short-stemmed, reddish-pink flowers of Armeria splendens, of which a white-flowered variety was also seen.

At the base of a rocky outcrop were the only two species of Saxifraga seen. A compact green mossy one, Saxifraga nevadensis, with white, pink-spotted petals and sometimes pinkish petals, and a dwarf granulata-like species, S. glaucescens, with rather nice white flowers, much dwarfer than S. granulata, with greyer and smaller leaves and with the characteristic basal bulbils. These are mentioned in Farrer's "Rock Garden" as not in cultivation. A yellow-flowered dwarf Alyssum, A. diffusum, with greyish foliage, was fairly frequent in dry positions high up. Alyssum spinosum, with silvery-grey, spiny, hard, shrubby foliage and usually covered with flowers, a well-known occupant of many gardens, was frequent, but not common, over a wide district, and usually with the prettier pink and rose coloured flowers, appreciably more desirable than the white.

(To be continued.)

Hardy flowers for wreath making

One does not need expensive white flowers at this season for wreath-making or for things of similar character, the hardy flower border and shrubbery supplying ample material. There is no better hardy flower as groundwork than the double white Arabis, with its long Stock-like spikes that have the merit of standing fairly well. The flower lacks the perfume of the Stock, but this can be supplied from the shrubbery with a few bits of Choisya ternata—not too much of this or the scent is apt to be rather overpowering.

White Hyacinths and Tulips from the borders must be used sparingly as they are rather stiff in habit, but the white form of the common Bluebell is both graceful and acceptable; so, too, is the May-flowering Narcissus poeticus, of which plentiful supplies of flowers can be obtained from old-established clumps. Indeed, there are few Daffodils that, when naturalised, give such a glorious return. A pure white Wallflower has yet to appear, but there is a dwarf form closely approaching this which gives variety alike in flower and perfume. Plentiful supplies of feathery spikes of Saxifrages-like umbrosa and Wallacei are available just now and help to make one's handiwork light and effective. A few of the nodding flowers of the Summer Snowflake (Leucojum æstivum) are also acceptable. Also where small col Solomon's Seal have been establishe borders of shrubberies or in Grass o sprays will be found to associate w other things.

The above are just a few of th hardy flowers that will be found ve at the present time where more e things are not available. E. Bu

REMINDERS FOR THE WEEK

Southern and Midland

Perpetual Spinach

This Spinach may be sown now to give a continuous autumn and winter supply. Sow in drills 15 inches apart, thinning the plants to 9 inches when large enough to handle. These thinnings may be used when drawn.

Celery

The earliest plants will now be fit for planting out. This is best done during showery weather if possible. Later batches may be pricked off into cold frames containing a rich sandy compost. Ample air should be given to get sturdy plants.

Seed beds

The young vegetable plants are now growing freely, and the beds should be kept free from weeds and the soil frequently stirred with the Dutch hoe. No delay in thinning the plants as they become large enough to handle should be allowed, and to prevent attacks from the Onion-fly and other pests liberal dustings of soot should be given after rain.

Endive

This is a very useful salad plant that takes longer to come to maturity than Lettuce, and where an early crop is required a small sowing may now be made. It is best sown in drills 1 foot apart and the plants gradually reduced to 10 inches in the lines. One point in the culture of Endive is never to allow the plants to suffer from want of water. They also require deep and well-manured soil.

Cucumbers

Plants growing on hotbeds in frames are now making progress, and care must be taken in watering and ventilation. Air should be given on all favourable occasions and the lights closed early to economise heat, when the plants should have a good syringing with water that has stood in the frame during the day.

Melons

Plants grown from seed sown during January should now be carrying fruits, and the bed must be well supplied with water. Liquid-manure may be given twice weekly, alternating this with a suitable artificial, such as Le Fruitier or Thomson's plant manure. Young plants may still be planted out in frames on hotbeds.

Vines

Thinning of berries calls for a good deal of attention about this date, and this is best done in the early morning. Care should be taken to keep the hands and hair from touching the berries. All sublaterals should be pinched back to one leaf in their young stages of growth. A genial, moist atmosphere should be kept up and air given freely when outdoor conditions permit.

Tomatoes

Whether the plants are grown inside or out, it is essential to restrict the growth to a single stem by pinching out all shoots that appear in the axils of the leaves. No manure of any kind should be given to the plants until the first truss of fruit is set. When watering, the soil should be thoroughly saturated and no more given until the soil becomes practically dry. This applies to the plants in their young stages of growth.

Bedding out

Most of the plants that have been well hardened off may now be safely planted out. This is best done during dull periods or in the evening after the sun has gone down. Such plants as Begonias, with tender foliage, should be kept back for a further week or so.

Arum Lilies

These plants are now over and should be hardened off in preparation for their summer treatment. This may be done by gradually ripening and drying off the roots, or they may be planted out in trenches in the reserve garden. The former method I prefer, as during wet seasons the crowns of the latter are never so plump as the ones that are dried off.

Nerines

These plants require practically the same treatment as the Amaryllis. If properly treated, by the middle of June growth should be completed, when the pots should be stood on a sunny shelf in the greenhouse, withholding water until the flower-stems commence to appear towards autumn.

W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Cold frames

By this date bedding plants which are being hardened off in cold frames will be better if placed along the base of south or west walls. This will release the frames for other purposes. If necessary both Cucumbers and Melons can be grown in these frames if sufficient fermenting material be available to give the plants a start. Others can be utilised for growing on Cyclamens and the earliest batches of Cinerarias and Primulas. Seedling Ferns, more especially seedling Pterises, will be better on a bed of ashes in a cold frame during the summer, and those who yet grow Aralias and Grevilleas will find that young plants thrive exceptionally well under the same conditions.

Gladioli

A finish ought to be made with the planting of Gladioli. Although there are many very excellent things in all sections it is worth while to plant the old G. Brenchleyensis with a free hand. Bold groups of this variety are very telling in autumn, and their vivid colour is, at that season, seen to advantage. Previous plantings must not be forgotten in the way of timeous support, and the necessary ties ought to be made as loosely as is consistent with the safety of the plants.

Chrysanthemums

The transferring of the Chrysanthemums to their flowering-pots can now be attended to as opportunity offers. It is well to get this important work pushed forward before the "bedding out" time actually arrives, when everything has to give way t ing of beds and borders. Do not into using fancy composts for th anthemums. Good loam, sound le sharp sand, *plus* a little soot are goo for ordinary specimens. Let the p more than three parts filled at pre the season advances top-dressing can afterwards stimulants may be giv needed. After potting, if the co moderately moist, no water should for a few days.

Early Melons

Bottom-heat is absolutely essentia fruits are almost finished, and w stage approaches the bed ought t almost dry. There is, as a rule, culty in getting Melons to set growth has been well built up, sho and healthy. The time at which stimulants to Melons is when the yo are obviously swelling, but when fully grown no further feeding ou given. Lime in some form is an necessity in the case of Melons.

Hardy fruit garden

The outlook continues to be prom wall trees have, apparently, set a The weather at night—as is not u May—remains cold, and this may in curl in Peaches and Nectarines walls. While it is unsightly, no g need be felt, as, with warmer growth will be normal. It is a go pick off infected leaves and to b Aphis may make its appearance o of these trees, as well as on P Cherries. A liberal dusting of powder will, in most cases, prove e

Roses under glass

Those who have Roses, such as Niel or Nephetos, planted in cor do well to keep an eye on them at Not only are insects likely to be tr but mildew may put in an appe well. I give my opinion, for worth, that when Maréchal Nie mildew it will be found that, at or other, the bed has been permi come dry and then deluged to error. In a general way mildew repeated applications of flowers Cuttings of these fine old Roses, of others which have been forced now with certainty if put into t moist heat of the propagating-case

Kitchen garden

Continue the thinning of youn crops. If there are blanks in th Beet, seedlings from congested p lines can be transplanted. Make enough to receive the root with Afterwards, as a rule, one goo suffices. The value of salt is looked, but some crops relish application. Asparagus, for inst kale, and Beet all thrive more ma getting a trifle of salt. Half-a square yard is a safe allowance.

W. M

Mabie Gardens, Kirkcudbrights

UIT GARDEN

umming of fruit-trees

ere always possible to trace every-
o its source it would be found that
ng in stone fruits in most cases had
in a deficiency of lime in the soil.
ises doubtless may lead up to it,
eep planting, or planting in soil of
ating a character. Much injury is
ropping the borders in which the
inds of stone fruits are planted.
ng and manuring of the ground to
wants of the surface crops are sure
later to throw the trees out of gear
on many evils, not the least of
requently a host of suckers, caused
ade or fork injuring the roots, or
nures which are used for the crops
n the border. It is well known to
d cultivators that Peaches and
o best in firm soil, but if the top
er spade culture the roots must go
a lower stratum for the firmness
and far away from the beneficial
f solar warmth; the growth comes
annot ripen properly, and is more
to insect attacks.

be thought when young trees are
d that the roots cannot occupy all
d the border may at least be used
ing until the trees require it. This
e reasoning, and so early Peas,
Tomatoes, and other crops are
e man with the spade goes along,
bad system once begun is con-
ery few people think, when plant-
rees, that it may be necessary to
e plaster or old lime in some form
oil, but to obtain healthy growth
absolute necessity. Of course, on
limestone formation the natural
ns sufficient lime for the needs of
Drainage, too, is all-important.
and the Apricot are Eastern trees,
temperature may be made still
ul if the drainage is not free.

of the gardens made early last
was the custom to place a layer of
the bottom of the borders. Where
s wet and cold this was desirable,
many places I have come to re-
s a needless expense, though per-
ge is an absolute necessity if the
o do well. In cold soils, with a
lift the borders up, and mix some
and charcoal-dust or charred
ith the soil in which the trees are

ying in Apricots has puzzled culti-
many years, though, as far as I
this disease, if it is a disease, was
ceable 40 or 45 years ago as it has
ce, and the old writers do not ap-
e observed it, or have passed it by
lling attention to it as having any
nificance. I regard branch-dying
an aggravated form of gumming.
generally some indications of
efore the branches begin to die off
orm. It is quite possible to make
o rich for Apricots without using
the usual sense of manuring. The
an old pasture is what is usually
ed for border-making when it in-
turf which has been fed off by
cattle for many years. Soil that
ood Wheat will grow good fruit if
ed, and helped where necessary
lime, wood-ashes, or charred
I never object to a few crushed
they contain lime, and, as bones
ly, there is never any reason to
timulation by mixing a few with
a tree planted in top-spit loam may be overfed unless the tendency to over-luxuriance is corrected by a free admixture of lime. G. F. T.

Early Melons

To enable the fruits to swell uninterruptedly and to a good size fresh additions of fibrous loam enriched with a little bone-meal, applied on the little-and-often principle to the front portion only of the narrow borders, are necessary. Stimulative waterings are also required, but care is taken when these are being given not to wet the stems of the plants. All lateral growths are pinched at the first leaf and precaution taken to preserve as far as possible the main or premier leaves. The loss of one or two is not of any great moment, but anything beyond this has a prejudicial effect and should be guarded against. With the aid of a brisk temperature and a sweet and humid atmosphere the fruits will now swell rapidly. Plants on which the female flowers are about to expand must, to render setting more easy, be kept on the dry side for a time. For the same reason much less atmospheric moisture is required. Pollination is best done about the middle of the day, when both the pollen and air are dry, stopping the laterals at the same time at the first leaf beyond the fruit. The cordon method being that which is practised, from two to four fruits are held to be a sufficient crop for each plant. When these have been secured, root watering, syringing, and damping are resumed and an addition to the front part of the border made without delay. Plants in a less advanced stage of growth need to have the points removed as they near the limits of the trellis, and side shoots stopped at the first leaf to ensure the production of an ample supply of fruit-bearing laterals. C.

FERNS

ALL who are interested in gardening seem fond of Ferns, perhaps because they can be grown in odd corners of the garden as well as in the greenhouse. A collection of these, when planted in naturally-formed rock work, tree stumps, or rustic baskets, makes an interesting display as the many species and varieties show great diversity in the form of their fronds. On both shady and sunny banks in the open air a pretty bit of rustic gardening may be executed by planting hardy Ferns, and although their season of beauty is not so long as when grown under glass, they give but little trouble when once established.

Under the influence of spring the majority of greenhouse Ferns soon show signs of active growth. When the crowns are swelling is the time for repotting such plants as require it. A suitable compost for the majority of Ferns is formed by mixing two parts of good fibrous loam, one part of rough peat, and one part of sharp sand.

The Fern grower will often notice small spots at the back of the Fern fronds. These are the spore cases containing the seeds or spores. If the fronds are cut off, laid between sheets of paper, and placed in envelopes in a warm, dry room, they will soon throw off the spores, which will look like a kind of brown dust. Prepare pots by putting in about 2 inches of evenly-broken crocks, cover these with 2 inches of good peat, loam, and sand, well mixed, then over this soil put a finely-screened dressing of crushed flower-pots or brick. This must be in powder form and put on thick enough to conceal the soil only. Then press down evenly to get a smooth surface, damp well, and allow them to settle for a day before using. Scatter the spores over the crushed flower-pot or brick dust, but do not cover it with soil. Place a pane of glass over each pot and stand in a shady, warm position.

The first sign that all is well is a slight colouring of green on the crushed flower-pot or brick-dust surface. This will gradually increase in size until it becomes like a layer of fine Moss, and it should then be pricked out in tiny pieces in flats about 1 inch apart. The flats must be kept covered with glass until the fronds are about 1 inch high, not forgetting to turn the glass every day. The raising of Ferns from spores is very interesting and is quite easy to manage.

The bulb-bearing Fern, Asplenium bulbiferum, is, perhaps, the most characteristic of the Ferns which produce bulbils or young plants on their mature fronds. Where a large stock is required, a whole frond may be placed on a bed of decomposed fibre refuse or sand, pegging the pinnæ so that these will rest on the material. If covered with a frame in a greenhouse, kept close and moist, and shaded from the bright sun, every bulbil will soon root into the compost or sand. When well rooted the several plants can be detached from the old frond and potted into small pots, returning them to the frame for a few days and then gradually inuring to the air of the house.

A few of my favourite varieties for general use are Adiantum cuneatum and Farleyense. Pteris tremula is very graceful and is one of the quickest-growing Ferns in cultivation. Prettily variegated Ferns are Pteris argyrea, P. cretica Mayi, and P. cretica albo-lineata. A good bold Fern is Polypodium aureum, and the milky green fronds are quite distinct from those of any other Fern. Pteris cristata and major are good Ferns to grow, as there are none that last better in rooms. Nephrolepis bostoniensis, commonly known as Boston Fern, Nephrolepis exaltata, and N. cordata compacta are well adapted for growing either in pots or baskets. Lomaria Gibba and L. ciliata major are Ferns of distinct appearance. Asplenium Nidus, or "The Bird's Nest Fern," in a large planted-out fernery has a grace and beauty all its own. Two pretty gold Ferns are Gymnogramma decomposita and G. Alstoni, and there is also a beautiful silver Fern, Gymnogramma calomelanos. A few of the most graceful varieties for outdoor use are Osmunda regalis, the Royal Fern, and Osmunda cinnamomea, the Cinnamon Fern. They produce fronds of noble proportions and should be grown in a moist position, if possible, near running water. Among Nephrodiums, N. Filix mas, or Male Fern, is the best known species. Good varieties of the species are Barnesi, grandiceps, and magnifica. Adiantum pedatum is one of the most graceful of all Ferns. Aspidium acrostichoides, although one of our common species, is a pretty one, and Polypodium vulgare is one of the best evergreen species for rock work.

Those who make a hobby of trying to form uncommon features in their gardens would succeed beyond their expectation if they took up the culture of hardy Ferns in earnest and racked their brains in contriving natural, yet novel, methods of arranging them, and, above all, made a point of securing every variety they see or hear of.—A. K. DOUGLAS in *Gardeners' Chronicle of America.*

Paths and walks

This is an important item in a well-kept garden, as all beauty is spoiled if these are left to become untidy. Any re-gravelling that is necessary should be done without delay, and where weed-killer is to be used, now is the best time to apply it. Care must be taken to keep it from the grass or other vegetation. A sheet of galvanised iron carried along the edges is an excellent course to adopt.

VEGETABLES

Pot Herbs

NO garden, large or small, is entirely furnished if without a selection of domestic herbs, so acceptable for flavouring and the compounding of soups, stuffing, and other culinary preparations.

PARSLEY stands in the first rank, and has many uses, not the least of which is its employment for garnishing table dishes. For this purpose a dark green well-curled kind is best. If seed be sown every year—during the month of April—Parsley will never be lacking, but as it is properly a biennial, growing one year and seeding the next, and of much less value after it has seeded, it is best to keep a stock of young plants always on hand. The best place for a sowing of Parsley is in a drill beside one of the garden paths where it can be grown and gathered without interfering with the usual quarters devoted to vegetable culture. As a few pieces of Parsley may be wanted at any moment it is well to have it so convenient that it may be procured by any member of the household. Seeds should be sown thinly, and in any case the plants should be thinned out to widths of some 3 inches or 4 inches from each other.

THYME is generally grown in two sorts—the upright or common and the creeping Lemon-scented. The former is mostly used in stuffing, and the latter for the flavouring of broths and soups. Two or three plants of each are enough for the use of any small household, as they will in time cover a large space of ground. It is well to lift the largest plants from time to time, pull them to pieces, and replant again in a fresh spot; this will keep the stocks always vigorous and the plant growth abundant.

MINT, because of its peculiar aroma, is a highly favoured herb, and although where it is the practice to distil some for domestic use it is necessary to grow a considerable breadth of the dark-leaved Peppermint, yet it is found needful to grow but a small breadth when required simply for ordinary domestic use. The most favoured garden Mint is the spear-leaved kind, which is known by its tiny pale green leaves. It may be propagated either by transplanting bodily a good clump of the roots and the soil in which they are growing from one place to another, or portions of the roots, cut into lengths of a few inches, may be laid out in a piece of specially-prepared soil and then be covered over to a depth of 1 inch with other loose soil, and then be trodden over and raked to make it neat; or young tops, taken off when the green shoots are a few inches in height, may be put into a box as cuttings and placed in a gentle warmth where they will soon root. In either way a bed of Mint of a permanent nature is soon obtained.

SAGE is another herb, much in demand for its flavouring properties. It has so many uses that the most experienced of housewives is hardly familiar with all, but in the stuffing of poultry Sage is regarded as an absolute essential. Young plants of Sage are procured in abundance by plucking branches from some old bush and planting them in the ground nearly to the leaves; these soon take root and then require to be kept within bounds, so luxuriantly will they grow.

MARJORAM is a very useful herb of two kinds—the Sweet Marjoram which is annually raised from seed, and the Pot Marjoram which is a perennial. Both are in request for the flavouring of soups, and are more required in large families than in the cottages of the poor. The summer Marjoram is sown in spring in drills, and the Pot Marjoram is propagated by the division of roots. Small quantities of each are sufficient for ordinary family use.

Some other herbs that were formerly valued for their medicinal use, such as Rosemary, Rue, and Horehound, are in these days less in request, but they are all, nevertheless, worthy of culture, as it too often happens that just when not to be had they are most required. The herb garden should be as complete as possible, having regard to the requirements of the family, and always placed within easy distance of the house.

Boxes *versus* pots for Tomatoes

Those who have had the opportunity have no doubt of the superiority of Tomato crops obtained from boxes over those from pots. True, the Tomato is a very accommodating plant, and often extraordinary crops are produced in pots. I have on many occasions had them growing in close proximity one to the other, and thus have been enabled to note the comparative results. So highly do I think of boxes that my first early plants are to be accommodated in new boxes instead of pots. The length is 4 feet; depth, inside measurement, 7 inches; width, 10 inches. In these, four plants will be accommodated, and I shall be disappointed if by actual weight four plants thus provided for will not give an equal weight to six in 10-inch pots. The boxes will be filled to about two-thirds their depth at first, filling them up later as growth and fruit are advancing. Boxes made of deal ¾ inch thick and planed on the outside will last several years, and they will do this the better if painted two or three coats before using them. There would be a marked gain of strength if the corners are secured with small angle plates, or the ends bound with light hoop-iron. Allow ample space for drainage, and provide two light strips nailed on the bottom to keep them off the soil. This permits of air passing under, and will prevent the bottoms decaying so quickly as they would do standing on a moist and solid surface.

One of the best and cheapest stimulants for Tomatoes I find to be bone-meal. A sprinkling given occasionally to the surface will cause quick root action. New turfy loam, of course, is best for planting in. To this can be added a small quantity of burnt refuse, as well as a little bone-meal. Press this firmly, and it will be quickly apparent that in boxes short-jointed, sturdy, and fruitful plants are obtained, much superior in comparison to those occupying pots. I have given the size of boxes that I find to suit my purpose, but these can be modified in depth, length, and width to suit the means and convenience of any would-be grower. C. P.

Overcrowding

Growth at this season, if the weather be favourable, is very rapid, so that everything soon outgrows its allotted space. Plants of every kind will soon spoil unless they are thinned out from time to time as growth proceeds. This is particularly so with the kitchen garden crops, as they are more apt to get neglected than some of the others. Thinning ought always to be resorted to before there are the least signs of overcrowding. It is not necessary that the plants be so thinned when small as to jeopardise the crop, but they should be allowed room, so that their foliage in so small a state may grow sturdy, for there is nothing like a good start. Gardeners, as a rule, are apt to err on the side of growing things too close. How often do we see Radish-seed sown so thickly that it would be next to an impossibility for bulbs to form under such conditions; yet how few gardeners think of thinning these. Seedlings are often allowed to stand till the plants are so drawn that, after being pricked out, they run to seed instead of growing away. Parsley, too, is sown, and there it s the more robust plants choke the ones. This is one of the most imp all our kitchen garden crops, as it for every day at all times of the year should be thinned as soon as large handle properly. The thinnings transplanted 6 inches apart each when the plants have grown so as one another they should again be more room by using every second pl hardier this is grown the better wi stand the frost; therefore there sho overcrowding from the first. Pea are often spoiled through this sam three or four plants are grown ought to suffice, the consequen mildew, black-fly, and other diseas would laugh at the idea of thinn but if this were more resorted to th not be so many failures. We all where large Onions are grown for ample room is allowed between from the very earliest stages, so may have no hindrance to their gr this holds good with one class of pl why should not all share the same t We usually see Broccoli and oth vegetables that are grown out in a stand the frost better than those in This is because they have not b crowded; every part of the plants thoroughly developed, so that thei tion is more robust. Potatoes, too, planted too close together, for the of the soil is not taken into accou should be no set rules for the dist crops ought to have, but the soil tion must be taken into account if vator would show the best resul varieties, being stronger growers th will need more room, otherwise will become so entangled as to ground and exclude the air, whe happens, the tubers are small.

Autumn Cabbage

A pinch of Cabbage-seed sown t will furnish plants which can b on ground previously occupied b or early Potatoes. Sorts like Whe perial or Mein's No. 1 may be relie cutting in autumn before the fi winter greens are ready, and come come change in most household case of Spring Cabbage now being ground is not wanted it is well to of the stumps for furnishing spr The soil should be freshened wi manure forked about the roots.

The Leek

"Grow more Leeks this year said the other day, and I pass on to the owners of small gardens (1) is a profitable vegetable; (2) plan got out in June either in we trenches or dibbled into ground been well dressed with manure. little attention after this has been cept watering in a dry time and little liquid-manure. They are of trouble beyond this, and scarcely ev ject to pests. Mr

Cucumbers

Where the plants have been frames on hotbeds more attentio given from now onwards to damping down, and supplying the ample supplies of water that warmed to the temperature of Close down early in the afternoon mats over the lights at night. regulate the shoots as necessary.

THE CHELSEA SHOW

(Continued from page 320)

BEGONIAS

SRS. BLACKMORE AND LANG-
N, Tiverton Road Nursery, Bath,
intained their reputation for high
tuberous-rooted Begonias. These
esented by well-grown plants, freely
carrying blooms of ideal form and
diversity of colouring. Noteworthy
were Hilda Langdon (soft pink),
(white), Lord Lambourne (orange-
a), Queen of the Belgians (lovely
), Mrs. D. B. Crane (blush-pink,
white at edges), Sir H. Wilson
let), Mona (white), Edith Barker
nd Betty McDougall (pink). There
11 examples of basket Begonias
on stands above the group of the
e, all very beautiful and striking.
liage plants and an edging of Pani-
gatum completed one of the most
roups in this great show.

Sutton and Sons, in their very
comprehensive group, had two or
resentatives of well-grown double
representing flowers of good form
charming array of colours, all
m this firm's double mixed seed.
e pillars covered with Begonia
re also most effective.

LUPINS

Maurice Prichard and Sons, of
rch, had some very well-grown
baskets, the outstanding variety be-
Majesty, a beautiful clear pink of
raising. It is certainly one of the
soft pinks. Other good pink sorts
y Thursby, Mrs. Stevens, High-
Pink Beauty, and Joan Bown.
vere Downer's Delight, Mount
hite), Purple Emperor and Victoria
urple), and Brenda (an improved
. M. Prichard, itself one of the best
Christchurch).

J. Waterer, Sons, and Crisp,
had some well-grown plants in pots.
was Pink Pearl. Others were
China (pale blue and white), Saxe
l (pale blue and mauve), Delight,
King (reddish-purple).

R. Downer, the Lupin King, of
, had a big group of cut spikes,
luded some fine novelties, chiefly
row, a mauve which keeps its self-
m start to finish. Countess of
ens white and changes to mauve,
. Lighthouse (a lovely soft pink),
rl, Woodland (a bicolor pink),
r, Goodwood, Responsive, and
vere other good pinks. Happiness
Queen were two good dark purples.
es of Delight, that unique variety,
shown.

Wilson and Agar, of Reading,
pins in their herbaceous group, and
Delight, Queen of the West,
China (pale blue-white), Apple-
bicolor pink), and Happiness (a
e).

Wolverhampton, had good Lupins
erbaceous group, Pink Pearl, De-
others.

e's, of Sheffield, had many Lupins
erbaceous group in seedling varie-

n Gardens, Rolvenden, had a big
upins on the ground in fancy vases.
gs chiefly shades of blue.

REES AND SHRUBS

specially interested in trees and
re well provided for. Waterer's
irons from the Bagshot nurseries
he height of perfection, and the

Azaleas and Golden Yews from Knap Hill were the source of much interest. Flowering shrubs were also well shown by Mr. L. R. Russell, of Richmond. Rhododendrons, Berberises, Philadelphus, Lilacs, Viburnums, Pittosporums, Escallonias, and a host of other flowering shrubs were represented by the Donard Nursery Co., Newcastle, Co. Down, Hollamby's Nurseries, Groombridge, G. Reuthe, of Keston, and R. C. Notcutt, of Woodbridge, while many fine specimens of the pink Cytisus Dallimorei in bush and standard forms were noted in these groups.

A very interesting collection of Japanese flowering Cherries came from Messrs. Hillier and Sons, Winchester. It is hardly necessary to explain that these flowers had been retarded in cold storage. One of the finest varieties was Prunus serrulata longipes. We noticed that the Japanese Cherry so well known as Hisakura was shown under its older name, Sekiyama. The lovely Prunus Clara Meyer was also well shown in company with P. triloba fl.-pl. and P. lannesiana sirotæ. In the same group were noted the two chance seedling Cistus, viz., Silver Pink and Wintonensis, both of which originated in the Winchester nurseries.

Those interested in topiary work found much to delight them in the specimens sent by Messrs. J. Cheal and Sons, Ltd., Crawley, from Mr. John Klinkert, Richmond, and Harrods, Ltd., while Messrs. Robert Green, Ltd., 28, Crawford Street, W., sent specimen Bay-trees in tubs, which are so much in favour for use in town gardens and balconies.

Azaleas in all the lovely colour tones of pink, red, orange, and yellow were shown by R. and G. Cuthbert, Southgate, and M. Koster and Sons, Boskoop, Holland.

From the Yokohama Nursery Co. came Japanese dwarf trees and miniature gardens that seem to attract even more attention than ever.

COLLECTIONS OF VEGETABLES AND FRUIT

There were several fine displays of vegetables. The best was the gold medal exhibit shown by the Hon. Vicary Gibbs, of Elstree, which included excellent dishes of Carter's vegetables which it is possible to obtain from a well-stocked kitchen garden in the height of summer. Baron Bruno Schröder, of Englefield Green, also had a good group, and so had Messrs. Sutton and Sons, of Reading.

Messrs. George Bunyard and Co., of Maidstone, had a collection of between 70 and 80 varieties of Apples showing over what a long period it is possible to have the king of English fruits if suitable varieties are chosen and proper storage conditions provided. Among varieties in particularly good condition were Cox's Orange Pippin, Allen's Everlasting, Sir John Thornycroft, Smart's Prince Arthur, Wagener, Claygate Pearmain, and Easter Orange. Strawberries were shown by the well-known specialists, Messrs. Laxton Brothers, of Bedford; The Duke and King George were both shown in quantity, and among the other varieties were several novelties. As previously referred to, Messrs. Thomas Rivers and Son, of Sawbridgeworth, had a group of Peaches, Nectarines, and Cherries in pots.

Well grown and well staged

Collection of vegetables exhibited by the Hon. Vicary Gibbs (Gardener, Mr. Edwin Beckett) at the Chelsea Show. Awarded the Society's Gold Medal

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *8, Bouverie Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

ALPINES

Alpine plants by post

Could you kindly give me any instructions for packing and forwarding to England live specimens of alpine plants? The transmission of such plants often turns out a failure. I believe they can be sent in small boxes by parcels post from most places on the Continent, but much depends upon the condition of the roots, the degree of moisture, and the mode of packing. H.

[Wash the roots out clean, and wrap round them a little thoroughly damp, but not wringing wet Moss—soaked in water and wrung out in the hand will be right. Fold a bit of waterproof paper round the root end only, and put some dry Moss round and among the heads of the plants; if needed to make the package even, put a little dry Moss round the root end also over the waterproof paper. Wrap firmly in a piece of strong paper 15 inches square, beginning at one corner and rolling diagonally, folding in the ends as you go. Tie round the middle of the parcel only with a strong string twice round and properly knotted, and have the address on a tie-on label, so that the parcel itself is not stamped upon. I have sent home scores of such packages from France, Switzerland, and Italy, some having been eight days on the road from stress of weather. I have never lost a plant, and have even sent flowers and leaves of brittle and succulent texture so packed from Southern Italy, and heard afterwards that they arrived in good order. After many trials I do not think any way of packing in boxes for plants better than this simple way of Moss and paper. The finished parcels are from 6 inches to 7 inches long and 2 inches thick; if larger they might exceed the limit of size and weight. The cost is the local equivalent of a halfpenny for every 2 ozs. The packages go by pattern post, which out of England is of a more elastic nature. It is a great saving of trouble to have everything ready—wrapping-paper in 15-inch squares, waterproof paper in 8-inch squares, and printed address labels marked "patterns." There is a useful black waterproof paper with a dull surface sold in Italy. —A.]

GREENHOUSE

Plants for back wall of greenhouse

(Bridget).—The following plants should answer your purpose: — Habrothamus elegans, Plumbago capensis, Clematis indivisa lobata, Heliotrope, Camellia, Lapageria, Tacsonia, Passiflora cœrulea, and Passiflora Constance Elliott. A good Rhubarb for your purpose would be Daw's Champion. If you want a very early one for forcing, then Champagne is the best.

Boronia megastigma

(K. M.).—No greenhouse should be without this plant. The delicious odour of its flowers is very enjoyable. The plant likes an abundant supply of water during the growing season, therefore the drainage should be very free in order to keep the roots in a healthy condition. Even during the winter the soil should not be allowed to get dry. Cut the plant down when flowering is over, and when it shows signs of starting into growth repot it carefully into good peat and sand, adding a little turfy loam. Pot firmly in the same way as you would do a Heath. It can be increased from cuttings in the same way as the greenhouse forms of Erica.

FLOWER GARDEN

The African Hemp (Sparmannia africana)

(W. Ray).—The frost must be kept from this plant if it is to thrive. After the flowering is over prune the plants into shape and put in a few cuttings to raise stock for flowering in small pots. Get the growth made early. A little warmth to start with will be beneficial, and as soon as the young shoots get a little firm, or, say, early in July, place the plants in the open air and keep there until frost is expected, when they should be removed to a greenhouse where frost will not enter. Occasional doses of liquid-manure are very beneficial.

Saving Chrysanthemum seed

(C. P. W.).—Obtaining seeds of Chrysanthemums in this country, the double ones more particularly, is among the finer arts of horticulture; really a highly technical business. The plant blooms at a season when there is not much assistance from the elements, nor do insects help to any great extent. In adopting methods such as preparing the proper plant and producing the likely flower, experts have become the master, and can originate varieties the equal of, and possibly better than, those raised anywhere. This work not only requires knowledge, but judgment and perseverance. The few engaged depend on results more or less as a livelihood, and therefore it is obvious these would not care to broadcast the many details connected with it.

TREES AND SHRUBS

Cutting back Clematises

(Leamington).—The correct method of treating your C. Jackmanni is to cut it down to within a foot of the ground in the early part of March. This climber flowers on the wood of the current season, and by treating it as above the resulting growths are stronger and the flowers larger. From your description of the other kinds we suspect them to be the variety Marcel Moser, but without seeing a flower it is impossible to say with certainty. Marcel Moser belongs to the lanuginosa section and flowers on the wood made the previous year, or, rather, on short shoots which develop from the winter buds. Therefore if you treated this kind as Jackmanni you would cut away the blooms. The correct plan is to cut away dead ends, thin slightly, training out the remainder.

Layering Rhododendrons

Will you, please, inform me how Rhododendrons? Is it necessary to shoot at a heel or joint?

[In layering Rhododendrons s branches that are nearest the gro bend them down. Remove the so depth of 2 inches to receive that pa branch that is to be layered. After placed get a strong peg and make so that the branch is 2 inches under Place another layer of soil over t part and the work is done. In two layers will have made sufficient ro removed. Last season's growth n best layers. Another way is to s few of the lower leaves, then take in the left hand and make a cut inches in length with a sharp kni centre of the shoot. This is technic tongueing the shoot.]

VEGETABLES

Collection of vegetables for ex

(M. G. C. L.).—A good represen lection of 12 varieties of veget exhibition at the date mentioned Peas, Cauliflowers, French Beans, Cabbage, Vegetable Marrows, Onions, Globe Beet, Turnips, C and Tomatoes. The Leeks and really good, could be substituted fo the following should they not be hibition standard, viz., Carrots, Beetroot, or Cabbage. With rega method of arranging the exhibits tration in the work to which you re serve as an excellent guide, and if it closely you will then see how best the various vegetables you decide ing. A good stimulant for Cuc diluted liquid-manure applied at a ture of 85 degs. Peruvian guano, gallon of water, can also be reco Nitrate of potash and phosphate ½ oz. of each, dissolved in 1 gallon are also recommended as good liq lants. These can be used both for and Tomatoes. Guano and t manure previously mentioned are for Tomatoes. In regard to the of query about pot plants we can out whether it is a suitable manu tain plants in 6-inch pots that you a list of plants that may be g flowered in pots of that size. manure would be Clay's Ferti greenhouse plants there are Begonias, Fuchsias, Show and Zo goniums, Marguerites, Hydrangea lium cœruleum, Heliotropes, Clibrani, Schizanthus Wisetone sams, Celosias, and Cockscombs, usually seen in competition at flow

Moving Asparagus

In April, 1925, I planted two beds with three-year-old crown giving up the garden in the comi and moving about ½ mile away. tell me if my Asparagus would liv at that time? I shall be unable to the following spring.

[You may certainly lift the crowns in the autumn and transf another site, but seeing they were mentioned at the time of planting not expect them to yield good re transplanted. To afford them ev of recovering from the ordeal of r carefully and with as much soil within reason, attached to the think, however, it would be wort be prepared for these crowns fa worth retaining after you have c

season, and therefore advise fresh e planted in the new garden next

Marrows for June show

to grow Marrows for a big show on , and I have very fine plants, but produce male flowers. Could I do to produce female ones in time for I have some in two frames and a cool house that is not heated. ly as soon as possible. C. Y. K.

ly thing we can think of likely to plants to become fertile would be d stimulants, afford plenty of air on able occasions, and water sparingly time being. This would check growth and cause it to become of ry or firmer consistency, and fruit- ould follow. You have probably lying the plants too liberally with , but, even so, it is strange they ale blossoms only. As a rule, they oduce an ample number of female When Vegetable Marrows are der glass they must be fertilised, fruits may be looked for in vain. have been fertilised and the growth the first or second leaf beyond the atter grows very quickly to a ser- ze.]

s mildewed

t me know why, in a house where no draughts, Cucumbers show ight temperature 50 degs., and ourse, higher. They are looking s mildew on some leaves. Please any particular manure they ought They have got Clay's in small Every care is taken of them. started writing a lot of small have formed, but most of the e good fruit, some nearly 2 feet nore in length. C. Y. K.

ves have become mildewed as a e temperature at night being too correct day and night tempera- ucumbers are 70 degs. and 75 degs. s. and 65 degs. respectively. The e of these temperatures will en- oyant atmosphere and promote uitful growth. In addition to the amed, Peruvian guano and liquid- e suitable stimulants for Cucum- fford a change of plant food. An very light sprinkling of nitrate of surface of the soil prior to water- beneficial.]

FRUIT

y bushes failing

be greatly obliged if you can tell lisease is attacking these Goose- s. The withered branch is from ich started this spring in an ap- ealthy condition, but is now nd has lost all its fruit. The other parently not so far advanced, but already badly affected.

R. Kirkpatrick.

ooseberry bushes are affected with " (Botrytis cinerea). This fungus lespread and attacks a number of is also very common as a sapro- any kinds of decaying garden rub- e case of Gooseberries the disease to gain an entry in two ways— y of the foliage and by attacking em at the collar of the plant. In the result is the same—death to ttacked. The specimens you have s show that in one case the shoots killed entirely, and that in the the leaves, and especially the slightly attacked. We should ad- grub up and burn at once the badly-attacked bush. You might try and save the others by spraying with Bordeaux mixture composed of 2 lbs. copper sulphate, 2 lbs. good quicklime, and 25 gallons of water. The copper sulphate should be dissolved in a small wooden container, using 2 gallons of water for the purpose. The quicklime should be slaked by adding a little water to it in another vessel, then add a little more water to make the lime up into a fine paste, and gradually adding water, eventually making your lime-water up to 23 gallons. You now have one vessel containing two gallons of water with 2 lbs. of copper sulphate dissolved in it, and another containing 23 gallons of water with 2 lbs. of quicklime dissolved. The copper sulphate solution should now be very gradually added to the lime-water, stirring the mixture the whole time. Bordeaux mixture should be used as soon as it is made up, and you should take care that you coat the undersides of the leaves with the mixture. Air-slaked lime should not be used for making Bordeaux mixture. It is useless for the purpose. If your lime-water, when made up, contains any gritty material it should be strained through a piece of fine sacking before the copper sulphate solution is added. If you keep a sharp look out for the disease, and cut out the affected parts, spraying the rest of the bush immediately afterwards, you ought not to be troubled further with the disease. At this time of the year you may find that Bordeaux mixture will cause spotting of the berries.]

Fungus on Vine leaves and fruit

I am sending examples of Vine leaves and one bunch (the only one affected as yet). The leaves have been affected now for three weeks. One I kept under observation gradually rotted away. Would you kindly let me know what the cause is and the remedy? F. Cecil.

[We think this to be Vine Sclerotinia, a fungoid disease injurious both to foliage and bunches before the latter reach the flowering stage. Spray at once with a solution of liver of sulphur and at weekly intervals until the Vines come into flower. Remove and burn the worst of the affected leaves. The method of making the solution was given in a recent issue, and the quantity of the liver of sulphur to use is 1 oz. to 3 gallons of water. We advise you to give both Vines and structure a thorough cleansing next winter.]

Pear scab

I am enclosing with this a few young Pears. Can you tell me what disease they are attacked by and its remedy? I had some last year, and later on the Pears looked as if they had been dipped in soot, nearly black. It seems to be on the skin only, and I suppose it is fungoid. J. A. B.

[Your Pears are affected with Pear scab (Vanturia pirina). This fungoid disease is very common on Pears, and attacks the leaves, fruit, and young wood. Different varieties of Pears vary considerably in showing the signs of the disease. Some varieties have the leaves badly affected, others do not show much sign of attack on the foliage at all. Some varieties have their fruits attacked and killed early in the season, others do not have the fruit attacked early in the season, but the fruits attain a fair size and then crack or become misshapen. The disease first of all attacks the foliage and spreads later in the season to the fruit and young wood. The winter stage lives in the old foliage, diseased fruits if left about, and the attacked wood. We should advise you at this time of the year to pick off and burn all the fruits attacked like those you have sent in to us. Then the trees should be sprayed with Bordeaux mixture at summer strength. When pruning time comes examine the young wood carefully and cut out the diseased material. The old leaves, when they fall, should be either collected and burned or buried deeply in the soil. Next spring you ought to spray again with Bordeaux mixture. If you spray your trees with this mixture as soon as all the petals have dropped from the flowers, and again three weeks later, you should have a clean crop of fruit next season. This does not mean that the disease will be gone, but only that it is under control. When spraying with Bordeaux mixture for Pear scab it is very important to spray the underside of the leaves. We had a case last year where the trees were sprayed three or four times and still the fungus made headway. When we examined the trees we found that, although the trees had been covered perfectly on the top sides, the under sides of the leaves were, in the majority of cases, not touched by the spray. Pear scab rarely attacks the upper surface of the leaf, but spreads very rapidly on the underside. It is, of course, difficult to spray the underside of Pear foliage when the trees are on a wall, but with a little trouble it can be done. Write us again if you have any doubt as to what is, or is not, infected wood.]

MISCELLANEOUS

The clay-coloured weevil (Otiorrynchus sulcatus)

An answer to the following query would be greatly appreciated. A group of Rhododendron Doncaster planted two years ago is trying to grow in the same place and under the same conditions that older plants are now flourishing in. I could not make out until now what was checking growth. Am I not correct in assuming that it is a fly or grub? They have injured last summer's growth, and I frequently notice the same damage to leaves here where Rhododendrons are planted in long grass and before they get well established. If my assumption is correct can I prevent the attack being repeated by using insecticides, or what? Grampians.

[The leaves of Rhododendron you have sent us appear to have been eaten by a weevil, probably the clay-coloured weevil (Otiorrhynchus sulcatus). The adult weevils, which are now appearing, feed on foliage of various kinds, also the bark of certain trees. Later on in the season eggs are laid in the soil near the roots of the plant attacked. These eggs give rise to maggots, which feed upon the roots. The maggot stage lasts until the following spring. The grubs, when fully fed, turn for a very short period into pupæ, from which the adults emerge in May and June, and the life-history is repeated. You must remember, then, that this pest damages a plant in two ways. First, the adults feed on the bark and foliage. Secondly, the adults give rise to numerous grubs, which attack the root-system of the host plant. This is probably why your newly-planted Rhododendrons are doing so badly. For methods of control please see "Rhododendron Injury," on page 252 in our issue for April 17th.]

Hair worms

I am sending you, to-day, a small tin box in which you will find a bottle. In the bottle you will see a thing like a yellow thread, which, when stretched out, measures about 4 inches. This thread is a dead insect of some description, as I found it crawling about on the flowers of a Rhododendron. I shall be interested to hear what kind of a beast it is, as I never saw one like it before.

Joseph H. Welch.

[The specimen you send is a hair worm, belonging to the genus Mermis. The worms may often be found on plants after rain, and sometimes in great numbers, making some

persons think that there has been a shower of worms. There is no doubt that they come out of the ground, where they pass the greater part of their mature existence. The life-history of these worms is not thoroughly made out, but it is certain that they pass a portion of their early life as internal parasites of insects. They are perfectly harmless to plants.]

Painting the inside of boxes

(W. B.).—We should have no hesitation about painting the insides of the boxes with a rot-preventing paint, provided the paint is allowed to dry thoroughly before the boxes are filled with soil. To be on the safe side we should allow 14 days between date of painting and seed-sowing. We have known of cases where injury has been caused by being in too big a hurry. When boring holes in the bottoms of the boxes for drainage it is a good plan to burn the holes out with a hot iron, because charred wood offers considerable resistance to wet and rot. If this is not done the wet gets in at the holes and sets up rot, and thus weakens the bottoms of the boxes.

Duration of cut flowers

(Captain Saunders).—Much depends on the time of day at which the flowers are gathered, also the age of the blooms. If you gather a fully-open flower and one that may have been at its best for some time you cannot expect it to last so long as one that is fresh and that has not been exposed to the sun and weather. Again, much depends on the temperature of the room in which the cut flowers are placed, and also the capacity of the vase used for holding water.

SHORT REPLIES

R. B.—The flies collected from your Bramley's Seedling Apple belong to the order Diptera. To the best of our knowledge they are perfectly harmless.

Henry F. Parsons.—1, Yes, if you thin the buds of the Carnations you will increase the size of the flowers that remain. 2, Impossible to say. You may sow a packet of seeds and not get a seedling of any value. It is quite a lottery.

NAMES OF PLANTS

W. J. B., Suffolk.—1, Cistus, probably C. crispus; 2, Ceanothus, kindly send better specimens; 3, Dictamnus Fraxinella; 4, Scilla peruviana. The specimens sent are very poor. It is impossible to identify plants from the small scraps.

A. C. P., Oakfield.—1, Bottle Brush (Callistemon Salignus); 2, Juniperus communis.

E. J., Cheshire.—Rhododendrons Cunningham's White and Cynthia (pink).

Erin.—Probably Tulip Orange King.

W. H. Archibald.—Please send better specimens, a piece of the branch as well.

Evelyn Snell.—We know of no work devoted solely to the cultivation of the plants you inquire about. There are various replies scattered through the pages of this journal.

Ulsterunda.—1, Doronicum Harpur Crewe; 2, Bedding Viola Bullion; 3, Euphorbia Cyparissias; 4, Sedum roseum (syn. Rhodiola rosea).

F. W. C.—Bird Cherry (Prunus Padus).

E. A. T.—Rock Cress (Arabis albida), the single or double form. The plants ought to be broken up and replanted in good soil. They will again recover their vigour and flower well.

O.—1, Polemonium cœruleum; 2, Daphne Laureola; 3, Doronicum austriacum; 4, Berberis Darwini.

L. C.—1, Euonymus japonicus aureus; 2, Potentilla repens; 3, Corydalis lutea; 4, Saxifraga granulata.

Report on Condition of Horticultural Crops on the 27th May, 1926

VEGETABLES.

Beans (Broad).—Autumn-sown crop is growing well and pods are setting freely; spring-sown making good progress.

Beans (Kidney).—Germination good in most places.

Beans (Runner).—Sowing made under good conditions.

Beet.—A good plant in most districts.

Brussels Sprouts.—Autumn-sown plants now planted out are making good progress; spring sowings look healthy.

Cabbage (spring-sown).—Young plants are rather backward, but making satisfactory progress.

Carrots.—A good plant, but growth slow.

Cauliflower.—Autumn-sown plants now well established in the fields, but have made but little growth.

Celery.—Plants are doing well, and planting out has commenced in some districts.

Cucumbers (under glass).—Are making good progress and fruiting freely.

Kale.—A good plant.

Leeks.—Germination good.

Lettuce.—Autumn-sown plants are somewhat backward, but promise an average crop generally; spring sowings are backward.

Onions.—Spring-sown Onions are a good plant though backward.

Parsnips.—A good plant, but have made little growth.

Peas.—Now making good growth and look promising.

Savoys.—Germination good.

Sea Kale.—Crowns making good growth.

Spinach.—Spring-sown Spinach is making good progress.

Tomatoes (under glass).—Plants growing well, fruits ripening slowly.

Tomatoes (outdoor).—Planting out has commenced in the south.

Turnips. — Germination good, plants making good progress.

FRUIT.

Apples.—Setting of fruit is very irregular. Bramley's Seedling and Newton Wonder are patchy; Lane's Prince Albert and Lord Derby are reported fair; Worcester Pearmain is good; James Grieve fair; Cox's Orange Pippin poor.

Cherries.—Set is disappointing after plentiful show of blossom; Early Rivers is best in Kent, other varieties are patchy.

Currants (Black).—A heavy set of fruit which has been considerably reduced by frost damage.

Currants (Red).—Set is generally good and prospects are promising.

Gooseberries.—A good crop generally; up to average in eastern counties, where a heavy set was somewhat thinned by frost, and nearly average in Kent.

Pears.—Only a fair set generally; Conference and Fertility reported good in Kent.

Plums.—Victorias are good generally, but only fair in Kent; Czar is good in Kent and Norfolk, other varieties patchy; much dropping reported and the general prospects are only fair; Greengages poor generally; Damsons promise well in a few places.

Raspberries.—Canes are flowering fairly well; damage by frost reported.

Strawberries.—Blossom patchy, but fair in most districts; much frost damage reported.

CATALOGUES RECEIVED

J. E. Sleightholme, 2 to 6, Ingham Street, South Shields.—Garden furnishing.

Barr and Sons, Covent Garden.—Spring list of bedding plants and Dahlias, 1926.

Clarence Elliott, Ltd., Six Hills Nursery, Stevenage, Herts.—Alpine and herbaceous plants.

By Appointment.

GREEN
World-Renow
LAWN MOW
AND ROLLE

Every Lawn Mower m
Green's is the best for its
Green's Hand, Horse or
Mowers are world-famous f
ency, simplicity, easy runn
excellence of design and c
tion. Over a million sold.

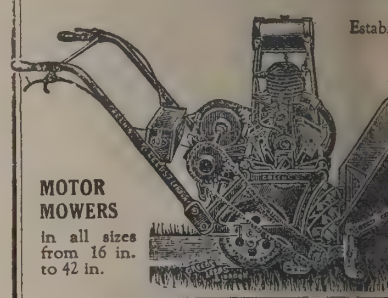
GREEN'S Motor Mow
the Motor Mower Trials
Regent's Park, London, in M

Obtainable from
Ironmongers, Stores, etc

Complete Illustrated List No. 15 on application.

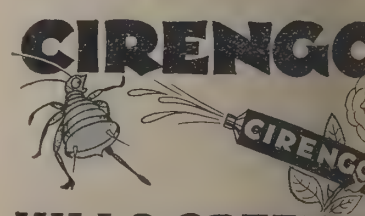
THOS. GREEN & SON
Smithfield Ironworks, L
and New Surrey Wo
Southwark St., LONDON

Estab



MOTOR MOWERS in all sizes from 16 in. to 42 in.

CIRENGO



KILLS GREEN F
AND OTHER GARDEN P

READY FOR USE. All you have to do is level teaspoonful in two gallons of cold wa a few minutes you have a supply of strong liquor.

9d. per tube.

Large size 3/- (5 times the 9d. siz

Of all Ironmongers, Seedsmen, Florists and or post free from :

THOS. CHRISTY & CO., 4-12, Old Sw London, E.C. 4.

GALVANIZED WIRE NETTING, per 50

Mesh.	12 in.	18 in.	24 in.	30 in.
½ in. x 22G ..	11/9	17/-	22/1	26 11
¾ in. x 22G ..	6/11	9/10	12/6	15 3
1 in. x 20G ..	6/5	9/2	11/8	14 2
1½ in. x 19G ..	6/-	8 8	11/-	13/3
1⅝ in. x 19G ..	4/7	6/6	8/3	10/-
2 in. x 19G ..	3/11	5/7	7/1	8/6
3 in. x 19G ..	2/11	4/1	5/1	6/2

	42 in.	48 in.	60 in
½ in. x 22G	37/9	43/2	54/-
¾ in. x 22G	20/11	23/10	30/-
1 in. x 20G	19/6	22/2	27/9
1½ in. x 19G	17/11	20/6	25/6
1⅝ in. x 19G	13/5	15/4	19/9
2 in. x 19G	11/5	13/-	16/6
3 in. x 19G	8/3	9/5	11/9

Carriage paid on Lots of £6 nett value and u

HORTICULTURAL GLASS, 4th quality and

In boxes, 100 sq. ft.	
9 x 7 in...	15/-
10, 12 x 8 in. wide	16/6
11, 12, 13, 14 x 9 in. wide	17/6
12, 13, 14 x 10 in. wide	18/6
16 x 10 in., 13, 16 x 11 in. wide ..	22/-
18, 20 x 11 in., 12, 14, 15, 16, 18, 20, 22, 24 x 12 in. wide	23 6
16, 17, 18, 20 x 13 in. wide	24/-
16, 18, 20, 22, 24 x 14 in. wide ..	24/6
20, 22, 24 x 15 in., 18, 20, 22, 24 x 16 in. wide	25/-
20, 22, 24 x 18 in. wide	26/-

One size only packed in a case.

Best Soft Putty, 1 cwt., 18/6; ¼ cwt., 10/-; ½ c 14 lbs., 3/6. Diamonds, 9/6 and 12/6 each Cutters, 1/6 and 2/6 each. Best Mixed Paint lever tins, 8/6 per stone.

List of Garden Tools, etc., on applicati

All o.r. Hull. Net Cash with Order. All sent

F. & T. ROSS, LTD., Ironmonger
Estd. 1843. MYTON ST., H

GARDENING ILLUSTRATED

66—Vol. XLVIII. JUNE 12, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

t by post... 340
eds, old... 340
blumosus 349
trans-
... ... 348
n pots ... 347
... ... 341
ggot... ... 348
... ... 347
nhealthy 349
oideus ... 347
auca pyg-
... ... 346
Cyclamens failing ... 349
Dahlias, success with 346
Daphne Mezereum ... 340
Endive, sowing 348
Figs dropping 350
Fruit-tree planting, the advantage of variety in 341
GARDEN IN SURREY, AN ARTIST'S 342
Garden, rock, the Kew 339
Garden, the architect in the 338
Genistas failing... ... 349
Gooseberries, caterpillars on 350
Grapes, thinning ... 341
Heaths, hardy, on behalf of 344
Humea elegans 346
Lilies for the Riviera 350
Lilies of the Valley, Pink 340
Lily, the Belladonna (Amaryllis Belladonna)... 350
Marrows, Vegetable, without stable manure... 348
Myosotidium nobile 346
Parsley for winter ... 348
Phlox subulata G. F. Wilson... 338
Pyrus Hosti 345
Quince, diseased ... 350
R.H.S. Autumn Show 337
ROCK PLANTS, SHOWY 337
Roses, Marechal Niel, opening badly 350
Rosmarinus prostratus 344
SCHIZANTHUS AND HOW THEY ARE GROWN, THE MODERN 347
Seeds in dry walls, sowing... 346
Show house, the... ... 338
Strawberry failing... 350
Sun, the clock and the 340
Tomatoes, sleepy disease in 350
Tomatoes under glass—the half-way stage 340
Tulips failing 350
Wakefield and North of England Tulip Society... 349
Watsonias, the treatment of 340

Showy Rock Plants

gardens are now so popular they are being multiplied all the country. A proportion of aged in this work have a fair of rock plants and their needs, may take it for granted that a portion of amateur growers is not te. This is the reason why many ens are covered with things that er be seen on them, for the simple t they are quite at home on the nd. The inexperienced grower lesires to have his rockery covered ortest time possible, and therefore ings that are easily established and ckly, and he fails to realise that arden is designed to be the home plants that can only be induced to hrive under special conditions as rainage and soil. Building a d filling it with such things as Alyssum, etc., is waste of time , and in the long run can give no ction to the owner. If there was of rock plants that could be easily nd that are free of growth the case fferent, but this is not so. The true vary infinitely in character; some quire the hand of the expert, but able portion of the most attractive of very easy culture. Arenaria one of the showiest rock plants in and one that is sure to give satisn to a very inexperienced grower. ery enduring nature and succeeds y light, free soil and quickly forms mass of foliage. When smothered r large pure white blossoms it lly striking feature for a consider- . It does not fear drought, but t sunshine, and can be allowed to a lengthened period without any ntion. It is, indeed, one of the -habited hardy plants in cultiva- panula pusilla is a charming little ich spreads freely from underns and thickly covers itself with ttle blossoms. The white variety . I once saw it used as an edging ge garden which sloped slightly ground-level, and the effect of the e white flowers was very good.

ze, C. muralis, is one of the best the beginner can take in hand; it ablished, has a long life, and will the poorest soil. As its name will live on old walls and is most very poor stony soil. C. turbinata l way is most happy when grown rk. It is a handsome species. Saxifrages S. pyramidalis is, when ngth, remarkably showy, half-a-dozen spikes 18 inches to 2 feet high and broad in proportion making a fine display. I have had as many as 30 well-developed spikes in a group, and I do not see how anyone could obtain a more striking effect on a rockery. Its near relative, S. altissima, is not quite so showy, but it is effective and is one of the easiest members of a large family to grow; it will thrive in any free light soil. It increases very freely and requires a little attention in the way of thinning the growths, otherwise in the course of two or three seasons they come into a crowded flowerless condition. Thin them early in April and put into light soil and the rosettes will make a strong growth and will throw up strong spikes. In a group this Saxifrage is very showy.

Nierembergia rivularis, not very well known to amateur gardeners generally, is very easily grown. It increases freely, and when covering a square foot of soil and covered with pure white flowers it is very effective. The Alpine Phloxes (P. subulata) cannot be passed by; they vary in colour from white through shades of pink and rose to crimson. They form compact bushes of foliage which is not seriously affected by lengthened periods of heat and drought. These little Phloxes are among the most showy dwarf-habited plants in cultivation and are of remarkably easy culture. Lithospermum prostratum has the same characteristics; it is one of the best investments that the beginner can make, for planted on rockwork or on a bank where there is free drainage it will last for years, and when covered with its lovely blue flowers it is remarkably effective. Narcissus minor, dwarf but vigorous, and N. Bulbocodium, the Hoop Petticoat Daffodil, are at home on the rockery in the form of colonies of a dozen bulbs. They make a nice show and the bulbs last years.

Primula pulverulenta, which has been so much improved in recent years, fills a moist pocket in the rock garden

The flowers of the new varieties are of lovely shades of rose and pink with golden-yellow eye. They are handsome plants that should be grown in masses

The mossy Saxifrages are very free of growth, and where covered with bloom are very showy. They have but one defect, and that is liability to suffer in a time of drought. It is, therefore, necessary to water them occasionally, otherwise they go brown and may even die out. Every third year they should be divided, and this is all they need. Solidago brachstachys is a dwarf Golden Rod that makes a nice show in late autumn when there is very little bloom on the rockery. Plumbago Larpentæ is another October-blooming plant, the blue flowers being very attractive and showy, especially in the case of established specimens several years old. Plant where it is to remain; it will give no trouble and will last indefinitely. There is no easier plant to grow than this pretty Leadwort. Last autumn was too cold for it, the flowers did not expand; but the previous season it was grand, the mass of lovely blue being very striking.

Beginners in this form of gardening should avoid those things that are in the least difficult to establish. Any or all of the above can with confidence be taken in hand, experience will come; but the great thing is to go slowly. The more difficult things can be dealt with later on, two or three at a time.

J. Cornhill.

NOTES OF THE WEEK

R.H.S. Amateur Show

From correspondence received it would appear that many are under the impression that the R.H.S. Amateur Show, which is to be held at Vincent Square on June 22nd, is open only to Fellows of the Society. May I ask you to be so good as to make it known that *all* amateurs are cordially invited to exhibit, and that there are no entrance fees. Schedules may be obtained from the Secre-

tary, R.H.S., Vincent Square, Westminster, by whom entries must be received not later than by the first post on Tuesday, June 15th.

A. SIMMONDS,
Assistant Secretary,
Royal Horticultural Society.

Vincent Square, Westminster, S.W. 1.

The show house

The practice of putting Orchids when in flower into what is generally termed the show house is a dangerous one, and is often attended with injurious results. When the plants are taken from their hot and moist-growing atmosphere and placed in a dry, cool, and draughty house they are very liable to suffer through the sudden change. No doubt the gathering together of different species and varieties in bloom into one house, tastefully arranged with Palms and Ferns, is both beautiful and effective, especially to the ordinary visitor. But to the grower and lover of these charming plants it is of far more interest and pleasure, when looking round a collection, to see both those that are in and out of flower together in their own departments.—*The Orchid Review.*

Phlox subulata G. F. Wilson

It is now a considerable number since I offered it as my opinion tha the alpine Phloxes, G. F. Wilso superior and very few equals. In in mid-May, this variety, in the roc is beyond criticism. "Sheets," "like Heather," are descriptions w season, I have heard applied to c P. s. G. F. Wilson in the rock ga freedom of flowering and its dainty ought to be much more widely kno

W

THE ARCHITECT IN THE GARDEN

DURING the past week I have been assured by more than one architect bearing an honoured name in his profession that good will come out of the discussion opened up in the columns of GARDENING ILLUSTRATED under the above title. To them I commend the battle that raged between the gods—and some others—25 years or 30 years ago, and subsequent events. Judging from the comments in your issue of May 1st on the lecture by Mr. F. Inigo Thomas, he merely repeated exactly what he said then. The contest was admirably summarised in two books published (I think) in the year 1892, one by Mr. Reginald Blomfield and Mr. Inigo Thomas, entitled "The Formal Garden in England," the other by Mr. W. Robinson (who was then the proprietor and editor of GARDENING ILLUSTRATED), called "Garden Design."

In a close scrutiny of subsequent events it is difficult to discern any reason for supposing that the extreme views of either side in that Homeric contest gained much currency or exercised any emphatic influence in the determination of the question under discussion. Mr. Thomas finds it necessary at this date to reiterate, and the writer of the criticism of his lecture to repudiate, in almost the identical terms then used.

Some architects still design good and some gardeners still make bad gardens. Every artist paints some pictures, every composer writes some music, every writer pens some literature, every architect designs some buildings, and every gardener some gardens that are better than all his other work, and also some that are worse than the work of others. If we judge one by his best and the other by his worst work we may come to a conclusion definite enough to satisfy us, but it will be an erroneous one. It is therefore futile to damn either the profession of architecture or gardening because each has produced bad examples.

The capacity to design is not a matter of profession or even of education, but of personality. A man is born before he becomes an architect, and with his birth comes an individual capacity that may or may not be developed by subsequent environment, *i.e.*, in this case, education, training. Sometimes environment nurtures and develops his inherited capacity and the world becomes the richer by his work; sometimes it emerges in spite of it. Either is just as likely to occur in a gardener as an architect. The proof that architectural training does not invariably or necessarily produce even good architects lies in the fact that those of them who are inclined to assert that in them, and them alone, lies the Divine spark of genius entitling them to control all garden development are usually the first to decry the disastrous results of the building work of the less efficient members of their noble profession. All architects admit there are badly-designed buildings. The point of this is that if an architectural training fails sometimes to produce good buildings, how much less is it likely to prove infallible in the production of good gardens. If education or training could ensure the endowment of the individual with this capacity to design, then the gardener who knows nothing of architecture could become quite as efficient as the architect who knows nothing of gardening.

The upper terrace in Mr. A. C. Kenrick's garden at Elstead, Surrey

If designing were a matter of formulæ alone the question wheth development should entirely rest in of the architect would be nearly se it is *not*. Design is instinctive; th of its application alone are teacha remark in itself concedes much to tect. He does undergo a general the principles of his profession, i study of the methods of applicat sign. This training is rarely either obtained by the gardener. This is tect's strongest ground. The garde repudiates the right of the architec and make the garden because, a claims, so few of them know anyt material they are using. This a fectly reasonable ground. An would (or should) hesitate to desig ing in a material about which nothing, as surely the matter c exercises a potent influence on de on style.

There is, or should be, a co equal meeting ground between t tremes, and it will come when architectural associations attach portance to the horticultural eleme den development. The modern its complex requirements impos architect the necessity for acquir mass of intricate knowledge that all too short in which to absor modern garden with its ever-incre of new and wonderful plants imp strain on the horticulturist. Neit time, few of them the inclinati from personal experience and r course with both), to intrude into of the other. What is wanted is of architectural knowledge super horticultural experience that will possessor to appreciate not only tions of the architect, but also ments of the garden and its When architectural training inclu in horticulture and horticultural education in architecture we shal a long way towards settling wh it is to design and make gardens

The writer of the criticism Thomas's lecture did rather assu of combative defence of certain garden design. Possibly the te lecture were an incitement to not, however, gain the impr "C. E. H." appears to have don was anything in his article "antagonism to the idea of Ital generally." Rather I concluded th ment was against the preponderan tecture in the garden that all publ in England hold up *as typical Italian gardens.* It is possibl fortune of English people who c not, visit the old gardens of Italy that most of the works on the su of wonderful illustrations of arc sculptural embellishments, an nothing about gardens. Sculp

g, although it may be used therein. the "finest Cypresses in Europe" illa d'Este that are usually extolled up for our admiration, either in by lantern slides at lectures, but the devices, stairways, vases, urns, and , many of which have not the semblance of gardening. If H." doubts me, let him turn over of the first publication on the gar- taly on which he can lay his hands e many in existence) and my case roved. At the same time I do not to think that I see no beauty in ngs as they are; many of them are xamples of artistic endeavour. It is o many architects incessantly hold as all that is wonderful in *gardening* gardener and, what is more, the public fail to see any inherent the claim of the profession to con- rdening destinies. If the claim that ly building and rich embellishment gardening could be sustained, then ner would certainly retire discom- e real reason why architects are not n in control of the garden is because w of them realise that building is ning, although it may sometimes be to build before one can garden.

athise with "C. E. H." in his re- wobbly walks and curls and twists. een such myself, but, believe me, not always the results of gardeners' have known architects indulge in of this sort quite as freely as gar- nd a predilection for rockery (in the aning of the word) and "rustic" ngst certain architects, who, by the y add to their names, should know ar more prevalent than "C. E. H.," om his remarks, supposes.

cussion of formal versus informal l, straight-paths versus curves, dges versus natural growth, crazy uch loved by a certain type of archi- us neatly-worked stone is both puerile. All may be essential at path that curves for the sake of its o more and no less ridiculous than path traversing a slope can be. othing æsthetically wrong in a wall Yew where enclosure is necessary han in a masonry wall covered with Formality forced into certain posi- be absurd and abnormally ugly, no at virtue there may be within the lf. The mere imitation of Nature, hat imitation be good or bad, can disastrous. If the sole result of garden is to be a display of clever al design or building effort, why garden? If, on the other hand, a of untamed Nature is to be our leal in gardening, why not let her own work—she can do it so er than we can. The truth is that es, styles have become fetishes. a name" is a passion to-day— udor, Italian, Old English, and en meaningless, have become just sell something, like a label on a ickles.

lian influence and all the other in- hat went before and have come never be eliminated either by archi- rdener. The spirit of English gar- a synthetic blend of the aims of all of all races. It knows no definite latest and most potent influence een brought to bear upon it (almost sly so far as practice is concerned) anese. To those of us who have tched the effect of this influence it ceptible; by the gardening public it quietly assimilated without thought as to where it was leading.

I have already mentioned the influence of material on design. I think no architect will dispute the fact that the availability of material at all times and in all climes has created styles of building. So also it has created and is influencing styles of gardening. To-day the English garden is the richest paradise the world has ever known. Climatic conditions permit us to cultivate successfully, the ramifications of Empire permit us to collect, and modern methods permit us to transport vegetation from every zone. How can the architect hope to keep pace with the times whilst modern domestic science is advancing at an equal pace and strains his capacity to the utmost. The importations of beautiful hardy trees, shrubs, and plants during the past few years have alone created a demand for a new provision in the garden plan for their accommodation. Towards this the geometrical disposition of enclosed lawns, alleys, and all the quiet and sweet simplicity of the gardens of the middle centuries contribute little.

In conclusion, may I pay a tribute of respect to certain great men in the architectural profession who, born with the faculty to value at its true worth the real spirit of gardening, the courage to repudiate mere conventionality of form when necessary, and the capacity to acquire some necessary knowledge, have contributed much to the realisation of the ideal in modern gardening. In nearly all these cases they would be the first to admit that their ultimate successes have been achieved because they had at hand some sympathetic colleague who, whilst appreciating their ideals, possessed an artistic sense, combined with technical knowledge that they could never hope to acquire, but without which they would never have dared to essay.

Architects and gardeners can walk hand in hand along the paths of beauty if each will treat the other, not as an opponent but as an expert in his own domain. If the architect will collaborate rather than compete and will consent to modify his design to suit modern garden life, he will find the gardener only too willing to assist him along the path of success. Also he must abandon the idea that formality and building are essential essences that run through *all* the garden scheme. Here is the matter in a nutshell. The tendency of the architect has been never to get far beyond formality of treatment, that of the gardener never to get close enough to it.

GEORGE DILLISTONE.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The Kew rock garden

THE GARDENING ILLUSTRATED of May 29th is just to hand, and it is with a sense of relief that I read Mr. George Dillistone's defence of the rock gardening at Kew. I confess that it was with something like a shock that I read the diatribe of "X." in your issue of April 24th. I know the rock garden at Kew very well—have, indeed, described it and criticised it before now in print—but I have not seen it for a couple of years, and, on reading the note in question, concluded with dismay that some drastic change for the worse had been made in the alpine garden, which I had so often visited with interest. On re-reading "X.'s" damning note I seem to perceive that it was written by one who looked for something in the Kew rock garden which the authorities of Kew do not intend their rock garden to supply, namely, a decorative display of spring flowers, which, like much else at Kew, would appeal to the visitor who is fond of flowers and likes to see plenty of them without much feeling for what is rare, difficult, or botanically interesting. I do not mean to say that a really decorative rock garden is not a desideratum at Kew. No doubt it is, for there are a hundred visitors who would enjoy a good scenic rock garden for five who would interest themselves in rare and interesting, though perhaps in some respects unattractive, alpine plants. Kew is in the difficult position of being at once a popular and a scientific garden. It has to appeal to the expert and to the inexpert, and is bound sometimes to fall between the two stools. To the expert in alpines—and by "expert" I mean merely the person who is interested in alpines *quâ* alpines—the Kew rock garden is—or was a short time ago—a most interesting little world of plants, where one could see growing, and occasionally very likely failing to grow, plants which one had tried to grow oneself, and failed or succeeded as the case might be. I do not know that on my visits I have looked for anything prettily scenic, though I enjoy the flowery picturesque as much as most, but though the rock garden might not be exactly a blazing valley of bloom there were always individual blooms sufficiently numerous and of sufficient interest to make the visit worth while. It is very likely that the Kew rock garden comes considerably short of the conceivably perfect rock garden. I should be astonished if it did not. To take a single tribe, I am wondering at this moment whether, for instance, Kew gives the connoisseur in Saxifrages the object-lesson which he ought to expect when he is prompted to visit Kew. Can Kew show, assembled within a space convenient for comparison, *all* the Saxifrages—not all the hybrids, of course, but all the recognised species? Very likely it does. Very certainly it ought. But if it does, that sort of thing will possibly not recommend the garden strongly to "X." He wants display, and within reasonable limits he ought to have it—not in *the* rock garden, perhaps, but in *a* rock garden specially contrived and furnished to satisfy "X." and those of similar tastes. The Kew authorities are bound to consider "X.," who, no doubt, pays his proportionate share of the Kew bill. So if Kew does its duty and desires to profit by the criticism to which it is being subjected it will proceed, as soon as may be, to dig another valley and build it up with peaks, gullies, terraces, ledges, pockets, and other devices known to the builders of rock gardens, subsequently filling all available shelves, hillocks, and depressions with solid sheets of scarlet, cobalt, yellow, orange, and other rainbow hues—all arranged with taste, of course, so as to provide a cheerful riot of colour, but a tasteful riot. The expense? Oh, hang the expense! As a matter of fact, there is nothing we—that is, you and I and the rest of us—enjoy so much as shovelling out money for irresponsibles to spend. Therefore again I say—Hang expense! Let "X." have the rock garden he asks for.

X2.

—— I am glad to see in your issue of May 29th that, in the main, that good gardener, Mr. George Dillistone, agrees with my criticism of the Kew rock garden; at least, the very small "bouquet" which he throws is out of all proportion to the "brick" which follows it, and nothing could be more damning than his criticism. He says the construc-

tion . . . is very bad indeed, that it should be entirely reconstructed on a concerted plan, and that he sees no reason why Kew should not possess as good a rock garden as Edinburgh. With all this I entirely agree, and, coming from so experienced and capable a rock garden designer as Mr. Dillistone, it is quite as "drastically damning," as he puts it, as anything I said in my previous note.

Mr. Dillistone says he has heard and read criticisms of the Kew rock garden before. So have I and so have many others, and it is surely time something was done to improve it. I do not ask for "ramping masses of Aubrietia, Alyssum," etc., although there is plenty of room for these at the top, where they might hang over the upper rocks and take the places of many less beautiful and less suitable things which are growing there now. I do not agree that the Kew rock garden should be primarily used for botanical specimens. It is rather for the enjoyment and education of the public, and there are hundreds of choice plants which, if they are grown at all, might be far better done than they are at Kew. I should like to make it clear that I am not making an attack on any of the Kew officials, but I really think the public is entitled to a better exhibition of rock plants and rock building than it gets at present. X.

—— In reply to T. D. Boyd's letter, issue June 5th, "Bosmere" would like to know why he thought that the reference was to a rock garden in Edinburgh; as it happens it was to a widely-known garden in the southern counties. Also "newly planted" is not applicable to either of the rock gardens referred to; both *were* tinted with Moss and weather-worn, but this year have been denuded of their natural growth both on paths and rocks. T. D. Boyd seems to wish "Bosmere" to suggest another stone, her own (covering about 100 yards of sloping ground) is made of Norfolk sandstone. "BOSMERE."

The treatment of Watsonias

I read with interest the Editor's note (June 5th) on the treatment of Watsonias. I grew W. Ardernei last year, for the first time, in a sunny bed set apart for Gladioli. Although some flowered, the situation may have been too dry. It seems that they require moisture, or more than they got in spite of some watering. At any rate, from the six bulbs planted I lifted 10 last autumn, most of them equally as large as those originally obtained. In the first week of April I replanted these in another spot, partially shaded and receiving more moisture through a slight decline in the ground. They have now pushed through, some up to about 2 inches above the soil, and the further result remains to be seen. The purity of the white flowers of Watsonia Ardernei and their exquisite scent invite one to give them a place in the garden if possible.

Rusthall, Tunbridge Wells. A. J. H.

Daphne Mezereum

I can understand grafted Daphnes failing, but it would be interesting if some of your readers could give the reason why the seedlings of D. Mezereum fail to establish themselves with me, grown in sandy loam enriched with leaf-mould. In a cottage garden only some 200 yards distant it thrives admirably grown in the ordinary soil of the garden. Seedlings come freely and plants develop into good-sized bushes, which are a pleasing sight when in full bloom, and are certainly interesting when laden with their brightly-coloured berries later. I have planted in different positions and on several occasions, yet with but poor results. In the cottage garden referred to the seeds fall of their own accord, germinate, and in due time numbers of plants appear, often to be destroyed in the course of cropping because they were not required. The fleshy nature of its roots does not suggest a peaty soil as being requisite, and for which leaf-mould is often adopted as a good substitute. It is passing strange, and apparently beyond explanation, why certain plants revel in one garden without any particular attention, and yet in another, which may be closely adjacent, nothing will induce a satisfactory growth. All Daphnes are favourites with most plant lovers, but none perhaps more so than this harbinger of spring, which should find a place in every garden. Advice on its peculiarities in cultivation would be welcome. C. T. K.

Alpines sent by post

With reference to your answer to a query *re* alpines sent by post, issue June 5th, p. 334, the method there suggested is one which I have substantially used with success, except that I do not post individual plants, but send them in small cardboard boxes. These boxes must not weigh more than 300 grammes (approximately 12 ozs.) in order to be accepted for sample post, but it is surprising how many plants can be sent within that weight if the directions as to packing as given by you are scrupulously followed. Last year I sent to England nearly 400 plants in 18 such boxes, at a cost of about 9s. at most.

The other day I saw one of my consignments after a year's growth in the garden of the friend to whom they were sent. They were all thriving excellently, with the exception of Rhodothamnus chamæcistus (extremely difficult to get a satisfactory root of, no matter how sent home), Campanula alpina (it is really necessary to collect seeds of this), Eritrichium (of course), and Papaver Kerneri (with its tap-root). These were the failures out of 20 odd plants. Most were sent from out-of-the-way places in Southern Austria.

On my arrival home, however, I found that certain local Post Offices in England had decided that these plants were not entitled to sample post rates, and had surcharged my packages up to letter post rate. Not every Post Office did this, and the matter appeared to be subject to the personal opinion of the local Postmaster. I accordingly took up one instance as a test case with the Postmaster-General. It was argued for the Post Office that my plants were saleable growing plants and could not be treated as botanical specimens for the purpose of sample post rates. My counter-argument was to the effect that they were not saleable plants in the ordinary sense of that term as applicable to plants sent out by a nursery; that growing plants, or plants which might with luck and with very specialised experimental cultivation be induced to grow, were just as much botanical specimens as dried herbarium specimens, and much more useful for botanical purposes; and that, in any case, there was in existence between European countries a Postal Union, the effect of which was nullified if conditions agreed to by the postal authorities of the various countries and accepted in the specific cases of my packages by all the foreign Post Offices across whose counters the packages were handed were not accepted by local Postmasters in England.

After three months the Postmaster-General refunded to me the 2s. 6d. which had been surcharged in the test case. I hope that this may have created a precedent, but I feel that probably local Postmasters may continue to have their own views. Nevertheless, I shall continue to send rare plants at sample post rates and take the risk of being surcharged, as, at the worst, the expense is trifling compared with the results obtained.

I should like to add, however, tha should dream of rooting up and posti any plants which can be procured name and at reasonable prices from men at home, and that when I used "rare" above I mean rare at home, in their native habitats. The latt be left to experts who have reasonab of promoting their cultivation in this

E. ENEVER TODD, I

Old Asparagus beds

In reference to the length of t Asparagus beds will last, I may say t are three large beds in this gard were planted before my employer bought the place, which is 90 years they still give good results. They manured every autumn, and in M get a dressing of salt; after that given a sprinkling of superphosphat and soot. If the weather is dry at the dressings are well watered in. A should receive copious supplies of w April to the end of August. It is important to stake the growths agai as, if this is neglected, much damag by the growth being broken down.

Freshwater.

Pink Lilies of the Valle

I have noticed in GARDENING ILL recently correspondence on the s "Pink Lilies of the Valley," and may interest readers of your paper that I have a border of them abo long under a wall which is cove Morello Cherry trees. The Lilie Valley were here when we came ago, and many people admire the va is certainly very fragrant, but the fl not large. EDITH C. H

Woodville, Abbots Park, Chester.

Tomatoes under glass—the h stage

It was very good of Mr. Wrigh out the error which I inadvertently my note on this subject in recom handful of superphosphate of lime a teaspoonful to be distributed to as was intended, and I am oblige The treatment would have been ve and would have ended in the ro burnt. With regard to steeping pie in liquid-manure, it is a practice I followed, and it may interest Mr. know that I have been gathering since May 25th. I quite agree views in reference to the removal o ing shoot after the fifth truss of fru which induces the swelling of the fr lower trusses, but am afraid that is not always appreciated. MID

The clock and the su

It is good to be in agreement Scottish Gardener" over a really matter which affects gardens management very considerably. found it a really good working ar to have at least a couple of men sta late in the day, completing their work at 9 p.m. (normal time 8), a ing to the staff employed so could th be adopted. But it also occurs to n start might be LATER, generally, in time," so that stopping time migh spondingly later. Why not start knock off at 6? I will conclude wi fied reminder that "A Scottish G seems to think the Fellows of th and others very prone to misco words. BRUCE

BEES

;T beekeepers will, I think, agree ıt a large proportion of the available ıey harvest in this country is lost ,son by uncontrolled swarming in the Swarming is the natural means by es increase their number of colonies, odern bee-keeping we adopt a more ırtificial system of management in obtain the maximum amount of ıoney without increasing the size of y.

ers who are starting bee-keeping wish to work up to a given number ; will find that the best and most al method of increase is by making ıring the months of May and June, ɔy allowing the bees to swarm.

unately, the present mixed races of nowadays in this country are much lined to swarm than was the case old British variety, a bee that has ctically wiped out by the acarine disease. With this latter bee the ; tendency had to a large extent been d by the careful selection of queens. ·ll known that for profitable bee- t does not pay to keep old queens, of us are too apt to renew our old y importing young ones from the t. Since the war the trade in foreign as increased to an enormous extent. : being sent over in thousands every Some are good, but many are of rior quality and, coming in some m a warmer country, are not suit- ır British climate. The home rear- eens is not difficult, and if we breed ntifically, as we should, we can do increase the honey crop in this coun- hin recent years great strides have de in all stock-breeding, both in and birds. Witness the wonderful ıents that have been made in milk ınd egg production. If these im- ts have been possible in the case of poultry surely we can do something ve the present race of bees. The F. W. Sladen showed that the ı law of inheritance applied to bees, observant beekeepers can see for s that certain characteristics are in- Every race of bees has its own stics, and every colony varies some- 'e have all noticed how some lots of ı apiary under similar conditions of ent produce double the amount of ıan others. This goes to prove that ing qualities of bees are not all nprovement in bees can be pro- two methods.

NG AND SELECTION.—Crossing effects at once, but only by rigid selection change be fixed, so the best results ned when the two work hand in : one time it was not thought possi- trol the mating of the young queen, ienced beekeepers now find that if of the selected drones are placed in g hive a day or so before the virgin expected to fly, in 75 per cent. of the queen will be mated by one of the rones. In all queen-rearing opera- ;, of course, an advantage to be as ssible from neighbouring beekeepers luce the number of drones in all our 'h the exception of the one specially for breeding our selected drones, to ım. It is generally accepted that ent is transmitted through the male ing qualities through the female, so plan accordingly.

n be induced to build queen cells on the rear part of an ordinary brood- from which the laying queen has uded by a sheet of excluder zinc or wires, or in a super above the excluder, but this latter method requires a stronger force of bees.

Never on any account breed queens from cells made under the swarming impulse. By so doing we tend to perpetuate the very trait we wish to avoid. Drones can be easily reared in our selected hive by giving the bees frames fitted out with drone base foundation. Matters should be so arranged that the drones are flying freely in readiness for the young queens.

If the beekeeper feels disinclined to breed his own queens let him purchase from some reliable breeder, and there are many in this country. Without doubt the selected British queen is, from a honey production point of view, far ahead of the foreigner.

Wells, Somerset. L. BIGG-WITHER.

FRUIT GARDEN

Thinning Grapes

FROM the middle of April until the end of June is the period during which Grape thinning is most common, as then all midsummer, autumn, and winter Grapes require thinning. The Vines belonging to amateur growers are seldom started into growth until the days lengthen, and the majority of these are just ready for thinning at this time. That operation might be divided into two sections—first, the

THINNING of the bunches, and then the thinning of the berries. All Vines in good health produce a great many more bunches than are required to form a crop; very often, especially in the case of Gros Colman, Foster's Seedling, Duchess of Buccleuch, and some others, there are two, three, and sometimes as many as four bunches produced on one shoot, and one of these is enough for a crop. Again, every shoot will produce at least one bunch, but it is very seldom one bunch can be allowed to remain on each shoot, as that would be too heavy a crop; the whole of the bunches must therefore be judiciously thinned off before the berries have swelled to any extent. The very smallest of the bunches may be cut off before they come into flower, but a general thinning should not take place until the berries are fairly formed, when the worst shaped bunches and those in which it does not appear the berries are well formed should be taken off. In doing this, the important question of the proper quantity to leave for a crop will occur to the thinner, and this is a most difficult matter to decide properly, so much depending on the strength and age of the Vines. One year's experience, however, will help the cultivator, as it is easily seen when the Vines have matured their crop whether it is too heavy or not. If the fruit did not swell up well and finish off nicely last season owing to the crop being too heavy, do not fail to have it lighter this season. If the Vines finished off the fruit well, and gave the impression that they could have perfected more, do not thin the bunches so much this time. Over-cropping is a serious matter, as it cripples the Vines and the fruit produced under such conditions is always inferior. It is much better to under than over crop. We have rods of Gros Colman just now bearing 55 and 60 bunches. The rods are about 18 feet in length and the bunches are in bloom, but before they have formed berries the size of Peas they will be cut off until only about 20 bunches to a rod remain.

THINNING THE BERRIES.—As soon as the berries are the size of Peas thinning should begin. Those who have had no practice in this work will not thin very quickly at first, and it is well that they should do it slowly, as to attempt to thin fast would lead to taking out many berries that ought to remain, and it is an easy matter, too, to injure those left, as the point of the scissors may penetrate them, and the operator not know that he is doing harm until the decay hereafter exhibits itself. Practical hands soon run over a large number of bunches, and make no mistake; they know pretty correctly the size to which each berry will ultimately swell and thin accordingly. For several years we had six weeks each spring day after day Grape-thinning, and wearisome work it was, but the practice once acquired is not readily forgotten, and we would advise all beginners to attend to it diligently at first, and note the results of their work as the fruit develops. The berries should be well cut from the centre of the bunch to begin with, then thin the extremities, but do not cut off the very outside ones, as that would reduce the size of the bunch, and, as a rule, it will be found that those outside ones swell up best. Thick clumsy scissors should never be used for Grape-thinning. Long narrow ones are the proper sort, as they may be pushed between the berries without doing any injury. They should be clean and sharp and cut the foot-stalk through without the slightest difficulty. A small twig of Birch, in the form of the letter Y, should be used for holding up the shoulders of the bunches.

Some say that rust is produced by rubbing the berries with the fingers or touching them with the head, and although we do not credit this, there is no advantage to be derived from rough handling, and this is why the stick in question should be used. Black Alicante and Lady Downe's have generally a great many small berries in each bunch, and these should be taken out first, allowing the largest and most robust to remain to form the crop. Muscats do not always swell up evenly, many bunches being composed of large and small berries, and it is very important that the whole of these should be clipped out. Where the berries grow larger when ripening than was anticipated a few of them from the closest part of the bunch may be taken out just as colouring begins.

The advantage of variety in fruit tree planting

The effect of frost on fruit blossom, and whether this followed a dry or wet day, is strikingly illustrated this year in the promise of fruit alike in the large and small kinds; that is, we find one tree of Gooseberries, Currants, Plums, Cherries, or Pears well laden with the small fruits, whilst another close at hand is comparatively bare. The reason is not far to seek; the expansion of the blossom was at varying times in the one case fully out when a fairly sharp frost came, following storms, and in the other either not yet out or already set. Gardeners, as a rule, do their best in the way of protection, but this is not always possible, and in those cases we are practically at the mercy of Nature's different moods. The above is a striking illustration of the advisability, even in small gardens, of variety of planting in all the different fruits; that is, in the varying times of expansion of blossom quite as much as in the ripening of the fruit, so that one should be fairly certain of at least an average crop. I have often urged in GARDENING ILLUSTRATED the judicious and varied planting of fruit in small gardens and what a boon an extended season of the same is to the household, and have practical experience of the same in my own small place. I generally start the first Gooseberries about the end of April, and from then until the end of the following January, when Apples are nearly over, I am seldom without fruit of some kind. As a few of the most useful vegetables are also grown the fruit is confined to one part of the garden so as to economise space. E. B.

AN ARTIST'S GARDEN IN SURREY—II.

(Continued from page 328)

THE orchard is by no means wholly composed of fruit-trees, for many other deciduous-flowering trees, such as the Tulip-tree, Magnolia stellata, and Magnolia Soulangeana nigra, have been planted, and even evergreens, such as Laurels, Osmanthus, and Cupressus species, which add mystery to the walk through it.

In the portion of ground which is used as kitchen garden and for propagation stands a small greenhouse. Some gardeners would not approve of this at all, for there is none of the orderly array of brand new pots or weedless borders. It is, however, maintained with the idea that the plants and shrubs in it should form a picture, and a riot of colour is produced by Geraniums, Petunias, Stocks, and Cinerarias, which are allowed to seed about the floor, and by flowering shrubs and climbers.

A fragrant-flowered shrub growing against the greenhouse wall is Buddleia asiatica. It is a difficult subject to bloom, but Mr. Galsworthy has found that by severely cutting back the plant when it has reached a considerable size it will subsequently flower on the new shoots.

In the border running along the outside wall of the greenhouse are growing Crinum Powelli, Habranthus pratensis, some Brodiæas, and a hardy Begonia, while in the propagating beds are several plants recently received from America. Mr. Galsworthy has quite a number of American wild plants in the garden, and among others which he has received or has himself brought from that country are Aquilegia canadensis, A. chrysantha, Viola canadensis, Arisæma triphyllum (Jack-in-the-pulpit), Phytolacca decandra, the common Pokeberry, with handsome spikes of shining black berries, and Symphoricarpus orbiculatus with a small red berry.

As one walks up the garden the path winds past a row of Lombardy Poplars, one or two of which Mr. Galsworthy has judiciously felled and so greatly improved the effect. Round about these trees it is often possible to find brownish fungi (Morchella esculenta) called Morels, which are said to be a great table delicacy.

In this part of the garden is a very good collection of Pæonies many of which were sent from America by Mrs. Edward Harding. Some of the best varieties are Walter Faxon, Le Cygne, and Solonge.

A neighbouring bed is devoted chiefly to Delphiniums. This particular strain is one raised by a Lincolnshire amateur who grew several fields of this plant with the sole object of improving the strain and who carried on his selection for 25 years. The resulting plants are very vigorous and often exceed 12 feet in height. They have been a feature of some of Mr. Galsworthy's larger pictures. In the same bed are plants of Crambe cordifolia, whose bold leaves and feathery flowers make a striking contrast with the Delphinium spikes.

It is noteworthy that in the flower beds of this garden there is little or no bare earth visible. This is not the effect of elaborate bedding-out, but of the introduction of plants which seed about the garden and come up wherever they can find space to germinate. Among the most useful for fulfilling this purpose are found to be Campanula persicifolia, Honesty, Aquilegias, a giant purple-leaved Fennel, Cranesbills, such as Geranium phæum, of which Mr. Galsworthy has a variety with purple markings on the leaves, Geranium lucidum with bright red st foliage which colours in late sum grasses such as Briza maxima. In to these many British wild plants, Geranium pratense, Lady's Mantle milla), Verbascum nigrum, the flowered Cardamine, and a variegat Barbarea vulgaris, are allowed to s wherever they do not interfere w more important plants. A const cession of flower is also obtained means. For instance, in a patch o

Above: **The south-west angle be old cottage and the ne**

Below: **The greenhouse**

tommasinianus Welsh Poppies hav couraged to seed, and their fl foliage help to cover up the untidy the Crocuses after the have finish ing.

Towards the centre of the garde and water garden supplemented b of tubs sunk into the ground an which water percolates. Here Ca petala luxuriates, growing right in in company with the Bog Bean (M trifoliata) and a Japanese Carex w gated leaves, while on the banks hardy Lobelias, and waterside Pri flourishing. Primula rosea and th Brockhurst variety of Mr. Hanbu ceptionally well here and are cap Mossy Saxifrage (S. hypnoides), wh wild at Dovedale, in Derbyshire.

The planting in the garden has well thought out and the trees selected. One of the most beau specimen of the Chinese Weeping Cerasus sinensis pendula) which ov rock bank. Another fine specimen of Picea pungens glauca (Koster's the beauty of which is considerably by the adjacent purple foliage Pissardi.

An attractive corner is formed by tion consisting of a Fern-leav Cerasus Hizakura, Magnolia cons

AN ARTIST'S GARDEN IN SURREY

1. The old cottage from the orchard
2. The old south gable
3. Daffodils and fruit blossom in the orchard
4. Grass path between orchard and wood

Bold groups of Rhododendrons which are now making a display on a south slope in the Royal Botanic Gardens, Edinbu

shrubs of Forsythia viridissima. A most successful combination also is that of a large specimen of Viburnum plicatum planted together with purple-leaved Hazel, which makes a splendid background for the former's snow-white blossom.

This is seen on the outskirts of a little wood of Birch, Beech, and Larch, in which are growing Campion, purple-flowered Comfrey, and that giant umbellifer Heracleum giganteum, sometimes known as the Cartwheel-plant, which is very difficult to keep in check.

On the shady side of the wood is a plantation of Ericas, Azaleas, and Rhododendrons (Fig. 4). Among these are some attractive R. Thomsoni hybrids, R. præcox, R. lutescens, the orange-flowered R. Blandfordiæflorum, and a hybrid recently raised at Knap Hill and named after Mr. Galsworthy, with dark mahogany-coloured flowers.

Beyond the wood is a pleasant little Rose garden, where, in addition to a collection of Hybrid Tea Roses, there are many interesting Rose species, such as R. Moyesi, R. altaica, R. rubrifolia, the four-petalled R. sericea, and the variety pteracantha. Among them, also, is a Rose species which was found not long ago growing in a cottage garden in the Shetlands and said to have been brought there by a sailor from China. It was not recognised as a described species, and has been named Rosa saturata.

Old varieties, however, have also a place in this garden, and strongly-scented kinds such as the old Damask Rose, Maiden's Blush, the York and Lancaster, and the white Moss Rose are carefully tended.

Around the Rose garden is a shrub border where that remarkable plant Pæonia Delavayi, with its unusual maroon-coloured blossoms, has now formed a bush nearly 5 feet high. In close proximity is a good specimen of Viburnum rhytidophyllum, the flowers of which are tinged with pink. Some of the best forms of Viburnum fragrans, a most variable plant, are also to be seen here in company with Viburnum Lantana versicolor, whose leaves are tinged with yellow and red, and V. tomentosum Mariesi.

Other interesting shrubs in this border are a Rubus deliciosus, with a very large broad-petalled flower and a purple-leaved Blackthorn, while among the surrounding trees are Populus lasiocarpa, with its huge leaves, and Populus trichocarpa, the foliage of which exudes an aroma reminiscent of incense.

In conclusion it should be noted that almost all of the less common trees and shrubs at Green Lane Farm were planted as small plants by Mr. Galsworthy himself, and the whole garden is an excellent object-lesson as to what can be done in a comparatively short time with a piece of ordinary farm land, for although the garden was commenced over 30 years ago, it had taken definite shape, and good garden pictures were already formed within 10 years of the date at which the start was made. J. E. GRANT-WHITE.

TREES AND SHRUBS

On behalf of hardy Heaths

SOME few years ago I planted a number of hardy Heaths. These, for the most part, were given dry, sunny slopes unsuitable for most things save Brooms, and I have no hesitation in saying that I have had fatter dividends of pleasure and satisfaction from these groups than from any other part of the garden. In making that statement, however, I am taking into consideration not only the peculiar fascination and beauty of these Heaths, or the fact that no other section of shrubs or plants gives us such an unbroken succession of colour the year round as do the Heathers. I also have in mind the very satisfying and consoling thought that these Heath groups have been accorded a minimum of attention. To put it in another way, no other planting of equal size has cost so little in labour and time—items which in these days must always be put in the balance when regarding plants from the point of view of general garden merit.

I do not propose to weary the reader with a long list of Heather species and varieties, for these can be found in any good nurseryman's list. But a representative selection will, as I have said, give blossom, and that in abundant masses, from the day that Erica Darleyensis and E. carnea flush the slopes of winter until November comes round again, with E. ciliaris, E. vagans, and E. stricta to wind-up just when E. Darleyensis is again making a fresh start. That is a great achievement and a fact of the utmost significance to anyone who can grow these shrubs. And who cannot? Those in limy must, it is true, cut-out all but E. ca Darleyensis, E. mediterranea, and E (a goodly number these, nevertheless ing the many excellent varieties species). As for the rest, they will p any average loam. I have never ounce of peat for any of mine, but le is sometimes added when planting th kinds, especially where the land is and stony that it dries-out quickly in

There is a current belief that Hea difficult things to start, but this, lik many other popular notions, is groundless. I have put in many hu plants, and losses have not averag cent. For most varieties early au probably as good a time to plant always provided the soil is damp. should happen to be a dry season I avoid getting too near winter, and March or later; that is, just when commencing.

Whenever the planting is done should be thoroughly loosened, and all stiff plenty of half-decayed leave weathered peat moss litter, or bot be mixed through it. The plants mu be put in deep, right up to the green should not be trodden too hard, esp soil that is liable to cake. I am, content to press the soil in gently hands, which leaves the medium fre to enable the delicate hair-like roo to business at once.

There was a time when I indulg tiresome job of watering all new groups should hot, dry weather co in early summer. But this was so doned for it did little good, especia steep slopes. Since that, if anythin done for such groups, I simply sc them a good layer of Fern, hedge-l or evergreen branches—anything evaporation and so conserve moistur alternative the ground between the be sown thickly with any quick annual. A. T. Jo

Rosmarinus prostrat

This is a charming little shrub su planting between large stones in position where a plant of drooping required. It is a dwarf form of the Rosemary. The plant has the

that renders the taller-growing elightful, and only differs from it in smaller foliage. Instead of form-nnar bushes this variety remains In late spring, when covered with er-blue flowers, this plant has few t should be given a warm position soil. The plant is easily increased gs or layers. It is advisable, how-eep a few plants in pots in a shel-ce. The plant, although hardy enough in most districts, is liable to suffer in severe weather. H. STEVENS.

Pyrus Hosti

Flowering now is this pretty hybrid of the alpine Whitebeam (P. Chamæmespilus). If not conspicuous, it is a shrub of more than ordinary interest by reason of its pink flowers and handsome leaves. The former are borne at the ends of the young shoots in corymbs each 2 inches across, and are very pretty as they nestle on the surrounding ring of bright green leaves, the latter coated on the underside with white down, each leaf about 5 inches in length. This distinct Pyrus is found wild on the Austrian Alps and is considered a hybrid between the alpine Whitebeam and some form of the Swedish Whitebeam (P. intermedia). Although rarely seen, this interesting shrub is worthy of greater attention on the part of planters. G. M. S.

REMINDERS FOR THE WEEK

hern and Midland

many varieties of Cabbage Lettuce o seed during the hot weather. A ne to sow now is Continuity. The hough of a purplish colour, is of a succulent nature. Ample supplies hould be given all Lettuces during eather.

s should be kept constantly hoed, further thinning is to be done it ne carefully, as any undue disturb-e roots gives rise to attacks of the Frequent dustings of old soot scattered amongst the plants. To the exhibition and other large application of nitrate of soda or ammonia may now be given.

n good time to plant out the main Celery. The trenches should have prepared with abundance of good the bottom. I find it advisable to renches a good soaking of water evious to planting if the weather is y. Lift the plants as carefully as ith good balls of soil attached to nd get them transferred without rwards well watering them in.

of these useful little Cabbages are they will form an excellent catch comes in between the autumn and winter Broccoli. Plant out hat has been cleared of early nd Peas. Christmas Drumhead s also useful for sowing at this

ies

ants, if growing on genial soil, nany superfluous shoots during the There is no advantage in allowing three to remain on each root, and d be selected and tied in, removing ler at the base.

s

not emphasise the importance of roots of fruit-trees moist, especi-growing on south walls. Water-be done thoroughly, not merely e surface, giving afterwards a ch if necessary.

ies

ortant to obtain layers as early as ere it is intended to grow them in they may either be layered into r straight into those in which they A good loam mixed with wood-bone-meal makes a good rooting Strawberries.

sses and Primroses

of these raised early are now fit in the reserve garden. Where it to increase the double Primroses er choice varieties the plants may ed and separated carefully, and re-a shady border.

Fritillaria imperialis

These plants resent being continually disturbed at the roots, but where they are overcrowded and the soil has become impoverished they may now be lifted, divided, and replanted without delay.

Chrysanthemums

Most all varieties are now ready for their flowering pots. A suitable compost for their needs is three parts good loam, one part each of decayed manure and flaky leaf-mould, mixing well together with sand, old mortar-rubble, and bone-meal, using the latter at the rate of one 5-inch potful to each bushel of soil. The pots should be clean and well drained, and the compost made firm around the roots. Careful watering is necessary after potting.

Lawns

Where new lawns have recently been made by sowing grass seeds they should now be in a fit condition for the first mowing. This should be done for the first time with a scythe, and after the grass has been raked off the lawn should receive a good rolling before using the lawn-mower, which should be sharp and set high for the first two or three mowings. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Scotland

Hydrangeas

Cuttings of the young wood of Hydrangeas root very quickly in the propagating-case at this time. The young plants, if well hardened, may be planted out in good soil in the open to complete the season's growth. So treated, the wood matures well, and fine flowers may be expected when the plants are potted up in September. Older examples which may have missed blooming should be cut hard back and treated as recommended above. Repot into 7-inch pots in autumn and it is fairly certain that each plant will, next year, carry from five to seven blooms.

Vallota purpurea

The Scarborough Lily has a very definite value for autumn flowering in the greenhouse. Meantime the plants will be best in cold frames placed upon an ash-bed. Vallotas bloom more freely when they are in a pot-bound condition. Occasionally it becomes necessary to repot or to break up crowded specimens, and this is the best time at which to undertake the work. Let the pots remain in the frames until September, when the flower-spikes will begin to throw up. Of course, plenty of moisture is desirable, and the sashes may now be entirely removed from the frames except during heavy rains.

Nerines

To ensure success the bulbs must be thoroughly ripened—indeed, "baked" were, perhaps, the better word. Place the pots on a shelf in a greenhouse, expose them to the sun, and withhold water entirely until the flower-spikes show. Like Vallotas, the Nerines thrive best when potbound.

Genistas

As soon as the Genistas pass out of bloom the plants may be shortened back in order to maintain their symmetry. Repot, if needful, when the young growth is well on the move. Plunge the pots out of doors in order that the wood may mature, and see that they do not lack moisture.

Stove

While Palms may, perhaps, be repotted at any season, it is generally conceded that this is the proper time at which to attend to their wants. Warmth and moisture are necessary, but there is no need for bottom heat except, perhaps, in the case of the Cocos family, and then merely for a time to promote active root growth. It does not appear that Palms are too exacting in respect of composts. A good loam with plenty of leaf-mould and a little sand suits them perfectly. If thrips be troublesome among fine-foliaged plants vaporising will put a period to their activities, remembering that it is preferable to vaporise lightly on two successive evenings rather than to give one heavy dose. In addition, the syringe ought to be kept at work regularly in order that the atmosphere may be kept at the proper pitch of humidity.

Orchard house

The thinning of the young fruits will now call for attention. If the trees be in pots spread the operation over a fortnight. Any branches which have missed fruiting can be safely shortened back. Syringe twice a day in bright weather, but see that the afternoon syringing is done early enough to permit of the drying of the foliage before nightfall. Ventilate freely, but beware of cold draughts.

Bedding out

This, as a rule, disorganises the routine work of the garden, and during suitable weather it is sound policy to hurry on the work to its conclusion. Most things may now go out with safety, although any exotics will be safer in cold frames for a fortnight longer. Those who appreciate Cheiranthus Allioni and who desire to have much the same colouring in the summer scheme ought to make use of the Calendulas.

Kitchen garden

Whatever may be the case elsewhere, in these gardens the Potato crop has been very badly hit indeed, owing to late and severe frosts. Curiously, King Edward VII., my favourite variety, although equally as advanced as the others, has practically escaped, and Sharpe's Express is but little the worse. All the others, however, are blackened to the ground. Turnips, including the garden Swede, may now be more freely sown as there is less chance of them bolting after this date. Salad plants may be sown in small and regular quantites—with the exception, however, of Endive, as plants sown before mid-June are inclined to go to seed prematurely. Stake Peas in good time, sowing catch crops of Spinach between the lines. Sow Walcheren Broccoli and Veitch's Self-protecting variety for late autumn use.

W. MCGUFFOG.

Mabie Gardens, Kirkcudbrightshire.

Success With Dahlias

From a radio talk by Mrs. Ernest H. Wilson, of Caldwell, New Jersey, who has won many prizes with her Dahlias

SUN, loose fertile soil, moisture, and fresh air, are needed for Dahlias.

Select a place in the garden that gets morning sunshine, where the plants will have the shade from the tops of distant tall trees early in the afternoon. This shade helps to give the long cool night of their natural habitat.

An open spot by themselves suits them best. Do not plant too near hardy perennials, shrubs, or trees, as the roots of these will take the strength of the soil away from the Dahlia.

Do not plant by a Vine-covered fence, hedge, or stone wall, or anything that obstructs free circulation of air.

Hedge plantings of Dahlias alone are very beautiful. Dahlias can be grown in any good garden soil that is loose and friable. A clay soil should be lightened by adding coal ashes and compost of leaf-mould.

Buy tubers from reliable dealers, and the best varieties for the purpose desired, namely, for cutting, for garden effect, or for exhibition. These are marked (*c*) for cutting, (*g*) for garden, and (*e*) for exhibition in some catalogues.

DIVIDING TUBERS. — Clumps of tubers should be divided with a sharp pointed knife in the spring, when the sprouts are forming. Sprouts form on the crown of the tuber or on the base of the old dry stalk. Each "eye" or sprout will be a plant; a small piece of tuber is sufficient to nourish it.

A small tuber is just as good, in fact better, than a large one. If you have bought them from a dealer, and should receive small tubers, do not be disappointed. If it has an "eye" or sprout this will be your plant, so be sure the sprout is not bruised or broken.

PLANTING TIME.—I favour early planting, as soon as danger from frost is past about May 10th, if the ground is warm and mellow. If the ground is wet and cold the tubers are apt to decay, then it is safer to wait until the latter part of May.

Early planting gives a good strong root growth and a slow top growth, making the plant strong and sturdy.

When planted early the plant requires more pruning, but makes more long-stemmed flowers for the Dahlia shows. If properly disbudded you will have fine blooms for the early and also for the late shows.

White Dahlias should be planted one week earlier than coloured varieties if wanted for display at the same time.

I have found that late planting forces a quick top growth, and that the root growth is not strong enough to bear the large flowers with good substance and form at show time.

Bear in mind that Dahlias planted early require disbudding and pruning to keep them from going too much to leaf during August.

PLANTING.—After the ground is spaded have holes dug at least 3 feet apart and 3 feet or 4 feet between rows; if you have plenty of room 6 feet apart is better.

First insert the stake to which the plant later is to be tied as it grows.

Fasten a label securely to the stake, bearing the name of the Dahlia.

Next put in the tuber, flat on its side, with "eye" or sprout up, and 6 inches below the surface of the soil; put a little sand around it, if you have some, for drainage; cover 3 inches with soil, and on top sprinkle one tablespoonful of bone-meal; level up the hole as the plant grows.

At planting time bone-meal is best, as it takes it some time to become incorporated with the soil, and by budding time the bone-meal will have rotted sufficiently to be available when the plant needs it most.

Animal fertiliser should not be used at planting time because it forces leaves and plant, and is injurious if it touches tuber or stem of plant.

STAKING.—Mason's lath makes good stakes for low-growing varieties, for the taller varieties one by one lumber called "mill rippings" is very good.

Stakes may be painted bronze-green to make them less conspicuous.

Have plenty of soft tying material. Inch-wide strips of cotton cloth are very good.

About the time the sprouts are well out of the ground is the time to look for cut worms; they work just below the surface of the soil, and often cut your finest-looking plant.

When cultivating at this time look for and destroy all cut worms.

Rings of wire screening or stiff paper placed in the ground around each plant make a good protection.

FERTILISING.—When the plants are shaping up and getting ready to bud, but before the buds actually appear, stir into the soil one tablespoonful of pulverised sheep manure to each plant and give a thorough soaking, or put it on just before rain, and stir the soil afterwards as soon as the ground can be worked.

A small amount of fertiliser at a time is best, used two or three times during the season will be very helpful in the development of the flowers.

Late in August your plants need a tonic. One teaspoonful of nitrate of soda to each plant stirred in the soil should be used.

From the last of August until show time use, first, bone-meal; second, nitrate of soda; third, soot or wood-ashes.

Never use soot on white, shell-pink, or creamy-yellow varieties.

CULTIVATING.—Frequent stirring of the soil is beneficial to keep down weeds and to create a dust mulch to conserve moisture.

After buds have formed avoid deep cultivating, as the new roots are forming at this time and may be injured.

During a long spell of dry weather water the plants in the late afternoon or evening, giving them a thorough soaking. A light surface watering forms a crust the next day and does more harm than good. Be sure to water thoroughly.

Myosotidium nobile

This is a perennial plant which attracts great attention, the foliage and flowers alike being very striking. The leaves are of a rich glossy green somewhat resembling those of the Mangold, and the plant forms a handsome clump, while the flowers in June are exquisite. I think there is no finer sight than a colony of this in bloom, for it becomes a mass of the truest blue. It is a very beautiful plant, and I cannot understand the reason Farrer disparaged it so. The common idea seems to be that it will not thrive inland, and can only be grown to perfection near the sea, but this is a mistake. It will grow inland just as well as it does by the sea. It grows and thrives in one place at least 28 miles from the sea. There is also an idea that it cannot endure lime, but this is also an error. It does not mind lime in the least if there is plenty of humus in the soil. Of course, in our southern climate it must be grown in complete shade at the foot of a wall or fence in a mixture of sand, leaf-mould, and peat, with just a little loam. It does no long life, but it can be raised qui readily from seed sown under g planted out when big enough i ground in shade. Slugs are its enemies, for they climb the stems an leaves, spoiling the beauty of the fol with a little care and attention thi can soon be checked. It hails f Chatham Islands, and is sometime as the Chatham Island Forget-me- given the proper soil and position, undisturbed, it soon becomes a no It is a plant that might be growr people would only try it, because hardier than generally supposed.

Sussex. C. R.

[The finest plants of this we have were grown by Mrs. Rogers, Pe Cornwall, in pure sea sand in the The late Mr. Jas. Douglas used t well in large pots.—ED.]

Coronilla glauca pygm

This possesses all the charm o favourite, C. glauca, in the numl showy blossoms. Instead of devel columnar habit one often sees in g forms a neat dense bush rarely 2 feet in height. It thrives in hot, and bears a multitude of brightly blossoms in endless succession. It cellent shrub for the rock garden, neat plant is required. Although hardy, it is advisable to provide s tection during severe weather.

H. S

Sowing seeds in dry w

I have a friend who lives in th and who has, fortunately, in her wall erected many years ago of rou of stone with spaces here and the wall, when I saw it in May, was a with Wallflowers and Aubrietias. same length of wall I noticed a r Antirrhinums, quite strong your almost in the bud stage. It is what a little soil suffices, as the st mostly limestone and sandstone, moisture for a long time. My fr contemplating sowing other va Aubrietias in the chinks, and no do succeed, as, grown in this way, pl do better than when planted part June is a suitable month for the wo is a great possibility of beauty in s that those who have brick walls c pect to compete with or copy.

WOODBA

Humea elegans

When well grown, this greenhous ranks amongst the foremost of pla for handsome foliage and elegan florescence—drooping, feathery pl latter may be called. It is invalua centres of large vases in summer, for the subtropical garden, either f out in beds or for plunging in the p turf, or near the margins of walk that its rich fragrance may the quently be enjoyed. It should be r seeds sown on a hotbed in May, an lings should be pricked off as soo can be handled and potted on befor get matted together. They should in the open air, where they should like Chrysanthemums, and be hou the beginning of October and affo nary greenhouse cultivation. By year they will be ready for their into large pots, and about the mide they may either be placed in posit open air or be planted out in be flower best when plunged in the b pots, but need more attention as to than they do when turned out.

DOOR PLANTS

modern Schizanthus and how they are grown

splendid specimens of Schizanthus at Chelsea and other shows this ng have led to numerous inquiries heir cultivation. In a cool, well-greenhouse the cultivation is simple, t is not everyone that succeeds. Our on is one of Dr. Badger's strain, by Messrs. Dobbie and Co. The hown were in relatively small pots e raised from seeds sown in Septem- and grown under cool conditions. the best-known types are Wiseton- d Retusus. They cover a delightful f colour, and the colour spots and s are fascinating. The Retusus were well represented at Chelsea by Sutton and Sons, and they deserve e attention than they have yet re-

ifferent garden varieties of Schizan- now universally grown for green- coration, and in order to have good g examples in early spring the seed e sown in the first half of September, will allow of the young plants be- well-established before winter. A of loam, leaf-mould, and sand forms uitable compost in which to sow the Vhether pots or pans are used, care taken not to sow the seed too thickly, e the young plants will become whereas the main object aimed at all stages of growth should be to m as stout and sturdy as possible. ufficiently advanced they should be f singly, using the same kind of com- before. Ordinary thumb-pots will n then. Directly the roots have ssession of the new soil the plants e given a good, light position in a nhouse—that is to say, a structure ept safe from frost, but at the same er allowed to get too warm, and enty of air is given. If shifted into ts the young plants may be allowed he winter therein. Then, about the ebruary, they may be shifted into 7-inch pots, in which they will Some of them will need stopping wice when growing, in order to en- l, bushy plants, but in others this is sary. In order to prevent them be- drawn the plants should, after re- ave plenty of room, and as the pots with roots an occasional stimulant given. H. C.

Camellias

s rather strange to read of the re- vour of the above after many years, uld hardly think it will hold its own tonhole flower against the Rose, , and Gardenia, because here we ity and scent combined, but where house devoted to the Camellia, and vigorous, a lot of flower is avail- season when other things are scarce, the upper branches that one has to quite long stems can be obtained suitable for tall vases. One of the growers I remember was Pomponia lower that varied in the most extra- manner, some nearly all pink, others hite, and many with a groundwork splashed and veined with pink, more avily. It also varied greatly in con- a semi to a very full double. A ful plate of the old variety appears Mrs. Loudon's books. Another old varied considerably, but not in so ed a manner, was Cup of Beauty, once very popular as a buttonhole flower. It was small, but a beautifully symmetrical flower, a clear white ground slightly veined with pink. These old sorts were called to mind because in common with others like alba plena, Chandleri, and Rubens they used to be found out of doors in shrubberies and have been recommended for that purpose. It is only, however, in a few very favoured spots, from a climatic standpoint, that Camellias are a success outside. They will grow away strongly, make fine bushes, and set plenty of buds, but the partially or wholly expanded blooms are nearly always badly nipped by cold storms and frost, and it is hardly advisable to plant the Camellia outside solely for its foliage when we have so many beautiful-foliaged shrubs. Whether planted out or in pots it is as well to do any pruning that is necessary as soon as the flowering season is over, and it is also a good time to give a thorough cleaning if there is any sign of scale or mealy-bug.

Hardwick. E. Burrell.

A well-grown Schizanthus—one of Dr. Badger's strain

Coleus thyrsoideus

Differing from the ordinary Coleus, which is grown merely for its brilliant foliage, C. thyrsoideus is grown for its value as a winter-flowering plant. The plant is woody, with rather glutinous and serrated foliage of a dark green colour, while the flowers, produced on terminal sprays, are of a cobalt-blue shade. C. thyrsoideus is very attractive in the stove during the dull days, and good useful pieces can be grown in 7-inch pots. Inclined to be rather leggy, plants require to be pinched a time or two in their early stages, otherwise no special attention is needed. Cuttings will readily root at this season if given the bottom heat of a propagating-case. Throughout a brisk heat is an advantage.

Kirk.

Auriculas in pots

The advantage of growing Auriculas in pots is that the flowers can be guarded against the changeable nature of our English springs. Planted in the open, their beauty is liable to be marred by heavy rains and frosts, which they are free from under glass. After blooming they need just enough water to keep them plump, and if the season is very hot they may be stood on the north side of a wall or fence, and in a rainy season such as we sometimes get it is advisable to lay the pots on their sides, otherwise the fibrous roots are apt to decay. In August they must be started into new growth, as this is the month in which the Auricula season commences, and the condition of the plants at blooming time depends in no small degree upon what is done at that particular season. The compost having been prepared, each plant has to be carefully overhauled, working away as much of the old soil as possible, potting firmly, but not hard. Stand them where they get abundant light and plenty of sun, and about the middle of September they should be under glass, so that heavy rains are kept off, but giving them full

exposure in fine weather. Shelter during the winter is all that is necessary, for, the Auricula being so hardy, ordinary frosts will do no harm. Should the weather, however, be exceptionally severe, it is as well to cover the glass with mats or litter. From November until the middle of February no water will be needed. About this time there will be indications of new growth, and then, if the soil is dry, a watering should be given. Although protection is thus given against inclement weather, there must not be the least approach to coddling. The Auricula loves full exposure to sun and air, so that the lights must be drawn off in mild weather. Confinement will weaken the growth of the foliage; the flowers will be deficient of substance, and will not fully display the refined beauty and delicacy of tint which distinguish them when the health conditions are normal. Light shade when the flowers are open will lengthen the blooming time. Sometimes a few days of hot weather will destroy the beauty of the flowers, and will naturally promote fertilisation, which causes the blooms to fade quickly. Frosts, which are apt to mar the beauty of the Auricula in the open ground, are, of course, guarded against, and this compensates the grower for the greater labour involved by pot culture.

Transplanting Asparagus

THE transplanting of Asparagus must not be roughly performed, or the chances are that the plants will fail to grow. It is certainly very annoying after having gone to the trouble of preparing the site for a permanent plantation of Asparagus to find that after the plants have started well into growth there are several blanks. In one sense failures are more likely to occur with plants procured from a distance, as unless they are well packed to prevent the roots becoming dry the chances are that several will fail to grow. Home-grown plants are decidedly the best on account of the convenience for transplanting. The best time for transplanting is directly the young shoots are seen coming through the ground, although they may be left until they are a few inches in length. The small rootlets will then be in full activity, and will take readily to their fresh quarters. With dormant roots the case is different. If these are planted roughly and the roots damaged, the chances are that they will decay, with the loss, perhaps, of the crown itself. Another advantage with home-grown roots when the planting is delayed until the growth is somewhat advanced is, that these having been previously well prepared may be lifted carefully with a fork thrust right underneath them, keeping as much soil to the roots as possible. The site must previously have been well prepared, as if it is in the least lumpy do not neglect to place some fine fertile soil in direct contact with the roots, so that they will be enabled to take to their new quarters readily. In planting endeavour to arrange the roots in the same position as that in which they were previously growing. Asparagus roots strike out in a horizontal direction; therefore plant them in this manner, and do not cramp them in a small hole. I have seen Asparagus planted by having a trench cut out with a spade, the roots being pressed in. Such a ruthless proceeding cannot be too strongly condemned. When all is ready, take out rather wide and shallow holes with a flat bottom, so that the roots may be laid out straight, arranging them so that the crown of the root is about an inch below the surface. Plant firmly, pressing the soil about the roots and around the crown with the hand. If the weather should be likely to be dry, mulch after planting with a thin layer of very rotten and short manure, or, what is better if it can be procured, some leaf-soil and burned refuse in equal parts. This will keep the soil cool, and so enable the plants to start freely into growth. The young growing shoots must be supported to prevent their being broken over at the neck by wind. This may appear a small matter, but it makes a deal of difference in the progress of the growth during the season.

In far too many instances the plants are set too closely together. When too close planting is indulged in, the produce is neither so fine nor so plentiful as when a reasonable distance is allowed between the plants. The evil, again, is very apparent during the summer, when the beds are crowded with growth. With too close planting the growth is so crowded that direct sunshine cannot penetrate to the surface of the bed. To procure strong crowns capable of producing good produce it is very essential that the plants be so set out in the first instance that abundance of light may be afforded to the base of the stems during the summer. Of course, cultivation makes a deal of difference, for if people will persist in cutting too late in the season and also not applying nourishment in due season, they must not expect huge crowns capable of affording good produce. My plantation is on the level and arranged in a series of two rows, the plants being 3 feet between each and 30 inches in the rows, and between each series of rows 4 feet, this space being devoted to attending to the beds, cutting, etc. A. G.

Sowing Endive

The middle of June is, in most situations, as early as this crop can be profitably sown; and if the sowings are repeated fortnightly till the end of August there will always be fresh relays of young plants to put out, and this is the best way of ensuring a good supply of well-grown Endive. There must, of course, in addition, be a well-manured, deeply-stirred soil, for Endive, like Lettuces, to be crisp and good, must be grown quickly, and on poor shallow land this would be impossible. A liberal supply of moisture in dry weather is also essential, accompanied by frequent stirring of the surface. Liquid-manure, when available, will be very beneficial. This will be best given immediately after a dose of plain water, as by so doing its presence will be longer felt than by pouring it on a dry, parched soil. Always sow the seeds thinly, and when they come up, single them out, so that no two plants touch each other. No matter how good the seeds may have been, there will always be some weakly plants, and these latter should, on thinning, be taken out. The first sowing should be made in drills, as if a few plants are left undisturbed from 12 inches to 15 inches apart, they will be less likely to halt prematurely. Later sowings, if the land is scarce, may be made broadcast, but the plants must be transplanted immediately they are large enough, and not be allowed to remain to draw each other up weak and spindling. On the whole, however, sowing in shallow drills will be found the most satisfactory plan, as it facilitates earth-stirring, which, in many ways, is so beneficial to the young plants. There is some advantage in putting a few plants out in different aspects. The main crops should occupy some good open situation, but a few plants of the early sowings, to meet exceptional seasons, might be planted on the north side of a fence or wall. Endive also generally does well on the ridges between the rows of late Celery. The greater depth of soil gives increased development, and in season the elevated site secures freedo damp. All the later plantings should on raised beds or borders if possible, a wise, especially if the soil be of a r nature, the crop will decay before it used. A good breadth from the last August sowing should be put out on border for late autumn and winter us lifted and planted in frames, or prot some other way when frost makes its ance. Endive that is blanched wher should be allowed plenty of space; 1 between the rows and 12 inches from plant is not too much. After the pl tied up, the surface soil from the space between the rows may be dr round the base of the plants with a then, if a flower-pot be turned over th each plant, the blanching will be quic without any deterioration of flavour, is nothing so cleanly as dry eart plants, of course, must be dry wl tying and earthing-up are done, or t rapidly decay. Blanching in winter quickly done by taking the plants w grown or nearly so, a few at a time Mushroom-house, or any other darl structure, and, as they make abun fibrous roots that hold the soil togeth may be easily lifted with balls an anywhere. In this respect they ar more manageable than Lettuces.

Parsley for winter

In sowing Parsley in June for wi well to bear in mind that it is an a to do so in a sheltered position—one where it is possible to cover the plant frame-light or a temporary structur severe weather set in. Last season Parsley was ruined owing to the w snow, which broke the leaves beside the plants. If possible work into the s old manure with a little leaf-soil near the surface. Parsley seems isolation, and though one cannot gi limited room for winter it is, neverth advantage to try and arrange matte start so that it will not be necessa much thinning out. Tow

Vegetable Marrows without manure

In planting out Vegetable Marrow no necessity to provide much manu imagine that a raised bed or heap is Quite good crops of Marrows can with a sparing use of manure; in fa been proved that it is not really esser good results can be had if old vego fuse and leaves are dug into the bed. liquid-manure can be given the pla the first fruit has set. Economy ir of stable manure during the last 10 so has proved that many things wh looked upon as doing well only whe to manure liberally do quite as well and the Vegetable Marrow is one. Tow

Cabbage Maggot

As soon as Cauliflower, Brussels Cabbage, etc., are planted out into manent quarters care should be ta the Cabbage-root maggot is kept at is much easier to prevent attack tha it after it has started. Tarred felt d fitted properly are effective, so als following mixture:—1 oz. of creosote of dry garden soil. Mix the creos the soil and leave for 24 hours, th the mixture to the collars of the plan rate of 1 oz. per plant. Repeat this tion about three times at interval weeks.

eld and North of England Tulip Society

Ninetieth Annual Show

large club room at the Brunswick it Wakefield there was staged, re- a magnificent selection of Tulips. ion was the ninetieth annual show kefield and North of England Tulip society whose records go as far 36, when King William IV. reigned land. The Society is said to be r than this. It is interesting to the Society possesses a quantity of e stands, hand made, for holding ms, and these stands, it is sug- e been in existence for a century. ct of the Society is the culture of glish florist's Tulip. A noteworthy the show was that, for the sixth ccession Mr. Needham won the lenge cup. There were prizes for r breeder, flamed and feathered , and also in the local classes.

rds in open classes included:—

nd of nine Tulips consisting of rres, three byblomen, and three h trio having one breeder, one and one flamed.—1st and silver cup, C. W. Needham (Hale, with Sir Joseph Paxton, Master- ie McGregor (premier), Athos, rd, Geo. Edward Schofield, and l, C. J. Fox (Sparkhill, Birming- n Peter's Annable, Sam Barlow, Paxton, Ida Sutton, Lucy Luard King of the Universe, Miss outts, Lizzie, and Clio. 3rd, . Bentley (Stakehill, Castleton, nester), with Sulphur Sam Barlow, d, Lilian, Geo. Edward Schofield, regor, and Clio. 4th, S. F. Rich- ett), with Red Seedling, Master- n Barlow, Bridesmaid, Mrs. Fox, George Edward Schofield Rose Hill, Mrs. Collier, and n, Frank Fox (Normanton), with Masterpiece, Sir Joseph Paxton, Talisman, and Annie McGregor.

ers, dissimilar.—1st, C. W. Need- lfinder, Alfred Lloyd, Electra, abel, and Clarissa. 2nd, G. W. ulphur, Alfred Lloyd, Columbine, ie McGregor, and Mary Swann. Fox, Sulphur, Sir Joseph Paxton, , Richmond's No. 1, rose Mrs. d Mary Swann. 4th, S. F. Rich- 10 seedling and Alfred Lloyd, , Ethel, Rose Hill, and Scarlet. Fox, Sir Joseph Paxton, Robin, Mrs. Whitaker, and Mary

amed, any class.—1st, C. J. Fox, w and Duchess of Sutherland. Needham, Sir Joseph Paxton and egor. 3rd, S. F. Richmond, Sam rose Mabel. 4th, F. Fox, Sam Sir Joseph Paxton.

eathered, any class.—1st, S. F. Trip to Stockport and Mrs. x. 2nd, C. J. Fox, Sam Barlow Douglas Fox. 3rd, C. W. Need- Barlow and Adonis. 4th, F. Fox, and Sir Joseph Paxton. 5th, tley, Trip to Stockport and rose egor.

wing is an extract from the eport for 1925:—"We have nnounce a very successful year and educationally, and all our ve the keenest interest in the . . . . We make a special ap- ho grow Tulips to try the English for purity of colour and beauti- real pleasure to see when full open (no black, dirty centres). All are pure white, or golden-yellow, and are as easy to grow as any other Tulip, and probably Wakefield and district have produced more varieties of this Tulip from seed than have been raised anywhere else. Help us to keep the names of Sharpley, Mellor, Moorhouse, Schofield, Hepworth, Gill, Hardwick, and many other Tulip raisers of old to the fore, and continue to keep Wakefield and district ever green to our noble flower—the English florist Tulip. The year 1925 will not soon be forgotten by Tulip growers. All say it is the worst on record—cold, wet, and sunless, and through it all we managed to put some fine flowers and in fair quantity at the show. Old growers of sterling type keep dropping out, and it is very regrettable that their places cannot be filled to the same advantage. Last year we had to report the loss of Ald. J. W. Bentley, J.P., C.A., Castleton. His loss cannot be made good to-day. We have now to report, with deepest regret, the loss of Mr. Harry Gill, a real Tulip enthusiast of 60 years' standing, which ends the career of three long generations as Tulip growers and raisers of seedlings. His collection of Tulips was, perhaps, the oldest and best in the country. Mr. Gill was vice-president and chairman of our committee a great number of years. Also the Rev. Joseph Jacob, Vicar of Whitchurch, who has for many years taken a great interest in our society, and has visited our shows for many years, and taken very interesting photographs of flowers, etc., in the show, and has perhaps grown every known species of Tulip. His loss is irreparable. We are able to add four new growers this year, and we wish them every success." The Hon. Secretary of this interesting Society is Mr. S. F. Richmond, Nurseryman, Ossett, Yorks.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

GREENHOUSE

Asparagus plumosus

(Harry Enderby).—This is not a Fern, but a true Asparagus species. The beautiful green of this Asparagus, its frond-like foliage, its lasting properties, and the ease with which it may be grown are some of the reasons why it has become so popular. Give the plants a greenhouse where the conditions are moist, warm, and partly shaded, and you need never be short of plants for decoration or for cutting. The several forms of greenhouse Asparagus are fast superseding Ferns, owing to their suitability to stand the atmosphere of rooms. They are easily raised from seeds or cuttings, selecting those having a couple of joints and from fronds that have been well matured. These cuttings should be placed in pots of soil consisting of loam, peat, and sand. They should be stood in a propagating pit or covered with a bell-glass. When rooted they should be potted off and kept in a house where moist conditions obtain. They will stand any temperature, from 60 degs. to 80 degs. while growing. Old plants may be cut down in the spring and repotted. The yellowing of the fronds is due to exhausted soil. The best way to grow it is to plant it out, training the shoots to pieces of string, which, when wanted, can be cut with the growths attached.

Cyclamens failing

(E. J. Fleming).—There is no apparent reason for your Cyclamens not flowering, but the treatment in some way must be at fault. The plants should still be kept in a greenhouse or frame, and watered carefully. Later on a lessened supply of water will be needed, and during June and July they will only require enough water to prevent their being parched up. Then, kept somewhat moister, they will soon start into growth, when they may be shaken clear of the old soil and repotted in a mixture of loam, leaf-mould, and sand. After this, place in a frame and shade from the brightest sunshine, but be sure and give plenty of air, as the lights are principally needed to ward off heavy rains. Then, about the end of August, take them into the greenhouse and stand near the glass, where there is a free circulation of air. If overcrowded or kept too close, Cyclamen blooms are apt to damp off just as they are pushed clear of the tuber, and, this being easily overlooked, it may have been the cause of your failure.

Camellias unhealthy

(White Camellia).—If you examine your plant closely you will, we think, find that on the back of the leaves scale and mealy-bug, two enemies of the Camellia, are present. The only thing you can do is to carefully wash the leaves with some insecticide, and keep a watchful eye that the pests do not reappear and spread over all the plants. There are several causes for the dropping of the buds, such as over-dryness at the roots, a sour soil, and unripened wood, which last is, in our opinion, frequently the main cause. Allowing too many buds on the plants also weakens the plant. It is unable to perfect all that are set, the consequence being that a great many drop.

Genistas failing

(Kate).—There must be something decidedly wrong in the treatment given to your Genistas, as they drop their leaves and flower-buds directly they come into your possession. The cause of this is impossible to say with certainty, but very probably they are allowed to get too dry, for the neat little bushes which are grown in quantity by some nurserymen are, as a rule, only in pots 5 inches in diameter; hence, they are crammed full of roots, and quickly suffer from want of water. The Genista, too, is essentially a greenhouse plant, and needs a fair circulation of air, as if kept too close and moist overhead the foliage will soon be destroyed by mildew. Again, a very draughty spot is detrimental to the health of the plant. To propagate it successfully by means of cuttings needs a con-

siderable amount of care and attention. The best way to set about it is this: After flowering, cut off the old blossoms and place your plant or plants in the warmest part of the greenhouse in order to induce it to grow. Then, when the young shoots are from 1½ inches to 2 inches long, they should be cut off cleanly with a sharp knife, removing also the bottom leaves in the same careful manner. Then dibble into well-drained pots filled with very sandy soil pressed down firmly, and cover with a bell-glass till rooted. A shaded position in the warmest part of the greenhouse is a very suitable spot for the cuttings.

FLOWER GARDEN

The Belladonna Lily (Amaryllis Belladonna)

(H. E., Haslemere).—There is no plant better suited to the hottest position any garden can offer than the above, provided the one thing so essential to success, viz., a well-prepared bed of good loamy soil, not less than 2½ feet, is assured. Good turfy loam, some well-decayed manure, and a little old mortar-rubbish or charcoal, with sharp sand or grit, should constitute the mixture naturally suitable. The bulbs, being very large, should be planted fully 6 inches deep. The base of a south wall or the narrow border in front of a greenhouse are among the best places for the successful cultivation of this fine bulbous plant. The bulbs begin to push up their new leaves during the spring, and on the freedom with which they are sent up the bloom in the autumn depends. We should advise you to plant them at once. Kindly say in what condition the bulbs are.

Lilies for the Riviera

(Puck).—You might try Lilium auratum, L. regale, L. tigrinum, L. Martagon in variety, and L. elegans in variety. If you plant these in various positions you may succeed. In order to get the Michaelmas Daisies to flower late you might try cutting down. The growths made after the cutting down will bloom late.

Marechal Niel Roses opening badly

(N. B.).—The complaints of this Rose doing badly this year are very numerous. It has been doubtless owing to the cold, sunless weather. No amount of artificial heat or careful ventilation can overcome the effects of such weather as we have had. With milder weather an improvement may be expected. The conditions stated in this question—Rose planted out, span-roofed greenhouse, and moderate temperature—ought to give good results. See that the leaves are kept clean and the border sufficiently watered.

Tulips failing

I have enclosed bulbs of Darwin Tulip from a mixed bed planted in the autumn of 1924. Last year the bed was a blaze of colour. This spring, however, they grew well until the buds were opening, then the whole bed (about 1,000 bulbs) became spotted on the foliage with brown spots, a general discolouring of the foliage followed, and the blooms opened very ragged. Can you advise me as to remedy, if any? W. J. H.

[An examination of the bulbs you sent—with a magnifying glass—revealed the presence of several small brown insects eating into the bulbs at the base of the flower-stalk, and this is, probably, the cause of your trouble. Lift all the bulbs from the bed and, after removing the flower-stems, plunge the bulbs into a tub or pail containing a fairly strong solution of Quassia Extract or Katakilla, afterwards laying them out on a sunny piece of ground to dry and ripen. In about 21 days the bulbs should be collected and stripped to a solid clean base and again plunged in a pail filled with Bordeaux Mixture; this will remove any suspicion of fungus from which your bulbs may not be absolutely free. After the bulbs have again been dried store in a cool, dry room until planting time arrives, when they should be given fresh ground. Give the old bed a good dressing of Vaporite and allow it to lie fallow for a while. Failing this, plant it for the time being with something of a totally different character.]

FRUIT

Figs dropping

(G. S. E., Lyme Regis).—In the south of England the first crop is nearly always an excellent one if the right kind be planted, the Brown Turkey being the best and most prolific. The second crop never ripens, and should be rubbed off, as it only helps to exhaust the trees and prevent the formation of the embryo fruits which remain small enough to pass the winter safely. It may be that after having been planted for five years the soil is exhausted and dry. We should advise you to give the trees a thorough soaking of water, following this with a dose of weak liquid-manure, and mulching heavily with rotten manure.

Caterpillars on Gooseberries

Can you tell me how to get rid of the pest of caterpillars like the enclosed? They first appeared on a Gooseberry-tree trained on the wall, and gradually spread to the Currants. Last autumn I destroyed the Gooseberry-tree because I blamed that, but this year they are worse than ever on the Currant-trees. I have killed over a thousand. I have tried syringing the trees with paraffin, but it only washes them down. I have tried powdering the trees with lime and soot, but all to no good. If they turn into moths is there any way of destroying them? The birds do not seem to touch them, and hens will not eat them. WM. M. YEOMAN.

[The caterpillars you send are those of the Magpie moth (Abraxas grossulariata). The caterpillars feed on Gooseberries, Red and White Currants, and occasionally attack Plums and Black Currants. It is a difficult pest to get rid of once it becomes established in a garden. The details of the life-history of this pest are as follows:—The moth appears in July and eggs are laid in groups, generally on the undersides of the leaves of the host plant. When these eggs hatch the tiny caterpillars feed as long as the leaves of the plant remain green. About the time of leaf fall the caterpillars leave the host plant and creep for winter shelter into dead leaves at the base of the tree, or to the nearest place in which dead leaves are collected. When the leaves of the food plant begin to shoot in the spring the caterpillars leave their winter quarters and commence to feed again. They become fully fed during June and pupate on the host plant, or in a convenient place near by. In view of the above life-history there are three methods of control, any one of which should give a fair measure of control, or, if they are all tried in their turn, complete control should be the result. (1) The second week in August all the bushes of Gooseberry and Red and White Currants should be sprayed with lead arsenate. The material should be obtained and used according to the maker's directions. When using the spray you should remember that the object of the spray is to cover the whole of the foliage with the poison so that when the tiny caterpillars eat they must eat some of the poison. (2) Collect and burn all the dead leaves in and around the affected plants, and during the winter pay special attention to odd sheltered corners where leaves collect. It is often possible to find five to a dozen caterpillars in one leaf during the wi some time during the winter, and not later than the end of January, attacked bushes with a tar oil w there are any crevices in the wall r in your letter spray those too. (3) I that you still have any caterpillars spring the bushes should be spraye good nicotine wash. For a nicotin kill caterpillars it must be used fa in the season, and the caterpillars washed in the spray. All those tha the ground should be well drenched not use nicotine within six weeks o the fruit. Lead arsenate should b even longer.]

Diseased Quince

(Mrs. Haughton).—Your Quince with Quince leaf scald, a fungoi which attacks Pear, Apple, Cherr and other fruit-trees belonging to family. It is not a common disease are produced from infected wood spring. These spores attack t leaves, which soon turn brown and When old leaves are affected they appearance of those you sent. W advise you to spray your tree with mixture or lime sulphur at fortnig vals until you have got the dise control. Any leaves that fall from should be raked up and burned. Y also spray any of the above fruit- happen to be growing near the prevent the disease spreading. A time try and remove all the disea from the tree. This wood should and none of it should be allowed to under the tree. Next spring, just buds begin to burst, you should ag with a fungicide.

Strawberry failing

In the spring the Strawberry pla made good growth. The flowers right and the fruit set, but now plot has gone like the one enclose three-year-old plant and the maid have gone the same way. Could y what the disease is and the remedy

[We regret being unable to te cause of the trouble, as the disea has partially destroyed the foliag parently infested the fruit also, is known to us. We advise you to se similar to that you have sent us to of Agriculture and Fisheries, 4, Place, London, S.W., and ask if y told the origin and nature of the d its prevention.]

VEGETABLES

Sleepy disease in Tomatoes

I have enclosed root of Tomato your inspection. The plants from one has been taken were planted pots in February. They came until a fortnight ago, when on b the foliage began to wilt. Each ev recovered, and have behaved the sa present warm spell. On examinin I have found the lower portion to away, but new roots are coming base of stem. Can you advise me of trouble and if there is a remed are now fruiting. I have gathered

[The cause of the wilting of the due to a fungoid disease (Fusar persici), which attacks the roots about a flagging condition of t When this stage is reached the generally styled the "Sleeping Tomatoes." The disease afterwar to the stems. Unfortunately, th known remedy. As it is a soil

ıy to prevent it from spreading is to ɔth plants and the soil in which they een grown, and give the house a gh cleansing afterwards.]

MISCELLANEOUS

for lawns

l you tell me the value of kainit for Does it kill the grass? It certainly .e weeds and makes the grass very Does it only have to be put on the or how much should be used to the vard? T. MANN.

ɔu intend to apply the kainit to your ı eradicate weeds we think you are to disappointment, because if you ·avy enough dressing to kill the weeds l at least damage the roots of your and you may quite easily kill them er. Kainit, besides containing 12 t. to 14 per cent. potash, contains a ıantity of common salt. Agricultural s, of course, long been used as a for certain crops (light dressings only ısed) and as a weed-killer (heavy s being applied). Kainit, of course, · applied to the weeds only in a lawn, ould be a long job if the lawn was a The manure generally used for this is sulphate of ammonia, and, when applied at the rate of 1 oz. per square d repeated if necessary. The idea is phate of ammonia burns the foliage s. The foliage of most lawn weeds on the surface, and when the lawn is with sulphate of ammonia it falls on foliage and burns it, but the foliage grasses, being more or less upright, the burning. At the same time the supplied by the sulphate of am- ncourages the roots of the grasses to ıd produces foliage which stands a ınce of smothering out the weakened We have not tried kainit for this It may do the trick as well as sul- ammonia. We have, however, been ·cessful with the latter. If kainit ı the job as well it would, of course, per. Kainit is often used as a for lawns, but when used for this it is usual to apply it in autumn. may be kept in fair condition by ıem 6 lbs. basic slag and 4 lbs. kainit ıre rod ($30\frac{1}{4}$ square yards), followed s. of sulphate of ammonia for the ·a in the spring. If the sulphate of ı be omitted Clover is encouraged at ınse of the grass.]

ly trouble

forwarding you some Pelargonium ıd would ask your advice. When I re last September the place was full fly, and I am not free yet, although I nigated with XL All several times inue to do so once a fortnight. Still ıew leaves which form go like the the old and young plants alike.

BABELL.

·an find nothing wrong with the ium leaves you have sent in, except by white-fly and fumigation. The ·appearance is the result of white-fly ıd the brown markings on the edges ·aves appear to us as though they e been caused by the repeated fumi- We should advise you to give ·yanide a trial to see if it gives you a ɔntrol over the white-fly. Calcium is easy to use, and if ordinary care there should be no danger to the Measure up the cubic capacity of ·e correctly and use $\frac{1}{4}$ oz. calcium for each 1,000 cubic feet. If you ·· very tender plants in your house using $\frac{1}{8}$ oz. per 1,000 cubic feet, and increase the quantity if you find the foliage will stand it. The house to be fumigated with calcium cyanide should be closed just prior to putting down the material and the temperature 55 degs. to 60 degs. F. You should arrange for the temperature to rise slightly during the night, but it should not rise above 65 degs. F. We recommend XL All white-fly vapour, it is simple in application and certainly effective.]

Dandelions and the destruction of injurious weeds

A neighbour's garden has been neglected for two years and is now a complete mass of Dandelions in full bloom, and, if neglected further, will pollute not only my garden, but several in the immediate vicinity, and as I understand there is an Obnoxious Weed Act I wish to ask to whom I can apply to put the said Act into operation. The party to whom the garden belongs will do nothing to clean it, nor allow anyone to do so. Your reply in an early issue will much oblige.

L'ALLEGRO.

This letter has been referred to the Secretary of the Board of Agriculture for Scotland, who replies :—

" I am directed by the Board of Agriculture for Scotland to state that under the Corn Production Acts (Repeal) Act, 1921, they are empowered to require an occupier of land to destroy the following injurious weeds :— Thistles, Docks, and Ragwort. They have no authority, however, to require the destruction of Dandelions."

SHORT REPLIES

Rev. B.—The little plant with the white flower is Alyssum maritimum (Sweet Alyssum), sometimes known as Kœniga. It is easily grown from seeds. The yellow Viola has all the appearance of having been eaten by slugs. As you know, slugs are particularly fond of Viola flowers, and if a search is made at night time we think the culprit will be found. It may be, however, that the yellow Violas are attacked by sparrows, which are said to select yellow flowers for destruction in preference to those of any other colour.

A. P. C.—(1) Get John's " Flowers of the Field " through any bookseller. (2) The only way is to visit some district where cider is made.

NAMES OF PLANTS

A. P. Clow.—Gasteria verrucosa.

H. M. A. H. R.—The Honeysuckle is the variety known as Early Cream, of the perfoliate Woodbine (Lonicera caprifolium). The Marguerite is Anthemis cupaniana, a valuable early and continuous-flowering species, rarely exceeding a foot high.

W. H. Lund.—1, Next week; 2, the Soft Fern (Polystichum angulare).

Journeyman.—1, Luculia Pinceana; 2, too shrivelled to recognise; 3, Phyllanthus nervosus; 4, Phyllanthus atropurpureus.

D. McD.—Tolmeia Menziesii, common in London gardens, especially in the Marylebone district. A hardy perennial producing a plantlet at the base of each leaf blade. Native not of Russia, but of N.W. America.

G. Heath.—1, Salvia Grahami; 2, Libertia formosa; 3, Saxifraga granulata fl.-pl.

N. B.—1, Asphodelus ramosus; 2, Geranium striatum; 3, one of the florist pinks; 4, please send better specimen; 5, Achillea millifolium.

Training Sweet Peas

Who was it first pruned Sweet Peas? By pruning I mean taking out the laterals and taking up four or five stems off a plant to a height of, say, about 12 feet. I would be much obliged for this information if you can kindly supply it. JAMES F. MCFARLANE.

Opening of Bouverie House

Benn Brothers' Staff's Visit to Oxford

TO celebrate the opening of Bouverie House, the new headquarters of Benn Brothers, Ltd., and its associated companies, the staff, to the number of about 160, by invitation of the Directors, paid a visit to Oxford on Saturday, June 5th, travelling by chars-a-banc. Among those present were Sir Ernest and Lady Benn and Mr. John Benn.

In proposing the toast of the firm after luncheon, Mr. F. E. Hamer said that Bouverie House was not only the outcome of past success, but was literally a concrete proof of present resources, and, above all, an expression of confidence in the future. Capacious as it now seemed, it was their hope that some day, like all the previous premises of the firm, it would prove too small for their expanding activities within it. It was a striking addition to the architecture of Fleet Street, and inside its quiet dignity and comfort were as admirable as its fine exterior. It was sometimes a problem with expanding firms how to assimilate the new interests initiated from within or acquired from outside so as to preserve a continuous identity, but to-day in all the associated branches of the Company there was a true collective spirit of unity and co-operation for the common welfare, and that would be further fostered now all the firm's activities would be under one roof. They had recently welcomed into the business the first representative of the third generation of Benn Brothers, and there were others to follow. They recognised in their Chairman the real centre of the business, and their hope was that not only would he long be spared as " chief," but that the large scale on which, as Bouverie House indicated, he had planned for the future would be completely justified.

In responding to the toast Sir Ernest Benn said there were only two things he wanted to say about Bouverie House. They were sometimes inclined to forget in connection with business matters that they spent the bulk of their business lives in business premises. They were all looking forward to spending the greater part of the time that was left to them in Bouverie House. That had been the thought uppermost in their minds in planning the building, and they were trying to make life inside Bouverie House as convenient and happy and agreeable as it was possible to be. There was something else about it that pleased him very much. He was bold enough to hope that he might go down in history as the man who put the trade paper in its proper place. The world was built upon the Empire and the Empire upon British trade. The trade Press for too long had existed in back streets and side ways.

Now they had Bouverie House in the very middle of Fleet Street and the world of the Press, standing on the top of a hill, looking down upon fancy periodicals which were, of course, of minor importance when compared with the organs they published every week.

This was not by any means a family business, it was not a business in which could be provided fat jobs for the persons one fancied; it needed the manufacture and distribution of brains, and they did not come from any one family. While they had done great things in the past, that position could only be maintained and greater things could only be done in the future if, from the bottom upwards, they produced better and better brains. And so, while the business bore the name of the family to which he belonged, it was really an organisation to oil the machinery of the country's trade and to render service to the country's traders.

LATE REPLIES

Plants required

I see a correspondent, "T. H.," in your April 3rd number, asks where he can get Paris quadrifolia. I believe that Messrs. Bowell and Skarratt, of Cheltenham, used to offer it quite recently, and no doubt can still supply it. Perhaps it has dropped out of their list for lack of demand, as it is not a plant many people would need. Could you, please, tell me where I could get the following:—Narcissus pallidus præcox (often mentioned but seldom offered), Narcissus muticus, Iris reticulata Cantab, and Campanula rotundifolia Soldanellæflora? I have looked in many lists for these during the past three or four years, but have failed to find them offered anywhere. S. P. ROWLANDS.

58, *St. Mary's Road, Doncaster.*

Lilium candidum diseased

(C. C.).—Your Lily bulbs have, unfortunately, fallen a prey to the disease which has proved so fatal for many years. When once a plant has been attacked there is but slight chance of saving it, though by cutting off the diseased pieces and spraying with Bordeaux Mixture this is said to have been done. Lifting the bulbs and putting them into a bag with flowers of sulphur, and shaking them up so as to work the sulphur into the scales of the bulbs, and then planting them while smothered with the sulphur have been recommended, but we doubt if any real remedy has yet been found.

Insect

(J. C.).—The insect you forwarded is the larva or grub of one of the Rove bettles, probably that of the common black species, generally known as The Devil's Coach Horse (Ocypus oleus). These grubs are quite harmless to plants, and feed on small insects, grubs, etc.

Lawn grasses

(W. J. T.).—The sample grass sent is one of the coarser Festucas, and it will be well to have so much of that type pulled out at once as you well can. Strong grasses of that nature root deeper than do ordinary lawn grasses, and in dry weather dominate the rest, to their injury. After extracting these coarse forms it will be best if you can give the lawn a top-dressing of finely-sifted soil from the garden, road scrapings, town street sweepings, or other fine material that will wash in and assist the weaker grasses to extend or run. Give also a heavy dressing of soot to wash in.

Pteris tremula

(W. R. W.).—The name of the Fern is Pteris tremula, which will succeed perfectly in a greenhouse provided it is shaded from the sun and kept as far as possible from direct draughts. Like your Palm, it has in all probability been grown in a hot, moist structure, and consequently suffered greatly when removed to an exposed and cooler spot. Many Ferns as well as Palms will hold their own under decidedly adverse conditions, but then the change must be very gradual, otherwise they quickly suffer.

Painting hot water pipes

(Creosoted pipes).—There is no doubt that the creosote is the cause of the trouble. We should advise you to paint the pipes with a mixture of lamp-black and turpentine, this being quite harmless to plants. We fancy the turpentine in the mixture will remove the creosote. If turpentine chiefly is used and only a little oil the pipes will not smell so strongly or be so long in drying. Well clean off any rust that may be on the pipes before painting them.

Summer Pruning

Great Successes obtainable by the LORETTE Method

This method, known to all fruit growers, is now obtainable in an English translation by the late W. R. Dykes.

Adapted to the English climate, set forth simply and clearly, with many excellent illustrations, this wonderful system is now within the reach of all

THE LORETTE SYSTEM OF PRUNING

Demy 8vo. Cloth. 7s. 6d. net.

Published by

MARTIN HOPKINSON & CO., LTD.,
14, Henrietta Street, London, W.C. 2.

LITTLEHAMPTON AND DISTRICT HORTICULTURAL SOCIETY

A FLOWER, FRUIT, AND VEGETABLE SHOW

Will be held on ***JUNE 30th, 1926***

At the Lecture Hall, Littlehampton

Full particulars can be obtained from—*Hon. Sec.*, E. Pitts Fenton, Gable Cottage, Irvine Road, Littlehampton.

LEEDS FLOWER SHOW

ROUNDHAY

July 13th and 14th, 1926

(LEEDS TERCENTENARY WEEK).

THE ROUNDHAY (LEEDS) HORTICULTURAL SOCIETY'S SHOW

in conjunction with

THE NATIONAL ROSE SOCIETY'S JUBILEE PROVINCIAL GREAT EXHIBITION OF ROSES in ROUNDHAY PARK, LEEDS

For Schedules apply: The Hon. Secretary, 67, Jackson Avenue, Roundhay, Leeds.

GALVANIZED WIRE NETTING, per 50 yd. Roll

Mesh.	12 in.	18 in.	24 in.	30 in.	36 in.
½ in. x 22G ..	11/9	17/-	22/1	26/11	32/4
¾ in. x 22G ..	6/11	9/10	12/6	15/3	17/11
1 in. x 20G ..	6/5	9/2	11/8	14/2	16/8
1½ in. x 19G ..	6/-	8/8	11/-	13/3	15/4
1½ in. x 19G ..	4/7	6/6	8/3	10/-	11/6
2 in. x 19G ..	3/11	5/7	7/1	8/6	9/9
3 in. x 19G ..	2/11	4/1	5/1	6/2	7/-

	42 in.	48 in.	60 in.	72 in.
½ in. x 22G	37/9	43/2	54/-	64/8
¾ in. x 22G	20/11	23/10	30/-	36/-
1 in. x 20G	19/6	22/2	27/9	33/4
1½ in. x 19G	17/11	20/6	25/6	30/7
1½ in. x 19G	13/5	15/4	19/2	23/-
2 in. x 19G	11/5	13/-	16/3	19/6
3 in. x 19G	8/3	9/5	11/9	14/-

Carriage paid on Lots of £6 nett value and upwards.

HORTICULTURAL GLASS, 4th quality and 21 oz.

	In boxes, 100 sq. ft.	200 sq. ft.
9 x 7 in...	15/-	25/-
10, 12 x 8 in. wide	16/6	27/6
11, 12, 13, 14 x 9 in. wide	17/6	30/-
12, 13, 14 x 10 in. wide	18/6	32/6
16 x 10 in., 13, 16 x 11 in. wide ..	22/-	38/6
18, 20 x 11 in., 12, 14, 15, 16, 18, 20, 22, 24 x 12 in. wide	23/6	42/-
16, 17, 18, 20 x 13 in. wide.. ..	24/-	43/-
16, 18, 20, 22, 24 x 14 in. wide ..	24/6	44/-
20, 22, 24 x 15 in., 18, 20, 22, 24 x 16 in. wide	25/-	45/-
20, 22, 24 x 18 in. wide	26/-	46/-

One size only packed in a case.

Best Soft Putty, 1 cwt., 18/6; ½ cwt., 10/-; ¼ cwt., 6/-; 14 lbs., 3/6. Diamonds, 9/6 and 12/6 each. Glass Cutters, 1/6 and 2/6 each. Best Mixed Paints, in 7-lb. lever tins, 8/6 per stone.

List of Garden Tools, etc., on application.

All .o.r. Hull. Net Cash with Order. All sent promptly.

F. & T. ROSS, LTD., Ironmongers, etc.,
Estd. 1843. **MYTON ST., HULL**

WILLMOTT Rival Plant Stake

(Patented No. 183779.)

As used in Royal Botanic Gardens. For all plants.

WILL NOT ROT, WEAR OUT, OR BREAK.

Samples of 8 sizes, United Kingdom 2/-, Overseas 4/-

H. J. GREENWOOD, F.R.H.S., *Proprietor*
Bracknell, BERKS.

THE HORSECOMBE QUARRIES & S WORKS, Combe Down, Bath, to GARDEN ORNAMEN

Old World Sundials, Bird Baths, Seats, Dove Garden Houses, Crazy Paving, Walls in Solid Stone. *Write for Photos*

They are the BEST AND CHEA

ARTISTIC FERN P AND BULB BO

State quantities and sizes requi have "Carriage Paid" quota write for Price List—FRE

RICHARD SANKEY & SON,
Royal Potteries, Bulwell, Nottin

WHEN WRITING TO ADVERT PLEASE MENTION "GARDENING ILLUSTRAT

All Prices Reduced

SMITH'S "PERFECT WEED KILLER

POWDER

Also in Liquid—All Sized Drums.

First Weed Killer ever offered and first ev

SMITH'S "PERFECT" NON-POISO LIQUID & POWDER.

Best Value. Most Reliable. Full Satisfact Guaranteed. Prices and Particulars

MARK SMITH, LTD., LOUTH, LINCOL

"Auto-Shreds" di

I just burnt them on the ground and they thoroughly fumigated my plants. The judge wanted the name of the stuff that kept my flowers so insect free. I told him "Darlington's AUTO-SHREDS." At all seedsmen they cost—

No. 1 (to fumigate 1/0,000 cubic feet). For tender or ordinary plants .. 6

No. 2 (1/0 000 c.f.) Ordinary plants 4/-

No. 3 (3,000 c.f.) Ordinary or tender plants .. 1/

No. 4 (2,500 c.f.) Ditto .. 1/

Any difficulty in obtaining write direct

W. DARLINGTON & SONS, Ltd.
Original Patenters,
HACKNEY, LONDON, E. 8.

THE DENNI THE WAY TO HEAT

FOR GREENHOUSE, GARAGE OR WORK *ILLUSTRATED LISTS POST FREE*

THOS. W. ROBINSON DENNIS PARK. STOURBRIDGE.

GARDENING ILLUSTRATED

467—Vol. XLVIII. JUNE 19, 1926 [Prepaid Annual Subscription to any part of the World, 15/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

'ulgens ... 365
b. diseased 366
s beds, old 355
, treatment 366
s 354
e Hedgehog
a pungens) 355
OT"—AND GARDENS 358
emums: cul-'es 356
ueen Anne's 355
LS, LATE 365
Dianthus Freynei nanus 360
Drimys Winteri, the hardiness of 355
Ferns, Chain (Woodwardias) 355
Festival, a great ... 366
Freesias at Wisley, trial of... 354
Fruit trees in grass... 356
Fruit trees, mulching... 356
Fumigation and the use of insecticides... 362
GARDEN, SPRING, SOME CORNERS OF THE 357
Garden, the Kew rock 355
Ginger, the Wild (Asarum canadense) 354
HYDRANGEAS FOR THE GREENHOUSE 353
Lettuces, early 364
Liatris, the 360
Lithospermum graminifolium 360
Mazus rugosus 365
Meadow Rue, the Columbine-leaved... 365
National Gladiolus Show, the 354
Orchid culture 360
Pears cracking 366
Phloxes, spring treatment of 357
PLANT HUNTING IN SIERRA NEVADA 361
Primula obconica ... 355
Raspberry rust 366
Red lead v. mice and birds 364
Red spider 356
Rhododendron Caldwelli 354
Rhododendron decorum... 353
Rhododendron Manglesi in the woodland 353
ROSCOEA CAUTLIOIDES... 354
Rosemary (the Prostrate) 355
Runners, Scarlet, cultivation of... ... 364
Spring Star Flower, the 354
Swedes, garden 364
Thermopsis montana 357
Tomatoes failing ... 366
Vegetables, exhibition v. general utility in 354
Veronica filicaulis ... 354
Vine leaves and bunches 366
Vines failing 356
Yew hedge failing ... 366

Hydrangeas for the Greenhouse

.E are very few plants of easy culti-n for the greenhouse (whether large mall) that are so useful as the ·a. In recent years they have be-re popular than ever. Under good n the plants may be had at their 1 there is a scarcity of good green-wers, namely, between the spring nd those like Begonias, Gloxinias, ·pi, and others. Early in March is me to purchase the plants, as by can tell by the buds whether they 1 or not. The best kind to purchase plants in 3-inch pots, unless larger are desired. Each of these small ould produce one large truss of

st suitable compost for Hydrangeas porous one that should be made at the same time able to take large f water, as the Hydrangea, when lished, is a thirsty plant. The best the purpose is loam, peat, and leaf-equal proportions, with the addition and and fine charcoal to keep the ous. This should be well mixed nd allowed to stand covered with several days previous to using.

.—Pots 5 inches in diameter are able for shifting the plants into as ey arrive, and they should be clean drained. The soil must be made when finished, sufficient space must watering. A shelf in a cool green-1 ideal place to stand the pots from the flowers commence to expand, n in too open a position away from they will become leggy, which is a to a perfect truss of bloom. for the first few weeks must be one, never allowing the compost to ally soddened or the roots will re-eck. Once the pots are full of uch water cannot be given. When re opening freely the plants will m a weekly dose of soot-water veak state, and although too much oad, a little weak liquid may also ernately until the blooms are fully n this should be discontinued. flowers are full out it is wise to ouse. I find the plants remain in h longer if placed in the fernery, will give a bit of bright colour.

e plants have finished blooming be pruned back to the first strong vatered sparingly until the new mence to grow freely, when they epotted and stood outside on a bed nere they can remain until danger They should then be housed in a cold pit or greenhouse to rest during the winter. These plants should furnish anything from three to six good trusses of bloom the following season.

Blue Hydrangeas.—No doubt everyone is desirous of growing the beautiful blue varieties so often seen at flower shows and in florists' windows in preference to the many kinds of lovely pink shades and also crimsons and pure whites. No Hydrangea flower is naturally of a true blue colour, and to obtain these they must be treated accordingly. Fortunately, the worst colours amongst the family lend themselves most freely to this bluing process. Alum is the secret in producing these attractive blue flowers, and should be used at the rate of 1 lb. to each bushel of compost at each potting, following this by watering the plants with 1 oz. added to each gallon of water once a week until the blooms show colour. This should not be given when the plants have been recently watered with soot or liquid-manure, but at least two days afterwards. If the plants are watered with clear water one hour before, so much the better. A well-known grower of Hydrangeas has his own preparation, known as Bluing Powder, which I have proved very successful if used according to directions.

Good varieties.—Although there are many newer kinds, the following are the best I have grown:—La Marne (soft mauve), E. J. Hill (blue)), Mme. Mouillere (white), Marechal Foch (blue), Radiant (carmine), Rubis (red), Splendour (salmon), Amarante (mauve-pink), Lanzelot (pink), Mme. Truffaut (rose), Vicomte de Vibroye (blue), and Parzival (deep red, and probably one of the best growers). The blooms are, in a way, different, as they are very much like a giant Primula.

W. E. Wright.

Stockton House Gardens, Warwickshire.

Hydrangea from a cutting

NOTES OF THE WEEK

Rhododendron decorum

One of the most conspicuous objects in the garden for several weeks has been a group of this Rhododendron. It is composed of from 15 plants to 20 plants ranging in height from 3 feet to 9 feet, and, being seedlings, some are of the purest white, others of a delightful pale pink. All are so choice and lovely that it is difficult to discriminate among them. One very striking quality—and this applies to both the pink and white forms—is the delicious fragrance of the flowers. The plants are growing in heavy soil, the only preparation of which consisted in its being trenched to a depth of 18 inches and a couple of shovelsful of peaty soil placed around each plant when put in some years ago, when they were little more than a foot in height. This fine group is arranged beneath standard Apple-trees, and, judging by their robust character and rich leafage, such a position suits them admirably. Eremuri are planted among the Rhododendrons, and these come into bloom just as the latter pass away, and extend the season of beauty. G. M. S.

Rhododendrom Manglesi in the woodland

Growing in the home woods here (Sussex) and blooming freely is this handsome Rhododendron, a hybrid between R. Griffithianum and R. album elegans. The former is one of the parents of Pink Pearl. There is much of the tender beauty of this latter in R.

Manglesi, and it partakes to a certain extent of the same habit of growth, except that in woodland culture there is a greater tendency to soar upwards. Its beautiful buds stand erect upon the branches and in a narrow cluster from 6 inches to 8 inches long. These are of a rich pink. The flower is as delicate as a Lily, white, suffused with pink, spotted with red on the upper side of the corolla and 4 inches across. The shrubs are from 10 feet to 15 feet in height and quite at home in the woodland soil, where they receive no cultural attention whatever, yet provide a feast of beauty every year. The extensive planting of these handsome shrubs in woodlands adjoining pleasure gardens is all to the good, as a wind-swept lawn or shrubbery is not the best place for such shrubs, which in woodland are protected from what is probably their greatest enemies, wind, hailstorms, and summer drought. E. M.

Rhododendron Caldwelli

A delightful shrub, known for many years but sadly neglected, is the above, which resembles the evergreen and rather dense-growing R. amœnum. It is in every way a more desirable shrub, with flowers more than twice the size of those of the latter, and, instead of being magenta, they are of a deep, bright, rose-pink colour. The flattish-topped bushes are sheets of bloom to-day (June 6th); indeed, the profusion of flowers practically obscures the leaves. Groups of this choice shrub are remarkably effective, and few things are more conspicuous when cut and arranged in vases for indoor decoration. R. Caldwelli is by no means difficult to grow, and flourishes here (Sussex) in what is a rather tenacious soil. Such a lovely shrub should merit a place in large rock gardens. E. M.

The Spring Star Flower

It is pleasant to see the appreciative note on the Spring Star Flower (Triteleia uniflora), on page 207. It is not nearly enough cultivated, and when seen in masses of a hundred or more is particularly attractive. The finest show of T. uniflora I have ever seen was in front of the house at Rockville, Murrayfield, Edinburgh, the home of that ardent flower-lover and good cultivator, the late Mr. Patrick Neill-Fraser, where this flower had been established for many years and where there were literally thousands of bulbs, largely self-sown seedlings. They covered a large space, and, even in the gravel drive in front of the house, grew and flowered as well as anyone could desire. The form T. uniflora violacea is almost, if not quite, as cheap as the typical one, and some prefer it, but at Rockville there appeared to be little variation. S. ARNOTT.

Trial of Freesias at Wisley

The Royal Horticultural Society will carry out a trial of Freesias in their gardens at Wisley during the coming season. Five corms of each variety for trial should be sent, to reach the Director, R.H.S. Gardens, Wisley, Ripley, Surrey, on or before July 15th, 1926. The necessary entry forms can be obtained on application to him at Wisley.

The National Gladiolus Show

The third annual Gladiolus Show will be held at Burton-on-Trent on August 11th and 12th, 1926, in conjunction with the Staffordshire and Midland Counties Floral Fête. The schedule provides sections for trade and amateur exhibitors (43 classes in all), and the amount required for cash prizes is £75, towards which the sum of £50 has already been promised, including a generous gift of £30 from the Staffs and Midland Counties' Floral Fête Committee. Mr. Albert E. Amos, 10, Bergholt Road, Colchester, is the Hon. Secretary.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Roscoea cautlioides

ONE of the most uncommon-looking plants which in recent years have been introduced is Roscoea cautlioides. This very attractive plant has, not without good reason, been likened in appearance to some of the hardy Cypripediums. It has nice, pale green foliage, and stout, yet proportionate stems bearing a number of pale yellow flowers which last for a considerable time in summer. A very fine form, Autumn Glory, blooms later. This Roscoea seeds freely, and self-sown seedlings, if left to grow, soon form a good colony about the parent plant. Roscoea cautlioides is probably best adapted for the rock garden, where it may have a level spot to itself. It likes a light, well-drained soil, but I have seen it doing well in a moist part of a rock garden near a little stream which ran through the place. S. ARNOTT.

The Wild Ginger (Asarum canadense)

This plant never fails to attract attention, and should be more generally grown. It is a low, spreading plant with heart-shaped leaves, but it is the flowers that are so curious and attractive. These are solitary, bell-shaped, with three sharply-pointed lobes, and are of a pretty brown colour. This plant is culture, liking a moist situation w soil. It is propagated by root Asarum virginicum is an evergreen the above, with much larger flow foliage. R. M

Thorpe Hall.

Roscoea cautlioides

Flowers soft yellow. Native of China.

It has many points of resemblance to both Gladiolus and Iris, but it is distinct from either and belongs to the natural order of Gingerworts (Scitaminaceæ). It is now flowering freely in the rock garden at St. John's College, Oxford

Veronica filicaulis

It is to be regretted that such a creeping plant as this should be fou by "S. J. R.," p. 265. I have it here on a dry bank. It has been thus for two years and has not a attempted to encroach on its neigh do not doubt its capacity to do so, but while it behaves itself with me feast on its beauty for a few more carpet of this plant under such a sl Forsythia is a pretty sight. H. S

Exhibition *v.* general utilit vegetables

It is a pity that, when one gives to an honest conviction, others wl see eye to eye with him assume writer cannot possibly know what about. "West Tyne" falls into palpable error. He says: "It i that 'Reformed Exhibitor' know of the northern shows." Why, w me, is it "evident" that I do not? information I may say that I kno there is to know about north southern) shows, from London t and including Shrewsbury, York, and Edinburgh. I shall not refer of prizes. I admit these did not, exhibition days, reach the magnif of 72 in a single year, a record "West Tyne" is obviously prou venture to think that a first at S might, conceivably, outweigh quite of "West Tyne's" successes. Tyne" practically admits the tru remarks when he says that, at th Newcastle-on-Tyne, large, coarse win the prizes. I fear he misses altogether in respect of Celery. "As a judge I will tell 'Refo hibitor' that coarse, overgrow blanched Celery is not seen on bench, as Celery is always cut centre before judging." Really. fact that "Celery is always cut centre before judging" prevent it f coarse, overgrown, or half-blanche "West Tyne," if he permits anyon himself, when he is judging, to or any other vegetable, has not y fully the importance of his office although I am now, truly, a "R Exhibitor," why does "West T that I "don't like shows"? A sumption for which he has n grounds, and in which, I assure absolutely mistaken.

A REFORMED EX

Billbergias

A recent note concerning Billber reminded me that, many years a was a young journeyman I had collection of these Bromeliads. T in a mixture of peat, loam, and le equal parts, with a trifle of silv keep the whole porous. At the p I have some good examples of B. in the collection to which I refer was not represented. My memor marmorata, with very large b

d the stem being of a brilliant scarlet B. macrocalyx, with an erect spike bracts of a deep rosy-crimson and re very persistent during the sum- Moreliana, which, if I remember had deep green leaves, transversely ith white, with brilliant rose bracts; oidea, very free-flowering, with deep bracts; and B. pallescens, not unlike oidea in habit, but with bright red hich were paler on the reverse side. ere others which I cannot now recall, member being told by the gardener Mr. James Blacklock) that on no nust the plants receive much water- he roots, but that the "cup" or entre of each plant, formed by the the leaves imbricating, should be supplied with moisture. Being, at , of an experimental turn of mind, I tested the instructions which I re- nding, of course, that Mr. Black- y what he was talking about. Nor ong in discovering my experiments itting a stop to the same.

W. McG.

Primula obconica

tive of its poisonous nature to the sitive skins, which undoubtedly is ause of the malady—having been a nyself—no one will deny its hardi- perpetual-flowering habit for a vely cool greenhouse practically it the year, but at its best in the ig. Those of us who saw the much- strain in size of individual flower rs of various hues staged by one or at the Chelsea Show must be con- at it cannot be relegated to the ap despite its evil repute. The o-day is well worth the name P. o. a. When we look back some 40 ore a small pale lilac flower, and hat the hybridists have done, it a great pity to discourage the culti- so useful and easily-managed a he original variety proved quite sheltered warm border in Devon- wering freely each spring and

J. Mayne.

Queen Anne's Daffodil

very pleasant to learn from "A Gardener's" interesting note on Capax plenus that this fine old Fodil is still grown and appreciated. if "A Scottish Gardener" could w it came by the name "Queen affodil"? It is much older than Queen Anne, for it is described by and is figured in the Flora s.

F. A. Hampton.

ardiness of Drimys Winteri

the medium of your correspond- ns I should be glad to hear from f that beautiful shrub Drimys hether it grows well and flowers our more northern districts. The ere (18 feet in height), planted in of a wall, is at present covered y-white panicles and is an attrac- I always imagined that a winter last would have cut it down, but it gh untouched. Amongst a collec- ther delicate shrubs Calceolaria was the only one which seemed to ing sickly for a week or two after ent.

T. M.

Old Asparagus beds

most interesting matter, and on sions I have been called upon to o the endurance of beds. I have which still yield exceedingly well ears old, so that results are evidently not to be judged by age. But what does materially affect these results is the treatment in the way of dressings with salt and superphosphate of lime. How much to apply is the ever-open question, and I have found, not infrequently, that Asparagus beds are not given sufficient of the former and are treated too liberally with the latter. What is "G. T.'s" experience with the 90-year-old beds mentioned in his letter on page 340? It would be of material help to many readers.

Petersfield. Bruce Hewitt.

The Kew rock garden

It is extremely interesting to one who has benefited much by many visits to the Kew rock garden to read the correspondence regarding it. I have always looked upon the Kew rock garden as an educative one, designed and planted with a view to the cultivation of plants, and not for the purpose of producing a striking effect by means of masses of colour. It has for many years fulfilled the purpose of introducing the plant-lover to many rare and new things. Yet, while it fulfils this mission Kew rock garden has also given many striking effects by the skilful use of certain plants, and it has, moreover, given numbers an opportunity of checking the nomenclature of flowers they grow themselves. All rock gardens are the better of occasional overhauling and replanting. When this is done, however carefully and discreetly, it is impossible to avoid bareness and the appearance of newness for a time. Those who criticise Kew ought also to remember that those in charge have to cope with adverse climatic conditions.

S. A.

The Hedgehog Broom (Erinacea pungens)

When we read of this charming little shrub growing so plentifully on some of the mountains of Spain that horses can scarcely make their way through it a desire is aroused on the part of some of us to see it when in bloom, for it must be a very pleasing picture and one such as is rarely met with. In the open air in our country this distinct spiny and compact bush—so spiny as to be true to its common name of Hedgehog plant—rarely exceeds a foot in height and flowers about the middle of May, the plants exhibited at shows earlier having been brought along in glass-houses. The charming flowers, resembling those of a small Pea, are borne in clusters which are neatly seated beneath the longest spines and of metallic-blue, paling towards the edges of the petals. More interest is now being taken in its culture, but, even so, it is comparatively rare, which may be due to its being planted in unsuitable positions. It is a sun-lover, and for this reason should be planted in a raised position and in very open friable soil—a position such as the foot of a rock facing full south, where it would get a little of the baking it revels in in its native mountains. It may be increased by seeds, which are occasionally ripened in this country, and by cuttings.

E. M.

The Prostrate Rosemary

Rosmarinus prostratus deserves all the praise so well given to it by Mr. H. Stevens on pp. 344-5. It is one of the prettiest of trailing plants for the rock garden, as it is pleasing either in or out of flower. I think your correspondent is mistaken in thinking it "hardy enough in most districts." At the time of its introduction I was in touch with many growers of new alpines, who tried it and found that it was not absolutely hardy with them. My correspondents were in various parts of England, Scotland, and Ireland. My own experience is that the advice given by Mr. Stevens to keep a few plants in pots in a sheltered position is excellent and, indeed, indispensable if one is not prepared to purchase new plants every now and then.

S. Arnott.

FERNS

Chain Ferns (Woodwardias)

Woodwardia radicans is, perhaps, the noblest of the few plants comprised in the genus. It is a native of Europe, being found, it is said, in Spain and Italy, but more generally recognised as a native of Madeira and the Azores. It is, without doubt, the best Fern that can be used for a large vase or pedestal. When planted a little above the line of vision its broad, rich, bright green, pendulous fronds have a beautiful effect, or planted in an elevated pocket in the fernery it is almost, if not quite, as charming. Woodwardias are all easily grown. They require good drainage, and the soil should consist of turfy loam and peat in about equal parts, to which must be added a fair proportion of sharp sand. I am not particular what sand it is, as anything will do if it has the one essential—sharpness. Sand, however, from a macadamised road is injurious to plant life.

When potted and placed in position, as soon as the roots show signs of moving into the new soil, the supply of water may be increased, until a large quantity will be necessary if the large fronds are to be kept in good condition. The temperature of quite a cool fernery is ample; indeed, the great fault is giving too hot a position, because then the fronds are apt to become infested with black thrips, which turn them a nasty brown colour and spoil their appearance. Although I do not recommend the treatment, I have a plant of W. radicans that has been out-of-doors all the past winter. The crown appears to be sound, and this with only a covering of glass at the top, one end being open.

W. radicans obtains its specific name from its rooting and forming a young plant near the apex of the frond. Plants may very often be seen with fronds of considerable length. Upon the original plant, when growing strongly, the fronds are pinnate, the pinnæ being broad, deeply cut or pinnatifid, and about a foot long at the base, tapering upwards. The colour is bright green on the upper side, paler beneath, the fronds attaining a length of 6 feet or more, and the habit is decidedly pendulous. The rhizome is creeping and clothed with large brown scales. This plant is said to be widely distributed, but I have little doubt that were specimens brought into our gardens from these various habitats, some differences would be readily seen. It is found in Europe, Teneriffe, and the Canary Islands, Northern India, California, Mexico, Peru, and Guatemala.

W. orientalis.—This species is a native of Japan. It is viviparous, the surface of the fronds being very often quite covered with hundreds of little bulbiform plants. These may be easily rooted by pegging the frond down to the soil. The fronds are some 6 feet or 8 feet long by about 18 inches to 2 feet broad, bright green, and pendent. It is a very fitting companion to the first-named plant.

W. japonica.—This, as its name implies, is a native of Japan. It is a very handsome form, but smaller in all its parts than the two previously named. The fronds are broadly ovate in outline, pinnatifid, and from 1 foot to 2½ feet in length by about 1 foot in breadth, the colour being of a very dark green. These Ferns are all evergreen, requiring but little trouble in their cultivation, and they should be more grown, for the effect produced by them is very charming.

H.

FRUIT GARDEN

Mulching fruit trees

I DO not think that the mulching of fruit-trees is carried out always as it should be Many persons put on a thick covering of manure over the surface of established trees in the autumn, leaving it there until decomposition has entirely taken place. I hold this is a great mistake and a practice likely to lead to bad results in many cases. Nine out of every 10 that treat their fruit-trees in this manner would be at a loss to give a reason for the practice beyond saying that others do it. Mulching is really carried out to conserve the moisture in the soil. Another object in mulching is to encourage surface roots, it being an acknowledged fact that a cool moist condition is the most favourable to this. When the soil is baked dry on the surface the roots seem to shrink from such unnatural conditions and dive deeper in quest of that moisture which is denied them on the surface. Those persons who pract se mulching of established fruit-trees in the autumn and winter cannot have any other reason for so doing than that of adding stimulating food to the trees. Mulching is not the best way to carry this out; the process of absorption is too slow to be efficacious. The evil of autumn and winter mulchings is great; by its presence the chief factor towards success is absent, that of the sun warming the roots and soil in the spring and early summer. Established trees, such as Peaches on walls, or, indeed, any kind, do not need assistance from mulching until the crop of fruit is assured; then this addition of food is useful to help to swell the fruit. The materials for mulching are not always well chosen. The constituent portions of the soil should determine in some measure the kind of manure that is best suited to give the greatest assistance to the tree. A heavy soil, which is naturally much colder than a light one owing to its greater retention of moisture, should not have the kind of manure laid on the surface that is calculated to render it still colder. I allude to cow manure, which is heavy and "closer" in its composition, therefore not calculated to suit heavy soil. Partly-decayed horse manure with a fair amount of short straw amongst it is the best kind of manure for strong land, especially if a good quantity of wood-ashes can be added to it. Light sandy soils are benefited by the addition of cow manure.

In the case of newly-planted trees it is the accepted rule in all well-managed gardens to apply some partly-decayed manure to the surface soil directly the trees are planted, the object being twofold—to protect the roots from frost during winter and to maintain the soil in a moist state during the summer. This not only minimises the labour in applying water to the roots during very dry weather, but keeps the soil in a better state than when artificial watering is resorted to.

The evil of mulching is that the manure robs the roots and soil of the benefit that should accrue from the sun shining upon them at a certain time of the year. Many persons, I fear, do not think of this; if they do, they do not take the trouble to remedy the evil. If the mulching was removed the first week in May or earlier, according to the state of the weather, being simply drawn off to one side and then allowed to remain for at least three weeks, when it could be replaced, provided hot and dry weather necessitated its employment for maintaining the soil in a moist state, better results would follow. Trees that are planted high—as they should be in soil which is at all heavy or wet—are much more likely to suffer from drought than those which have their roots deeper in the soil. C. P.

Vines failing

(Arthur Kay).—We have examined the portions of the Vine rods, which appear to have been dressed with Gishurst Compound, a harmless preparation, but beyond this there seems nothing, so far as we can tell, to account for the rods dying back as stated. Had there been anything of a deleterious nature, either in the dressing or on the brush with which it was applied, the buds would not, we imagine, have broken, let alone produce foliage, and the rods would, we should think, have died outright. The fact that the Vines developed their leaves before collapsing rather looks as if, whatever happened, took place at this juncture. You mention that the fire was out on a very cold night, and assuming this to mean that it was a sharp, frosty night, we think it quite possible that these two Vines, which would be full of sap and very susceptible to injury, were affected by the frost. If so, the growths would wither afterwards in the way you describe, and the rods gradually die back to a point where they were uninjured. That two rods only should be affected might be due to their being less vigorous or more exposed to the influence of frost than the others. We may be wrong in our surmising, but according to facts given in your note we fail to find any other solution.

Red spider

We hear more of this pest to plant-life than usual, and in districts where the rainfall has been limited, the tendency of vegetation to suffer from red-spider will be proportionately great. Vines are among the most liable to suffer, and we note that some are complaining of the difficulty they experience in combating the enemy and saving their fruit from becoming spoiled at the same time. To Peaches, clean, soft, tepid water applied with force to the foliage and no stint at the roots should be given. Where Grapes are ripening, or, indeed, where the fruit is in any stage of growth, it is not an easy matter to eradicate spider and keep the fruit uninjured as well. Sulphur applied to the hot pipes so that the eyes smart from the fumes will not destroy the pest. A simple way of applying the sulphur, and a method which we often have adopted with success, is to apply soapy water in the form of spray with one of the small india-rubber instruments so commonly advertised, and dust immediately after with sulphur. Applied in this way, the sulphur sticks to the foliage so finely that the leaves need not appear unsightly. With one man carefully applying the soapy spray while another follows closely with the sulphur a large breadth of foliage can be got over in a short time, and no injury by moisture or rubbing of the fruit need be feared. If a little dry sulphur falls on the fruit it may be blown off before the fruit is used.

Fruit trees in grass

There are differences of opinion as to whether grass growing under fruit-trees is harmful to them. I can but come to the conclusion after many years' experience that planting trees in grass is undesirable. Young trees with grass growing close up to their stems never make a good start, and as all fruit growers know, a good start is everything. The trees, instead of making sturdy growth and forming a sound foundation for the future, only send out a few weak shoots. No pruning will put the matter right, and in a year or two the trees will be in an unhealthy state. If it is necessary to have grass, then let there be at least 3 feet of bare soil all round the trees. Where possible f fruit-trees in cultivated ground, for th required is most valuable in the early

CHRYSANTHEMU

Cultural Notes

PLANTS intended to produc blooms, whether for home deco exhibition, are growing freely, a many plants are cultivated will requ attention in the matter of secu growths to prevent accident to the points which at this time are very succulent. All plants having made t break will grow away freely, and ea retained should be securely fastene right stakes, which are fastened to t rails. When all the shoots are sup this way, each one obtains its equal light and sun much better than wh branches are tied to one centre stake former method mildew is not nearly to attack the leaves, and ripening of progresses with the growth of the the assistance of a free leaf develop

The ripening of the branches c anthemums at this time of the ye nearly so much thought about as it s The growth, as it is made, sh hardened. It is the treatment at t of the growth of the plants which go way toward success on the one h failure on the other. With the plan ing quickly, gross-growing sorts r stant attention to see that the ra which the points of the shoots are f not too tight. Side growths which p the stems in any way should be pro moved, thereby concentrating th energy of the plant into the selected Suckers which spring from the ba plant should be removed as fast as t retaining any from scarce or new va the purpose of supplying cuttings e cember. If dibbled into sandy s now, and placed in a slight bottom will quickly strike root and make st plants which will produce cuttings f growth at the proper time. Care t taken in the removal of suckers. the roots of the plants are not dam necessarily by cutting out the sucke knife, as is sometimes done. The s to remove them is to break them off soil.

Insects have been rather trouble season so far, but fortunately are di now in numbers. The Celery fly h some places unusually abundant, an remedy that I know of is handpi this is persisted in immediately the of the grub is detected in the leaf need not be removed.

The spittle fly, or what is commo as the cuckoo spit, has also bee trouble. Secreting itself in the poi shoots, it quickly causes the tend leaves to curl up, and when once are affected in this manner they s cover their form again. Constant and removal are the safest means the plants of this pest. This fly, to remain, develops into what amongst gardeners as the "jumpe does much damage to the young eating out the point of the shoot. too, are beginning to appear. The fest the points of the shoots. Ha is one way of getting rid of them, may be trapped with upturned sm pots in which is placed a small Moss, also by Broad Bean-stalks.

The warm coloured end of the spring garden is seen in the top illustration, and the arching sprays of Berberis gracilis below

Some corners of the spring garden

ERIS GRACILIS may not be a properly botanical name, but retty shrub shown in the illustration came with it from a good ery. It is probably a form of B. stenophylla as it has just the abit of that kind, but the colour of the flower is a paler yellow. backed by Hollies, on a small projection in the little spring n company with pale yellow and darker Tulips, pale yellow ris, and Iberis.

erberis and B. Darwini are precious shrubs to have with the wers. Another corner of the same little garden, just beyond gate in the above picture, has Berberis Darwini and a deep zalea mollis, in a setting of some of the small red-leaved vith a front mass of the brilliant Cheiranthus Allionii and, in some orange Tulips. The end of a main border which leads rner is planted to harmonise for colour, with blood-red and ge Wallflowers and orange and red Tulips in a setting of the Heuchera Richardsoni, that most useful plant for association n-coloured flowers, with its dusky bronze-red leaves and satin-e.

G. J.

SPRING TREATMENT OF PHLOXES

plants which bloom from the end me until September is at an end, are more showy or easier cultivated paceous Phloxes. We grow some of them in the flower garden, es, and kitchen garden borders, and y which they make in all three posi-triking in the extreme; indeed, the on of all who see them is, "What nt flowers!" The very old sorts in spike, small in individual bloom, very showy or rich in shade of ut the newer ones, such as those l during the last 10 years, are re-for the extraordinary size of their eir massive individual blooms, and, their exquisite and endless shades

April is a good time in which to plants. Choice varieties will be re-small pots, and no attempt should o force them on in a hot place. The is to plant them out at once in beds s. If, however, it is thought that t to be kept in pots until they gain place them in a cold frame. Weakly ght also be transferred to larger hich they should be grown on until then planted out, but on no account tificial heat be applied to them. as hardy as it is possible for any plant to be. When the new plants are small, we do not generally plant them with the old ones; they are put into a favourable corner for the first year and put out for effect afterwards. This is a good way of getting choice sorts on quickly. Young plants were planted on a snug border in the kitchen garden, and although they were only turned out of 3-inch pots, some of them produced stems 5 feet in height before autumn, and developed grand heads of bloom. These plants have lately been transplanted to a position where they will have to take the place of full-sized plants in the general display of the coming summer, and although young, I have no doubt they will do this well.

A RICH DEEP SOIL Phloxes must have; without this they will never develop their full beauty. It should be deeply dug up before planting, putting the manure well down, and besides this when the holes are opened to receive the plants some more manure should be put in the bottom, in order that the roots may readily take possession of it. It is a mistake to plant Phloxes too near the surface; the crowns should be 3 inches or 4 inches below it when planting is finished. Thus far we have been dealing chiefly with young plants, but dividing large old ones is a good way of increasing their numbers. A crown 1 foot or more across may be cut into four plants, and each of these will make a good blooming specimen by the autumn. The roots cling firmly together and are not easily separated, unless a spade be used; but cutting them through does them little or no harm. In cases in which the whole of the plants may be divided the best way is to lift all the roots, cut them up and replant; but before doing this the soil in which they are to be replanted should be deeply dug and heavily manured. Where only a small piece is wanted off any special kind the whole of the root need not be lifted; on the contrary, a slice may be taken from the side and the hole filled up with rich soil. In cases in which the plants have become established and there is no desire to increase the stock, a quantity of rich manure should be forked in round each plant, and if manure is plentiful a mulch on the surface will be beneficial.

C. P.

Thermopsis montana

This has rich green foliage and produces erect Lupin-like flowers in great abundance. It is a good border plant if kept within bounds, but it runs so quickly as to become troublesome. It is seen at its best when allowed to run wild in a thin shrubbery or woodland.

H. STEVENS.

"CALDECOT"—AND OTHER GARDENS

By George Dillistone.

JUST as I had decided what to say about the picture page opposite, I was attracted by a passage in a recent article in Gardening Illustrated. It seemed such an excellent peg on which to hang my remarks that I will repeat it here—"Most of the gardens throughout the world are, however, small, and confined within walls or fences, which define a strictly formal plan, and, in effect, actually carry an architectural feature round the boundaries of the complete property." The truth of this is so patent that it needs no emphasis. Such a condition of affairs must obviously impose restrictions on garden makers. It is easy to make a garden, and much less difficult to avoid mistakes in doing so where the area at our disposal is ample, where it has breadth, depth, and distance, than in a situation where boundaries seem too near. Also, the higher one's ambitions soar towards a garden that shall meet every desire, the more one longs for each and every aspect of modern gardening, or, in other words, the more one loves a garden the more galling become the limitations so imposed.

In a measure these were the conditions at Caldecot, but with one redeeming feature—the view from the house across the garden is one of the most wonderful in a glorious part of Sussex. The total area of the ground is, I think, less than 3 acres. Now subtract a miniature nine-hole golf-course that provides an infinite amount of healthy amusement, a tennis lawn not less valued, a portion devoted to fruit and kitchen garden, and a garage for two cars and you will find you have actually a few yards less than 1 acre for the cultivation of things beautiful. It is scarcely to be wondered at that the owner prepared to approach his house along a cottage path bordered with old English flowers, under an umbrella if need be, rather than sacrifice the garden possibilities of one side of the house to an entrance drive. The results of the saving thus effected are apparent in the accompanying illustrations.

There are certain terms that have come by usage, rather than any actual association, to mean something in garden design, and Dutch garden is one of them. To most people this implies a somewhat rigid or formal arrangement of paths and flower-beds with a certain symmetry in the arrangement of the planting. Hundreds of gardeners indulge in it without calling it Dutch, and very few of the inhabitants of Holland would understand in the least what this garden is like from the term used. However, in this case a name was necessary to distinguish it from other portions of the grounds, and really it is as Dutch as any pleasant English garden can be. The paths are formed of warm brown and red "brindles" or little Dutch bricks laid on edge to a somewhat casual design, but with sufficient unity in arrangement to avoid a sense of haphazard or negligent use. These paths are bordered by broad green verges of mown grass that permanently relieve the garden of any sense of hardness. Ample beds and borders are provided for brilliant masses of flowers in season. It was May when the photographs were taken, and, in consequence, the Darwin and May-flowering Tulips rising from a groundwork of Forget-me-nots flooded the scene with incredible brilliance. Nevertheless, it was a brilliant harmony.

"Caldecot" has no drive to the door—its area is occupied by this garden

The owner and his wife are both artists of no mean order, and crudity of colour blending, harshness of contrast, or that uncourageous insipidity of colour-mixing that relies on neutrality to avoid a clash would all be intolerable. So the dark purple masses were relieved by golden yellows and then warmed to life by splashes of fiery orange that again led on to glowing crimson, dying away to paler and paler shades until the lavenders and creams just encroached into delicate pinks. The cold blue groundwork of the Forget-me-not held, as it were, all the varying shades and tones in an animated unity. The garden was only made last autumn, and, in consequence, there yet remain certain defects in its construction, due to lack of time to complete, that have soon to be remedied.

The design has, of course, its axial line, and this centres on a little window in the drawing-room, from which one of the most charming pictures is obtained. Leaving this (the north) side of the house and passing through a wrought-iron gate, another brilliance breaks on the view, this time a of Azaleas amongst which are plante for later colour effect, backed by taller ing trees and shrubs. In front of th creeper-clad pergola, and beyond it, left, along the whole south front of th stretches the rose garden. A July here will be quite as enchanting as tl display, but in May the newly-plante are but just breaking into growth.

Passing on across a quiet lawn v suddenly on to what has come to be as the Japanese garden. It is not a l effort. Originally it was just a di has now been widened and dammed Japanese, in that nine-tenths of tl tation in it originated in Japan. It conceived, so far as is desirable or pr in an English garden, in the poetic Japanese gardens. It has its "v stone from which the little scene spr at one's feet. From beneath it tl bubbles away into the stream, spann by a bridge stone of weathered grey r once by a bridge of Japanese design, ing Wistarias. Stepping-stones ind way to the little hut that is a rest commanding the glorious view bey stream. Japanese Irises, Maples, flowering Peach, flowering Plum, Fr and others all have their places in t garden. It has its "Seat of Contem and its "Fisherman's Stone," "Lighthouse Stone," and lanterl bridge. Japanese it may be in sympl the effort has really been to repro little bit of wild rock-strewn stre Westmorland or Devonshire and ta garden uses.

In another part of this garden is walk almost entirely devoted to I flowering Border Carnations, and garden on one side is flanked by baceous borders.

Such is one treatment of a limi Now I will describe another that carried into effect elsewhere. In there are no Roses, no Tulips, no A anything else in borders or beds, owner has developed a similar area of moorland garden. Heather, Gorse Barberries, etc., and many garden fl formally arranged are the subjects planting, and the paths are just sl with rough slabs of stone where becomes too damp to walk upon. genuine moorland scene beyond th and so Nature creeps right up to Nothing more unconventional or sim be imagined than this foreground tamed and merging into the real tance. None of the paths are str they all lead directly to something Flowers there are, or at least colour and berry all the year.

And who shall say that this or th that the studied arrangements of t more or less the outcome of artistic than the other?

Gardening is an individualistic each garden preference expresses t tion of one's own self towards som lar phase of beauty.

To grow the flowers, shrubs, tree give them the conditions they will pose them in surroundings that with their natural character, to give to the garden that will act as a co to its planting, to make the garden able with facility and appreciable from the house it surrounds, to co planting so that it shall at once for

ONE SEASON'S WORK — ONE DAY'S PICTURES

The gardens at "Caldecot," Crowborough, the home of Mr. John Glynn

tude of miniature pictures that combine a pleasing unity, to arrange colour so that it shall attract and not offend, to let formality of design extend as far as circumstances demand and Nature creep in to its never sharply-defined limits, to remember, above all, that the garden is of man's art for man's individual enjoyment, that it is the home extended to the open air—this is the true spirit of English gardening.

Lithospermum graminifolium

This possesses qualifications which should secure for it a prominent place on the rock garden. Its blue flowers are borne in drooping clusters during summer, and they appear freely enough to make a good display. It is well suited for the rock garden where a rich effect is required. The plant enjoys in cultivation fissures between rocks firmly packed with gritty loam and peat, all the better if mingled with broken rock not less than 2 feet deep in full sunshine. It may also be grown on the face of a dry wall by first carefully packing a plant into a deep chink and fixing it firmly with good material. The plant will grow luxuriantly on level spots, but, to my mind, it never looks so well as when seen hanging from rugged rocks. The plant is of easy increase by cuttings. These may be taken off and pressed firmly into sandy soil in a cold frame. These will make neat little tufts by the spring, and each plant should produce a flower-stalk under good cultivation.

H. Stevens.

Dianthus Freynei nanus

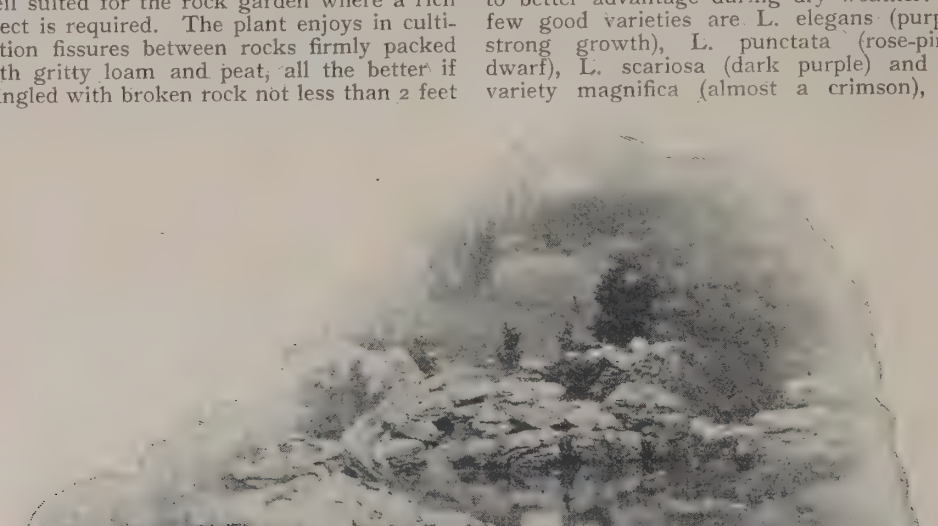
This is a delightful little plant forming tiny tufts scarcely 2 inches high and producing a multitude of pink blossoms on stems rising very little above the dense foliage. It usually forms mossy tufts of the freshest green, and few plants are so useful for carpets of glistening verdure in winter. It thrives in the rock garden on the level ground or in small fissures between rocks closely packed with gritty soil in full sun. When so planted it forms neat tufts flowering profusely in early spring. Cuttings root freely if pressed into sandy soil in a cold frame. Established plants should be top-dressed with sandy soil.

H. Stevens.

The Liatris

For a dry and hot border there is sometimes a difficulty in selecting suitable plants. Where there is plenty of water and time a dry border, of course, may be kept moist, otherwise we must fall back upon such plants as will thrive in such places. Among these are to be found the Liatris or Snake roots. Although they are not ideal border plants they are very useful, and few plants appear to better advantage during dry weather. A few good varieties are L. elegans (purple, strong growth), L. punctata (rose-pink, dwarf), L. scariosa (dark purple) and its variety magnifica (almost a crimson), L. graminifolia (rosy-purple), and L. pycnostachya. I have found these all very useful for hot, dry positions.

F. H.



A converted ditch at "Caldecot"

ORCHIDS

Orchid culture

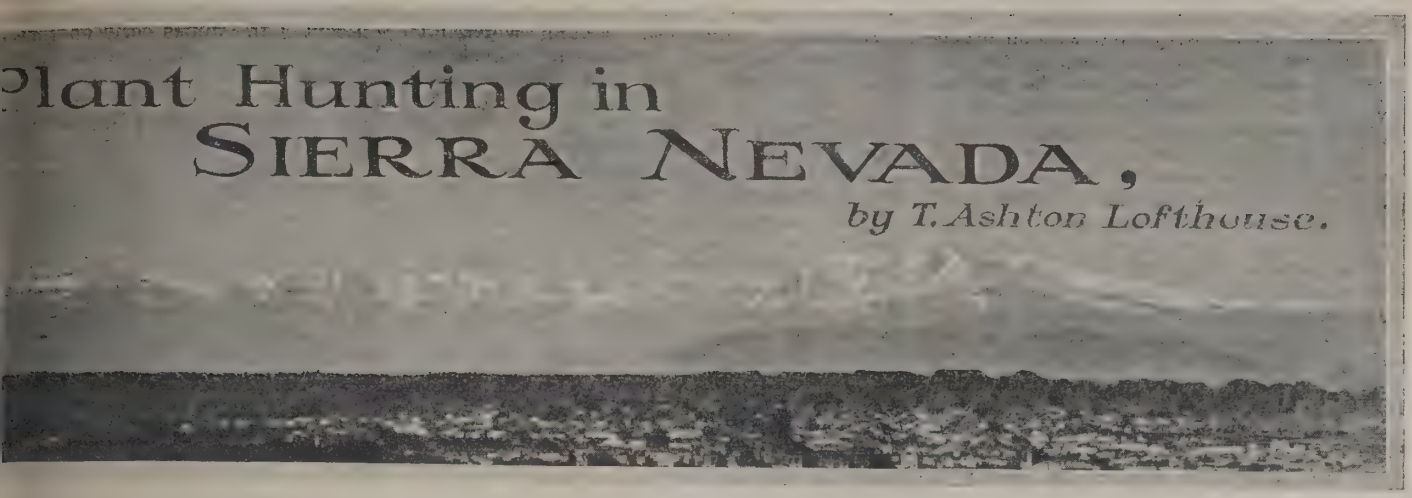
[In reply to a correspondent.]

It is impossible to point out in a short note the proper treatment for all kinds of Orchids, as there are now so many hundred species in cultivation, all of them differing more or less in their requirements. When we mention that some are found growing naturally at an elevation of 5,000 feet, and others revel in the hot jungles of India, or in the warm, moisture-laden atmosphere of the Philippines, you will perceive how difficult it would be in one single article to indicate the cultural requirements of Orchids generally, and that it is impossible to grow them indiscriminately in the same structure. For these reasons Orchid-growing has come a science, and men devote the time to this class of plants. Whoeve taking up the growth of these in plants in a small way will have to himself to one class of them, and owner of a small glasshouse may ho course of time to grow them to m fection. What are commonly called

Cool Orchids are the most sui small growers as they are compara expensive to grow, not requiring m from 45 degs. to 55 degs. in winte artificial heat through late spring, and early autumn. When once principles of their culture are un they are as easy to grow as man more generally seen in glasshouses would warn all who may be thi undertaking their culture that they succeed amongst the miscellaneous of an ordinary greenhouse. They very different atmospheric condition house flowering plants, delighting i ture-laden air, and requiring shade sun. Plants that can be grown w successfully are such as Ferns, D Palms, Ficuses, etc., which do not posure to the full sun, and fear cu dry air. Supposing the plants a grown in an ordinary greenhouse, exists in small gardens generally, blind fixed on a roller to be let up a at will is a primary necessity, for, the glass may be whitened over for mer, the growth is never so solid a maximum of light can be admitte engendering undue assiduity. The stage arrangement will suffice for of the house, as the plants can be flower-pots, so as to bring them n glass, but if the house is not more feet wide (and small greenhouses s ceed this width) it would be better the back portion free from stages, would prove useful for baskets, a kinds of Orchids do better grown than in pots. In commencing Orch it is best to buy established pl although imported pieces can be pu a cheap rate, it requires some sk them to start away into growth, then in a general way they are so coming into flowering condition.

The following kinds would form commencement, and if they did w might be added from time to time Skinneri, Odontoglossum crispum lection of 50 cool Orchids there sh dozen of this), Cypripedium insigne citrina, Odontoglossum grande, cristata, Sophronitis grandiflora majalis and autumnalis, Masdevalli M. Harryana, and M. ignea. The cream of Orchids which demand than 55 degs. by day and from 4 50 degs. at night in winter, and thrive very well together, and in with Ferns and many warm-h leaved plants. With respect to

Compost, Orchids require fibrous all the dust shaken out, Sphagnum charcoal in small pieces. They req age of an exceptional character, th ing filled two-thirds full of crock nearly all cases the plants must b above the level of the pot, so that t slopes from the collar of the plan the rim, forming a mound, on th which the plant rests. We would c ginners to obtain some good treat culture of cool Orchids, which w constant guide and reference, and and the hints constantly appearin dening Illustrated good success n tained, but proficiency will only b by dint of practice and perseverance



Plant Hunting in SIERRA NEVADA,

by T. Ashton Lofthouse.

(Continued from page 329)

norning of June 5th was devoted to :igating the Baranco (steep valley) unoz, along which runs the Rio de ıbout 1,000 feet below the mines. It narrow and steep-sided, and, owing lter and water, the growth was much ıd included some plants and shrubs elsewhere. Bushes of a fine). 5 feet to 6 feet high, with bright owers at the terminals of the stoutish stems the bark of which ·ably variegated. Digitalis obscura med attention on the loose shaly ving a south aspect; a Foxglove ll, coppery-coloured, dark-tipped t so large as D. purpurea, and with uphorbia-like leaves. Fine spikes r Foxglove, taken to be D. pur- y have been D. purpurea nevadensis gion. Linaria verticillata, a dwarf, oadflax with delicate deep green ıd yellow flowers with delicately- lines, was frequent by the track- d was collected and plants raised e flowered well in my garden this it was also shown at the Chelsea arrhinum laxiflora, with rosettes of labrous leaves and erect flower- white Snapdragon-like flowers; um linnæanum, a Vetch-like plant silvery-grey leaves and yellow ded flowers; Sedum acre and lants of Sedum amplexicaule; tall es of Campanula rapunculus; and ›rettier small Campanula Loeflingii mis, with tiny blue C. patula-like wiry stems by the stream side. cultivated ground above a Con- aved Polygonum, Polygonum con- ras more interesting than beautiful. g up the steep valley-side on re- ırt of which was in cultivation, we levelled, paved platform which is e native farmers for threshing and the "Era," and I had the good see the grain in process of being ıt in the local way by teams of g driven backwards and forwards doubt in the same primitive way een done for countless generations. tramp to the west as far as the aldivia, with the Punta de Valdivia ıinating feature, a little over 8,000 ·ight, added several new plants. e patchy in these hot, stony parts, generously surrounded with shaly me vivid deep magenta-flowered linifolium, very different to the flowered plants usual in our gar- particularly dazzling; and rather ideas of flowers in the wild state ıg with their associates. These ›minated and almost completely killed their quieter-coloured neighbours, such, for instance, as the more sober and pretty yellow-flowered Douglasia vitaliana, with its hard grey-foliage, which was frequent in the same locality, one fully exposed to the hot sun. It only flowered freely under the shade of the prickly mounds of Arenaria pungens Astragalus nevadensis, the Spanish form of A. aristatus, and representing the spiny desert section of the family of formidable mounds and mats of spiny branches, with silky but not showy whitish flowers; these taking the place of Erinacea and Genista at the higher levels. Erysimum linifolium was also frequently flowering in the shelter of the same mound, as did most of the dwarfer plants in very hot positions, these including an exceedingly pretty Linaria (Chænorrhinum) macropoda, with greyish-green foliage and sprays of large violet-blue Snapdragon flowers freely produced, a delightful species taking after the better-known L. origanifolia. Fritillaria messanensis, with greenish-chocolate bells more curious than striking; Alyssum diffusum and A. montanum, both dwarf, spreading species, the former with yellow flowers and the latter with pretty pale lemon-coloured.

A dwarf silvery-grey leaved Chrysanthemum-like plant, Pyrethrum hispanicum radicans, with lovely pale sulphur daisies, was one of the prettiest rock plants seen, brightening up some of the few high tracks we came across with their dainty, well-poised, sulphur-yellow daisies. Seeds obtained of this plant have germinated freely and have flowered most of the summer outside. Centaurea seusana, a good dwarf species with silvery-grey rosettes and deep blue, short-stemmed flowers, was flowering here.

At the top of the Punta de la Valdivia (where lunch was taken) Artemesia granatensis was found, a dainty aromatic plant with silvery grey-green silky-leaved cushions not unlike Eritrichium plants. This plant was seen sparingly in other parts, usually in moraine, but not seen in flower.

As we had not been near water for two or three hours a suggestion of Augustin's to leave the track for a spring he knew of was a fortunate diversion. It was in a green basin on the north side of the mountain; an oasis, indeed, in this parched-up region. The only Gentian seen in the Sierra Nevada was here, a delightful and welcome find. Gentiana æstiva, delightful with its large G. verna-like flowers, lovely blue stars in a deep green setting. Associates in and about this "Eldorado" included Viola nevadensis, Ranunculus acetosellæfolius in plenty with its fine white flowers, the yellow stars of Gagea polymorpha, the Crocus species (?) previously mentioned, a dwarf Allium with wine-red, short-stemmed flowers, and rosettes of the rare and interesting Erodium asplenioides, an inhabitant of the Sierra Nevada and North Africa. Compact rosettes of large greenish downy leaves (not Fern-like), deep scarlet-red centred. Unfortunately, it was too early for the flowers, only a single flower being seen, and that with white or whitish petals with a dark blotch on one petal, not rosy-pink as seen later at the Granada end of the Sierra.

In the crevices of a ridge of outcropping rocks Androsace imbricata argentea was magnificent with its hard silvery mats tightly wedged in the rock crevices and dainty white-petalled flowers freely produced. The plants were in crevices on the underside that had protection from overhead wet and partial protection from the hot sun.

At or near the base of these rocks were the two Saxifrages previously mentioned, S. nevadensis and S. glaucescens; the pretty dwarf high alpine Arabis alpina, very different from the straggling A. alpina of our gardens; and the yellow-flowered Draba hispanica.

Juniperus Sabina and J. vulgare were occasionally seen, the former in the highest parts, and a Cratægus (?) species with its branches flat on the high stony ground with pretty rose-pink flowers.

A few interesting birds were seen, including buzzards, the common wheatear, a very pretty black-throated wheatear, an African desert bird which overlaps into the Sierras in the same way as some of the plants, and a skylark in full song. French partridges were occasionally disturbed by the dog, and one was flushed from its nest containing a full complement of eggs. Some of the natives have this partridge in their homes, usually in a cage little larger than the bird. They are used as decoys. Some decoys seem to be quite enthusiastic in calling their relatives to destruction; rather a low-down achievement.

On Whit Sunday a visit was made to the village of Beires, 3,000 feet below, accompanying my host on a visit to the Alcalde, or Mayor. The journey was by mule, not over-comfortable, down the steep and rough track fully exposed to the hot sun.

Early in the descent Piorno blanco (Genista Loebeli (?)), the dwarf Erinacea-like shrubby plant, was much commoner and took the place of E. pungens.

Aromatic plants revelled in these hot mountain sides. Teucriums in variety, the pretty woolly-leaved Lavandula lanata and other Lavenders, Rosemary, Santolina viridis, and Helichrysum, various Thymes with Thymus membranaceus (Tomillo blanco of the Spaniards) was one of the most desirable

garden plants seen, a dense, greyish-green, scented cushion with upstanding cone-shaped flower-heads of tightly-packed whitish bracts and delicate white flowers peeping out between; a lovely dwarf bush for the garden, only noticed in the calcareous schist. Phlomis purpurea is another grey, woolly-leaved plant with whorls of reddish-purple flowers. At about 4,000 feet the Caper plant flourished, Capparis spinosa (Alcaparra of the natives), a lovely shrubby, grey, glaucous-leaved, straggling but spitefully spiny plant with large white St. John's Wort-like flowers with purplish-pink filaments. The flower-buds are collected by the natives and used as a condiment. Moricandia arvensis, a tall Cabbage-like plant with large violet flowers on long stems, was seen at about the same altitude.

On arriving at Beires, a typical Moorish village of white flat-roofed houses partly terraced up the steep hillside, we were welcomed by the Alcalde, and partook of the customary light refreshments. After a short rest we accompanied him round his little estate in which were Vines, Olives, Figs, Pomegranates, all flourishing, and abundant evidence of the great attention devoted to their cultivation and to the careful system of irrigation, to which important factor is due the prosperity of these highly-cultivated little valleys sandwiched in among the steep arid mountain slopes.

Around a water-basin holding water for irrigation purposes Trachelium cœruleum was noticeable with its large blue Eupatorium-like flower-heads, and in the damp, shady places the pretty annual Maidenhair Grammitis leptophylla.

It was interesting to know that the Alcalde had received his appointment under the new *régime,* superseding one who had held the position for a long period. In conversation with the late Alcalde he, having been informed of my interest in wild flowers, stated that he remembered a visitor collecting plants in that district some 40 years ago.

After lunching with the Alcalde it occurred to me that he might know of some Crocus flowering in the district, the result of my friend's questioning being that his wife informed us that some grew in rough ground above the stream running by the house. She was soon grubbing about along a wall-side, and although there were no leaves to be seen, seven or eight bulbs were found, which are, probably, C. sativus, the Saffron Crocus, and possibly an escape from cultivation.

The lovely snow-capped Mulahacen (11,703 feet) with its stately companions standing out in the clear atmosphere day after day looking quite near resulted in an attempt being made to reach the snowy region towards th my visit.

Leaving the mines early on June Augustin and mule, with the baggage for a region in which on t days away we were only near a ha once, that being the primitive "ve which we stayed two nights.

The early part of the journey w track previously traversed up to the l Valdivia. On the higher parts just about 8,000 feet, we passed through a yellow-flowered, sweet-scented sickly after being among it for son Genista, which had not the hard spin of G. Boissierii and was probably Buetica, a species inhabiting the hig tudes. The masses of yellow flower pleasing feature, and one or two pla pale lemon-coloured flowers were seen

Pyrethrum hispanicum, with its sulphur Daisy flowers, was quite and on reaching the path leading Venta de Ferreira plants with white magenta-red Daisy flowers, appare same species, were abundant. A littl along, the steep rocky sides of a strea ing through a ravine were magn clothed with the grey shrubby spinosum, mostly with the pretti coloured blossom.

(*To be continued.*)

Fumigation and the Use of Insecticides

HERE is a subject of such importance to every gardener that it cannot be too comprehensively dealt with, for upon the most careful application of either fumigating material or insecticide depends the well-being and, in severe cases, the existence of plants or trees. To better understand the magnitude of the subject we will classify the pests common to trees, plants, and flowers in general:—

Group I.—Enemies to bark, as American blight, Apple mussel scale, mealy-bug, Pear sucker.

Group II.—Flower and bud enemies, as Apple-blossom weevil, Carrot moth, Currant gall mite, Raspberry beetle, and yellow aphis.

Group III.—Seed and fruit enemies, as Apple sawfly ants, Bean beetle, Codlin grub earwig, Plum sawfly, and wasps.

Group IV.—Leaf or foliage enemies, as Apple aphis, Asparagus beetle, Begonia pest (incorrectly called Begonia disease), Black aphis, Cabbage aphis, Celery fly, Leaf-miner, Currant aphis, garden chafer, Gooseberry sawfly, Peach aphis, red-spider, Rose sawfly, slugs, spittle fly, thrips.

Group V.—Roof enemies, as bulb mite, Cabbage-fly, Cattleya-fly, field mice, Lettuce-root aphis, mole, cricket, Narcissus-fly, root aphis, wireworm.

Group VI.—Stem-borers, as Carnation maggot, Celery-stem fly, Currant-shoot moth, goat moth, stem-boring weevil.

All of the foregoing are doubtless more or less well known to gardeners, but their extinction is another matter. So far as insect pests are concerned—those which can be readily located, as white fly—it is a comparatively simple matter to "keep them down," although to do this successfully adequate precautions must be regarded. The ever-increasing white fly nuisance in houses, and in particular where Tomato plants grow, should be taken seriously in hand. There are so many insecticides on the market, all equally effective. Several applications are better than one strong dose of any of these, and in spraying the plants it is wise to, as far as possible, avoid spraying the hot pipes. Fumigation, too, in this case with XL All or other well-known fumigant should be carried out on a calm evening, all windows or ventilators being closed, the temperature lowered as far as possible, and the house in a reasonably dry state. Two or three fumigations are far better than one "stiff dose."

To deal with remedies for all the enemies included in our groups would take far more space than is available at the moment, and therefore it will suffice to take one or two pests from each group.

GROUP I. (Enemies to bark).—The general method of "cure" must be in the overhauling of the bark of the tree affected. All parts showing signs of disease must be removed and BURNT. It is useless to leave these lying about, as is often done by inexperienced men. The portion of the tree from which the bark has been removed should be gently, though thoroughly, washed or scrubbed with a mixture suitable to the particular case, such as Gishurst Compound. Preferably this work should be taken in hand after the fall of the leaf, and then, if necessary, a general spraying may be given with a suitable wash, such as this:—1 lb. soft-soap to ½ lb. of flowers of sulphur in 7 gallons of water. After application, that is, on the day following, the tree should be syringed with clean water. The enemies comprising

GROUP II. are either to be located in bud or flower, and, as we well know, are most difficult to deal with. Currant gall mite, for example. In this instance it is, perhaps, more satisfactory to remove all the affected buds and burn them. In most of the cases in this group clean culture is a very important factor. Yellow aphis can be defeated by fumigation lightly carried out with Tobacco-paper.

GROUP III.—Seed and fruit enemies comprise very largely caterpillars, and the best way to rid oneself of these is to collect them and destroy, and the same applies to all affected fruit. A considerable amount of trouble may be avoided by grease-bands so far as orchards are concerned. Wasps are best dealt with in the old-fashioned way—that of placing jam jars containing stout or other likely enticement in places whe pests frequent.

GROUP IV. (Foliage enemies).— aphis, not included in our list, nee little attention, seeing that it is t enemy of the Peach. Whether grown or under glass this pest is responsible curl. In the case of Peaches grow glass, unless the matter be taken in the outset it is hardly likely that a be complete, and it is very advi fumigate the house before the blosso as a precautionary measure. If the is detected when the buds begin immediate action should be taken a bud painted with Tobacco-powd damping them. Most of the othe enemies may be dealt with either by ful application of a good insecticid hand-picking directly the pest is det

GROUP V.—Root enemies can only with in a stringent manner. Plenty should be used. Affected portions cut away and burnt. Affected bulb be also entirely destroyed. Wirewo be trapped on pieces of Carrot or Pe

GROUP VI.—Pests which bore, su Carnation maggot, may be got rid frequent application of soap-su Tobacco-water to the plant. In this in the case of Celery-stem fly, insecti of no avail. Collecting and destro the most satisfactory means to ado stem-boring weevil may be capt placing a large sheet on the ground the tree infested and then gently sha tree. The sheet can then be remo its harvest of pests and suitably det It is a curious fact that very littl grown under glass without subje some pest or other, and the reason w tainly appear very largely to be due ventilation. Be this as it may, how antidote is at hand in the numer fashioned remedies for both outside side still firmly believed in by gard "better than new-fangled ideas," a remedies are to be found in any gardening. They embrace Bordea ture, paraffin emulsion, arsenate wash, and nicotine wash.

REMINDERS FOR THE WEEK

;thern and Midland

ıgus

ıg should cease after this date and the en regular supplies of liquid-manure er stimulants to encourage strong which will ensure good crowns for ison. In some cases the grass, if t during summer for decoration, is tal to the welfare of the plants.

eason up to the present has been le to the growth of culinary Peas, so sure of good crops of pods it is ad- o mulch the rows with lawn mow- ort manure, or leaves. If the soil well trenched and manured I do not watering this crop: On light and soils this generally has to be resorted spells of dry weather. When taken t should be done thoroughly.

wers

ourage the formation of heads on r varieties quickly the soil around s should be continually stirred with A pinch of nitrate of soda scattered ach plant and watered in will pro- ck growth. A little soil drawn up he stems of autumn varieties will neficial if done when the soil is

es

ıit on the early plants is now ripen- , so care must be taken not to allow o become dry, or many of the largest ll crack. On the other hand, the not remain in a soddened state or will become sickened and disease n. Stimulants may be given twice a t must not be overdone. Weak ap- are preferable and given at every ering.

n blight

st creates disastrous results amongst -trees if allowed to remain un- luring the summer. At this season better plan than going over the trees r and painting each woolly substance ıylated spirit.

Cherries

fruits are always apt to become sted, especially if growing on other h walls. The trees should be kept with insecticide to keep them clean. ts should now be reduced to the equired for extension purposes, re- ıll badly-placed and weak shoots

ung plants should be now growing ıd the soil should be kept stirred oe and all runners removed as they Red-spider often attacks the plants t weather, and to ward off this pest should be frequently sprayed with taining 1 oz. of common salt to the n occasional dusting of old soot is recommended.

and Violas

en annoying to see how these plants ur and the blooms become small ot weather and in light soil. To over this difficulty all dead blooms removed and not allowed to form . An application of sulphate of given at the rate of 1 oz. to the water and soaked well into the soil beneficial, while a light mulch will ep the roots moist.

Cinerarias

Seedlings of these plants grow quickly, and before they become overcrowded and stunted in the seed-pans they should be pricked off into boxes of sweet light soil at a distance of 3 inches apart. When large enough they should be potted into 3-inch pots and grown as cool as possible in a cold frame. A pinch of seed sown now of the Star or Stellata type will make useful plants for blooming next spring.

Melons

Whether growing in frames or houses these require careful watering. If possible this should be kept clear of the stems or canker is liable to set in. Overhead watering is beneficial to the plants at all stages, bar when the fruit is colouring. The lateral shoots must be kept in check by regular pinching when once the crop is secured. Liberal supplies of liquid-manure may be given to help the fruit to swell freely, discontinuing this as the fruit approaches ripeness.

The Vinery

The majority of the Grapes in small houses are now either thinned or in a fit state to be done, and no time should be lost in doing so. It is best done at several periods. Pinching of laterals should receive constant attention, and where the borders are inside they must be regularly watered. Nourishment may also be given freely when once the berries commence swelling.

W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Arum Lilies

Opinions differ as to the procedure adopted in the case of Arum Lilies after they cease to flower—whether they ought to be dried off, or whether they ought to be planted out. It may, perhaps, be suggested that when early spathes are required the drying-off treatment is preferable, but if the spathes be not wanted until round about Easter it is better to plant them out during the summer. In the latter case the plants may be put out at once in a position which is fairly sunny and in soil which is not too rich in organic manure. Under such conditions growth will not be too exuberant, and, as a rule, a plentiful supply of spathes will be assured.

Freesias

Many make a practice of purchasing fresh stocks of the popular and sweetly-perfumed Freesias yearly, but if those of the current season have been grown without any forcing (which is, undoubtedly, the correct way in which to get the best out of the Freesia), the pots containing the roots, after the ripening foliage has been removed, should be placed on a greenhouse shelf and well exposed to the sun, keeping the roots absolutely dry until September. Then they can be shaken out, graded, and put to work again. Treated in this manner the stock can quickly be increased and the bulbs improve from year to year. It scarcely needs to be added that Freesias are easily raised from seed.

Salvias and Eupatoriums

These are always most useful in the conservatory in late autumn and early winter, and after rooted cuttings have been well hardened off they should be planted out of doors in fairly rich soil. There they will rapidly form large and well-furnished plants which can be lifted and potted up in September. Eupatorium Purpusi monticola is a good thing, and a few plants of the Pineapple-scented Salvia (S. rutilans) ought to be included alike for its sprays of coral-red blooms and for the delicate perfume emitted when the plant is touched.

Chrysanthemums

Assuming that all has, hitherto, gone well with the Chrysanthemums, now in their flowering pots, attention will be a matter of routine, the daily work including watering, staking, and, in the case of those which are destined for "big blooms," regular disbudding. The plants will appreciate a damp-over with a hose or with a rosed can toward evening when the sun has been warm during the day. Do not be in a hurry to begin using stimulants.

Stove plants

Plants in the stove are now growing rapidly and must have space in which to develop. Fortunately, for a month or two now, some of the more accommodating stove plants will do quite well in the greenhouse to which they ought to be removed. Among these may be mentioned certain of the Palms, some of the Dracænas, and the Acalyphas, such as A. musaica and A. Sanderiana.

Fruit trees on walls

It appears to be now practically certain that the yield of fruit upon walls will be distinctly good, and will surpass, at any rate, the crops of the last three years. Therefore, where such a promise obtains, it is sound practice to devote some time to the trees and to assist them, especially those on south walls, by occasional waterings. A little Thomson's manure scattered over the roots before watering will give the trees a fillip. Apple-trees on walls, which have set a heavy crop, should be quickly and rather drastically thinned if good specimens are desired. The same remarks apply equally to Pear-trees on walls.

Vinery borders

Inside borders now require copious waterings to keep the roots moving. A mulch of some sort not only conserves moisture, but assists in keeping the roots near the surface. Do not permit sublateral growth to extend beyond a very few inches. Early ventilation on bright mornings is of prime importance.

Scalding in Grapes

Where scalding occurs among the berries it is safe to assume that the ventilation is in incompetent or in careless hands. Early ventilation on bright mornings is imperative, in order that the condensed moisture collected during night may be dried up before the sun hits the house. Over-thin foliage, too, may have a tendency to cause scalding. Madresfield Court, and in a less degree Muscat of Alexandria, are types of the Grapes which will scald if the foliage be insufficient. It is wise, therefore, to leave a few extra leaves upon such varieties.

Kitchen garden

There is a likelihood of a period of dry weather, and Lettuces will require careful management. At the moment sowings should be made on deep, rich soil, and a mulch of manure between the lines will help matters considerably. It is an advantage, during such weather to thin the seedlings in the drills rather than to transplant them, although Lettuces transplanted to the ridges of Celery trenches do quite satisfactorily, even during dry weather. Plant out Autumn Giant Cauliflower in ground which has not been treated too liberally. Where the soil is too rich the heads are apt to be over-large and coarse.

W. McGuffog.

Mabie Gardens, Kirkcudbrightshire.

Cultivation of Scarlet Runners

IN my opinion no vegetable more eminently combines the ornamental with the useful than the Scarlet Runner Bean, and few are so profitable and generally popular. At the same time I should like to see its culture still more extended among the proprietors of villa and suburban gardens, if only for decorative purposes, such, for instance, as covering arches, porticoes, or wherever climbers are required, provided always the positions are warm and sunny. Runner Beans grow rapidly, require but little training, and their large and prominently disposed spikes of scarlet, white, or speckled blooms, as the case may be, are borne in profusion till cut down by frosts; while the blooms, provided liberal treatment is given, will be succeeded by clusters of pods, which are very acceptable in most households. A row may also be grown in connection with the flower garden, the running growth in this instance being stopped near the ground or at any height. For comparatively small gardens long rows of plants are not needed to maintain the supply of pods for the kitchen; on the contrary, a few isolated plants, say oppositely in pairs at intervals along the borders of the principal garden walks, will be sufficient. Plants trained to tall, strong stakes will generally yield a surprising quantity of Beans, and, in addition, are highly ornamental. In fact, this is one of the best methods of growing Scarlet Runners, especially where space is limited, the single pillars not greatly interfering with the neighbouring crops, besides proving more productive than is the case where either the rows or the plants are crowded. If rows are preferred, these, in common with Peas, may well be disposed next the pathways, thereby assuring them abundance of room and light without detriment to other crops adjoining, or rather on the garden side.

SOWING IN ROWS.—As a rule, Runner Beans are grown too thickly, the result being light crops, and, during dry seasons especially, of short duration. The ordinary method of sowing is in double rows, these being about 12 inches apart, and the seed frequently a less distance asunder, nearly every plant receiving a stake so disposed as to cross near the points, girding stakes connecting the whole. This I consider to be a mistake, the practice involving much unnecessary expenditure in the shape of labour and stakes. My plan, which I believe to be much more profitable, is to grow them in single rows 6 feet apart, the seed being sown 4 inches to 6 inches apart, according to its quality, and eventually thinned out or made good by transplanting, so as to bring those retained about 12 inches asunder. To each plant a strong straight stake is given, these being when inserted from 6 feet to 7 feet high, and all are laced together with more stakes in a line 12 inches from the top—these serving to steady the whole. Between these rows I sometimes grow two rows of early Potatoes, but should the ground be too heavy for these, I grow two or more rows of early Cabbages or Cauliflowers.

GROWN WITHOUT STAKES.—Runner Beans may be grown without stakes, and in some districts in the counties near the metropolis fields comprising many acres are devoted by nearly every market grower to their culture. In their case I may add that the crops are to a certain extent speculative, their culture being necessarily expensive. For instance, I have known fields of Beans sold early in the season to speculating buyers—who relieve the grower of all further trouble connected with picking and marketing the Beans—at the rate of £22 per acre, and yet prove a capital investment, while perhaps the next season when Beans are very plentiful they scarcely realise enough to pay expenses. In small gardens, or where stakes are not available, the field plan may be advantageously adopted, and it is also the best for securing an extra early supply. The rows may be disposed 3 feet apart, and the plants eventually 12 inches to 15 inches asunder. Instead of encouraging the running growths, these should be kept closely stopped. If this precaution is neglected the Beans get smothered with growth, and in this state are both unsightly and unproductive. Stopping induces the early and continuous formation of large erect spikes of bloom, followed by great handfuls of pods. As the latter are naturally heavy they rest on the ground, and in wet weather get rather dirty. For the markets they have to be washed in tubs of water, but in private gardens the washing may be avoided by giving the plants a mulching of fresh stable manure, this serving to keep the pods clean as well as preserving moisture about the roots. T.

Early Lettuces

Salad in the spring and early summer months is important and any salad plant which matures quickly and is of good quality is of great value at the seasons named. Years ago the introduction of the small Tom Thumb and Commodore Nutt Lettuces was a boon to private growers. By sowing these early varieties there was a great gain in time, as these small forms heart so quickly, they are soon cleared, and make room for other things. Of course, it would be out of the question to advise sowing these early kinds in the open at this date unless in the best possible position, and giving shelter for a time. Much can be done with frames and hand-glasses, as these prevent the ground getting soddened. If sown on a raised border at the foot of a south wall, in a light, well-drained soil, the seeds quickly germinate. Avoid thick sowing as this tends to a weak plant. A much better mode of culture is to sow in shallow boxes, raise under glass, and then, when large enough, plant out in a frame, or if this is not available I have pricked out into boxes, but frames are best, and if the plants can be given a little warmth in the way of leaves or warm litter such varieties as I have noted above may be had with nice hearts fit for table in a few weeks from time of planting. By sowing a box of seed now under glass and planting out when large enough under hand-glasses on a warm border, it is surprising how rapidly the plants grow when the days are lengthening and they get plenty of sun-heat. There must be a generous root-run. Old potting soil sifted, with a sprinkling of dry wood-ashes makes a useful rooting medium, and when made fairly fine the wood-ashes keep the plants clear of slugs and worms, which are troublesome at this season. Another excellent variety for early sowing is Golden Ball, of dwarf growth and remarkably early. There are also others, such as Golden Queen and Early Paris. These all belong to the Cabbage section.

Those who prefer the Cos Lettuces can grow such as Nonsuch and Little Gem. The latter named is the smaller and an ideal frame Lettuce early in the year. Nonsuch, though larger, is quite as early, but requires more room, and Dwarf Perfection is a splendid forcing variety and may be grown in frames as it requires much less space than the ordinary Cos varieties and is therefore a valuable plant for cloches or hand-glasses. With the Cos Lettuce there is a great saving of time at this season by sowing in boxes in a warm house, keeping the seedlin the glass when they appear above face, and when large enough giving tion freely to harden the plants. Ti cater for the early market supply excellent variety called Petite Noire, not think this superior to the sm forms noted above. At times th sudden demand before the frame protected supply is available, and th met by sowing thinly in boxes a large enough cutting over in the s as Mustard and Cress. The non varieties are the best for this purpo the seed is covered over with sheets when sown till germination is activ is more rapid.

Red lead v. mice and b

In many gardens much difficulty enced in protecting seeds from n birds. Various methods of baffli pests are tried with more or less sa results, but we are satisfied with coating the seeds with this being proceeding, and apparently the onl preventive against either mice or the former exist in a garden it is ad attempt their extermination, but thi easily projected than accomplished. obliged to keep cats, though these turn have their enemy in the sha gamekeeper, and we are liable to l and be overrun with mice and, w rats as well in a very short time. Broad Beans are soon discovered and in spite of figure-4 traps and seeds a very patchy row is generall sult. We have tried soaking the petroleum, but this is no remedy, li volatile, and they must be coated lead, that is if we wish to feel about them. All that we find necess damp the required quantity of se water, and then well shake them powdered red lead, no mice interfe them after being thus coated. A ours finds it necessary to first mo seeds with turpentine prior to coat with red lead. The seeds thus bein coated with paint remain mice-p thoroughly decayed. In this case th is very large and in the midst of game preserves, these largely enc vermin, while cats cannot be kept. is said to be tasteless, and why it s avoided by mice and birds is a myste their natural instinct indicates the It may be it is the colour that frighte this being especially the case wi which invariably pull up a few of lings for the purpose of feeding on partially exhausted seeds. Before red lead we experienced the greatest in securing the requisite number of Broccoli, Savoys, Kale, and late Ca while Turnips and Radishes were a interfered with. The chaffinches greatest offenders, and it must be a v net indeed that will keep these bold d from the newly-germinated seeds. now is to moisten each sort befor in a damp piece of cloth (water on them causing them to clog togeth and then, if they are shaken up in paper containing a little dry lead, t become sufficiently coated. Thus they will not be much disturbed by remedy having the recommendation both simple and efficacious.

Garden Swedes

As an article of food many pe prejudiced against these, for it is exception to see a bed of these excell Many people have an idea that Sw

y for cattle, and are surprised when r are excellent for the table. They ier than Turnips, and it must be a ere winter that injures them to any ole extent. A breadth is sown of the white and yellow garden Swede early in May, and if the space is required in the autumn the roots are lifted and clamped in a pie, keeping well until the following June.

F. H.

Late Daffodils

E read the article on the above in sue of June 5th with keen interest ppreciation. I have been raising from seed for many years, and have agerly selected and preserved excep- ate flowers with a view to extending n of bloom as much as ever possible, result that I now have quite a large of what "W." very appropriately May-flowering" Daffodils. I can- ink that these late flowers will find d be welcome in the gardens of all like myself, ardent devotees of the we are always sorry when the last es, no matter how long the season Probably the most charming of late Narcissi are of the shallow- eedsii type, of which Samaria and ver raised by the Brodie of Brodie nely beautiful examples, the latter of the purest white Narcissi known lystic, referred to by "W.," was m a Leedsii somewhat of the old of Westminster type crossed with r. Engleheart's finest Poets, and ngs to the same class. I have had ers of this strain, a few of them ate, if not later, than N. poeticus Probably the old double N. poeticus later still, but even this is not the ll. A number of years ago bulbs me of a wild Pyrenaen Poet of e are still fresh flowers in my gar- y (June 9th). This is a rounded ivory-white flower with a slight, rather dull orange rim to its yellow eye.

Very late Daffodils, however, are not confined to the Poets and N. poeticus Leedsii hybrids. I have several large self yellow trumpet seedlings, also one or two white and bi-colour trumpets, which at all events in my climate, can be truthfully described as "May-flowering." One of these, indeed, I have named "King of May." This is a very large golden-yellow trumpet which does not, as a rule, open here until after May 1st, and keeps in condition till N. poeticus recurvus comes into bloom. I ought to say that our climate, which is wet, cloudy, and rather cold, is probably one of the latest in Great Britain, so that the flowers which open in May here would, in all probability, come in the latter part of April in earlier districts, and probably even earlier than that in the South of England; nevertheless, of course, they would still be relatively late. The past season has been quite the earliest in my experience, and I observed that these late trumpets, although still very late compared with others, were much less markedly so than in ordinary seasons, while the late Hybrid Leedsiis seemed to keep about their usual place in the order of blooming. From time to time I have also found very late flowers of other types, for example Incomparabilis and Barrii, amongst my seedlings, which have been quite good enough to grow on, so that, like "W.," I think that it is quite possible to have plenty of first-class May-flowering Daffodils. Speaking for myself, these late flowers are a source of great pleasure, as they provide a feast of quiet enjoyment when the Daffodil season proper, with its accompanying rush and hurry of shows and visitors and correspondence, is over. Further, if during the main bloom in April one's flowers have been ruined by bad weather, an experience, alas, too painfully common, there is always the hope and the slightly greater probability that the weather in May will be less unkind, and the latest flowers permitted to do themselves justice.

GUY L. WILSON.

Broughshane, Co. Antrim.

The late-flowering Silver Salver

A pure white Daffodil of rare beauty and refinement. It is of the shallow crowned Leedsii type

The Columbine-leaved Meadow Rue

What an acquisition this old plant is to a garden? It comes into beauty every June, no matter how hard the winter may have been. Frost may appear to check it for a time, but it soon responds when mild weather follows, and its delightful foliage and heads of flowers are a real pleasure to all those who are interested in herbaceous and hardy plants in general.

MIDLANDER.

—— When not in flower small plants of Thalictrum aquilegiæfolium, the Columbine-leaved Meadow Rue, deceive many by their resemblance to the Aquilegia. Very pretty indeed is the foliage of this plant, but its main beauty lies in its spreading heads of small "fluffy" flowers. Its heads of flowers, individually small, are so numerous and so light and elegant in appearance that they are like masses of sea foam. There are also a reddish-flowered variety, rubrum, and one with purplish blooms, called T. a. purpureum. Although liking a fair amount of moisture, T. aquilegiæfolium will thrive in an ordinary loam and is an excellent plant for a good border. It is from 2 feet to 3 feet high and flowers in June and July. It may be raised from seeds or propagated by division.

S. ARNOTT.

Anemone fulgens

Many people have an idea that Anemone fulgens must be lifted and dried off annually. That it may be necessary to follow this practice in some districts I do not dispute, but in a general way the corms may safely be left where they have been planted. I would strongly advise those who grow this Anemone to think twice before subjecting it to an annual lifting and drying off. I have known this plant remain undisturbed for 12 years, and the display was as good in the last season as in the first. Moreover, self-sown seedlings were freely produced, sometimes at a considerable distance from the parent bed, and this, I think, is in itself an argument against lifting the plants almost as soon as the flowers pass, and before the seeds are disseminated. It is sometimes alleged that, after their first season, the plants deteriorate. When this is so it is obvious, I think, that they are not happy in their site, or that they are organically weak. In either case lifting and replanting will not mend matters. Both in light soil and in heavy soil I have found A. fulgens to do satisfactorily.

W. McG.

Mazus rugosus

This is a desirable creeping plant with quaint lavender-coloured flowers studded profusely over the plant. It delights in a warm position on the rock garden, where it can be kept moist during hot weather. It will grow in almost any soil, but prefers that which is open and sandy. The plant is perfectly hardy. It is advisable, however, to winter a few plants in a cold frame from fear of loss during the wet season.

H. STEVENS.

2, Elm Dale Villas, Chepstow, Mon.

A great festival

£3000 subscribed to the Gardeners' Royal Benevolent Institution.

THE eighty-first Anniversary Festival Dinner of the Gardeners' Royal Benevolent Institution was held on June 10th, the Duke of Portland presiding. The festival was held at the Grocers' Hall, in the City of London. The use of this ancient and magnificent hall was very kindly granted by the Worshipful Master and Court of Assistants of the Company of Grocers, to whom the Gardeners' Royal Benevolent Institution has been indebted for many favours in the past. We know of the admirable work that the Institution is doing, especially among aged and distressed gardeners, and we have much pleasure in recording the success achieved on this occasion. The festive tables were beautifully decorated with Carnations and yellow Arum Lilies, and around the walls were large bowls of Pæonies and Lilium testaceum.

In proposing the toast of the Institution the Duke of Portland in a very happy speech referred to the fact that he presided at the Festival of this Institution 26 years ago. He paid a very high tribute to the late Queen Alexandra, who allocated funds for many charities, and always put a sum by for the Gardeners' Royal Benevolent Institution. The Duke recalled the fact that one of his ancestors was skilled in the art of landscape gardening and assisted Le Notre in planning gardens on a large scale. One of the Earls of Portland had much to do with the laying out of Hampton Court Gardens. The Festival Dinner, he explained, was held in the hope of raising funds for aged gardeners and their wives and widows. The Duke paid a high tribute to the Secretary, Mr. George Ingram, and hoped that he would long be spared to carry on his excellent work.

Mr. Edward Sherwood, the newly-appointed Treasurer, responded to the toast, and referred to the great work of the late Sir Harry Veitch, who for 50 years was Treasurer of the Institution. He also paid tribute to the work of the auxiliaries, notably at Bristol, Worcester, and Reading, and to friends who kindly opened their gardens to the public and contributed to the fund by making a small charge for admission. He recommended this means to the notice of others. Charity, he said, was the greatest of all virtues.

The speeches throughout the evening were excellent—interesting but not too long.

The toast to the visitors was proposed by Mr. George Monro and responded to by Mr. Gordon Selfridge and Mr. W. T. Roberts, Master of the Worshipful Company of Gardeners.

The toast to the Chairman was left in the safe hands of Lord Lambourne, President of the Royal Horticultural Society.

At the close of the evening the Secretary acknowledged donations amounting to £3,000.

We are unable to give the full list of subscribers, some of whom remained anonymous. The following donations were acknowledged:—The Chairman, 50 guineas; Mr. Leonard Sutton, 100 guineas; Messrs. Rothschild and Sons, 100 guineas; the Royal Horticultural Society, 50 guineas; H. D. Piper, 25 guineas; Messrs. Waterer, Sons, and Crisp, 25 guineas; Mr. Gordon Selfridge, 25 guineas; Mr. W. O. Corry, 25 guineas; Sir George Sutton, 25 guineas; Major Churcher, 25 guineas; Mr. F. J. Chittenden, 25 guineas; Messrs. Hurst and Son, £100; Mr. A. J. Wood, 75 guineas; Major Monro's list, £728; Mr. Charles H. Cook, Royal Gardens, Windsor, £104; Mr. W. Auton, £50; Mr. Charles H. Curtis, £40; Mr. H. Alexander, £35; Mr. T. H. Cook, The Gardens, Sandringham, 25 guineas.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their be named should send fair examples of stem, leaf, flower, or fruit. (Snippets and points of shoots are useless.) Not m four plants should be sent in any one we same correspondent. Where more than is sent they should be numbered. Of co cones should always be sent.*

Naming fruit—*Several specimens in stages of colour and size of the same kin assist in its determination. We have from several correspondents single spe fruits for naming, these in many cases ripe and otherwise poor. We undertake not more than four varieties at a time.*

FRUIT

Pears cracking

(Lowther Bridger).—This is due to a fungus known as Fusicladium pirinum. The remedy is to spray the tree with a wash containing sulphide of iron in addition to caustic soda, such as that known as Woburn Wash. Do this as soon as the tree has been pruned and the ground cleared of rubbish beneath it. Then before the buds burst when the tree has flowered and the fruit has set, and again in from two weeks to three weeks spray with Woburn Bordeaux Mixture. Use both insecticides according to directions sent with them.

Vine leaves and bunches

(Mrs. E. Williams).—We fail to find any trace of disease on either leaves or bunches, and have arrived at the conclusion that the house being unheated, and seeing that weather conditions for a long time have been so unfavourable, the pollen failed to ripen and become potent when the Vine came into flower, and that this is the reason why Grapes failed to set and develop. For Grapes to set properly a dry, warm, and buoyant atmosphere with the temperature ranging from 70 degs. to 75 degs. by day and from 60 degs. to 65 degs. by night is necessary. This you cannot, of course, command in an unheated house, but in a normal season approximate temperatures to those named are possible during May and early in June.

Raspberry rust

(F. E. F.).—The Raspberry leaves appear to us to be infested with the fungoid disease known as Raspberry rust (Phragmidium Rubi-idæi). Your best course is to spray at once with a solution of sulphide of potassium and at intervals of from seven days to 10 days afterwards until the attack is arrested. After the crop has been gathered cut out the old bearing canes. Cut out, also, the weakest of the canes of this season's production, and after clearing the ground of fallen leaves and rubbish lying about burn the whole. While the canes are dormant next winter spray them with a fungicide such as Bordeaux Mixture. To make the sulphide solution first dissolve 2 ozs. soft-soap in 1 gallon of hot water; then put in 1 oz. of the chemical, and, when dissolved, add sufficient water to make 3 gallons, and use at once.

Crab Apple diseased

(F. A. H.).—Your Crab-apple is affected with Apple scab (Venturia inæqualis). You should spray the tree with a fungicide at once, especially if you have any other Apple-trees growing near. Bordeaux Mixture is the best fungicide for the control of Apple scab. It would be wise to give all your Apple-trees a good spray with the fungicide as a precaution against the spread of Apple scab. Please see reply *re* Pear scab, on page 335 of our issue for June 5th. Apple and Pear scab are very much alike, and the control methods are the same in each case.

VEGETABLES

Tomatoes failing

Will you please inform me Tomato plants are damping off at th The plants all seem to be trying to roots all up their stems, especially on or 8 inches nearest the soil.

[Your best plan is to dig up the plants and burn them. The whole c in which the plants are growing s well watered with Cheshunt Com the rate of 1 oz. to 2 gallons of wa Tomato plant does send out ro readily all up the stem, but should c when the stem is covered with soil. plants which send out roots on the parts have usually a bad root syster may be keeping your house too da should advise you to be very careful watering-pot for a week or so to plants a chance to fill the whole of run with roots. You should also ad air to the roots. Keep a chink of night. Tomatoes grow best in a atmosphere, provided they are not a become dry at the roots. After used Cheshunt Compound it is safe other plants in place of those t damped off.]

Treatment of Asparagus

(C. Clifford).—Assuming you are t ting all the strongest of the heads sumption and leaving the weaker uncut, the latter should certainly This should be done on every occas cutting takes place, and then, whe for the season ceases, a simultaneo ensues. This should be encourag come as vigorous as possible by affo roots stimulants in the shape manures, especially in dry weat guano, or an occasional light spri salt. Be careful to keep the beds weeds and afford support to the t they become nearly full-grown a with the upper portions of old Peat anything that prevents the wind fr ing and twisting them about. growths in autumn carrying berri the latter are ripe enough to fa ground to avoid having a crop of appear on the beds next season, whi removed, are detrimental to the l occupants of the beds. With regar not deemed large enough for the ta bunching, all but the weakest are many establishments for the m Asparagus soup.

TREES AND SHRUB

Yew hedge failing

(D. Macpherson).—A probable r your Yews dying is that the soil is exhausted. We should advise you the plants several soakings of w mulch the plants with manure, a freely watering so as to wash the go the manure down to the roots.

back Rhododendrons

Buxton).—The best time to prune it is necessary to cut into the old when they have done flowering. We ly remove any shoots that are spoil- mmetry of the plants, as if you cut you will have to wait another year y flowers are forthcoming. This dron is apt to get leggy.

ng

d., Cheshire).—The best thing you to brush down the wall with a stiff l at once burn all the refuse. Then wall a syringing with Gishurst's , Katakilla, or paraffin emulsion, insecticide well into any crevices e in the wall.

GREENHOUSE

robusta failing

ou have evidently overwatered the kept it too cold after repotting, yellowing" of the leaves. When gets old it is not at all unusual for to fall off. It requires ordinary treatment, and in winter the tem- ould never fall below 45 degs. It the London parks during the sum- dot-plant over a groundwork of nsies or such like. It is easily seed.

mbing for wall of stove

.—The following should answer se:—Allamandas (various), Fran- ycina, Jasminum gracillimum, rosea, Thunbergia Harrisi, , Medinilla magnifica, Dipla- ya bella, Rivina humilis, Lapa- nd white).

der stage

.).—You could try Begonia Rex, gyoneura, Panicum variegatum, ia zebrina, Adiantum cuneatum, dy), with along the edge of the Selaginella Krauss and Ficus e saw Woodwardia radicans is purpose, and very effective it

MISCELLANEOUS

plants from France

, Co. Fermanagh).—Your inquiry plants home from France by post bmitted to the Ministry of Agri- o, in turn, referred the subject to ment of Northern Ireland, Minis- ulture, Wellington Place, Belfast. e Secretary states:—"I have to the importation of plants from Northern Ireland is permitted, at each consignment is accom- certificates as required by the eetle (Northern Ireland) Order of e Destructive Insects and Pests reland) Order of 1922." Copies er may be obtained from the

lawn

nbury). — Soak the ground with 2 lbs. of sulphate of iron 10 gallons of water. This will wn, but will not injure the grass. plications with the interval of a osen the turf slightly with a fork mit of the dressing reaching the

woodlice

These are very troublesome in es. We destroy them by cutting halves, scooping out a little from and laying them down, the cut the pests crawl under the Potato, and may be found there in scores in the morning. We find this a good remedy for slugs. Toads and green frogs are also encouraged in the house. The toads get quite fat on the woodlice. It is interesting to watch them suddenly whip their prey into their capacious mouths. Another good plan is to wrap a boiled Potato up in dry hay, put it in a small pot, and lay the pot on its side. This is a favourite haunt for them.

SHORT REPLIES

Ignorant.—The best thing you can do is to leave the staging as it is and procure a collection of hardy Ferns, and grow the same in pots. There are many interesting varieties of these.

G. L. C.—(1) The only way is to cut the tops off in the spring and use them as cuttings if you want to increase your stock. (2) No. Leave the stakes for several days so that the creosote can permeate the piece of stake inserted in the ground.

An Irish Reader.—Kindly send a sample of your diseased Onions and we will do our best to help.

Blanche Stoyell.—You might try some wholesale chemist.

NAMES OF PLANTS

R. D.—Tradescantia virginica, also known as Flower of a Day and Common Spiderwort. Hardy perennial. Introduced in 1629. Native of Florida and northward.

G. G.—The Californian Allspice (Calycanthus floridus).

E. A. Burdon.—1, Ceanothus azureus; 2, Ceanothus Gloire de Versailles; 3, Olearia stellulata.

G. E. Lambert.—Olearia macrodonta.

W. E. Hitchcock.—1, Erigeron speciosus; 2, specimen insufficient.

Trym.—1, Thalictrum flavum; 2, Verbascum phœniceum; 3, Veronica saxatilis; 4, Vittadenia (Erigeron) triloba.

Novice, Watford.—2, Luzula campestris; 3, specimen very dry on arrival, but it is probably Draba pyrenaica syn. Petrocallis pyrenaica; 4, Hesperis matronalis.

Yuccas not flowering

Can any of the readers of GARDENING ILLUSTRATED tell me if they have found that their Yuccas have not bloomed last year, and why? The same thing has occurred in the case of the early-blooming Pampas Grass (Arundinaria conspicua), which up to now has flowered every season. I have four clumps in the garden. E. A. BUSDON.

Benn Brothers' Other Journals

The Cabinet Maker.—Bouverie House Service; Furniture Shipments in May; Waring and Gillow's Annual Meeting.

The Chemical Age.—Chemical Overseas Trade for May; The German I.G.'s World Programme; London's Forthcoming Congress of Chemists.

The Electrician.—Full Report of the Incorporated Municipal Electrical Association Convention; "Gridiron Switchgear," by Dr. C. C. Garrard; "National Electricity Supply," by H. Quigley.

The Fruit Grower.—Imperial Economic Committee's Fruit Report; State of the Crops; East Norfolk Tour (Illustrated).

The Gas World.—Assessment of Gas Undertakings for Rating Purposes; Gasification of Coal and the Products of Oil.

The Hardware Trade Journal.—Application of Engineering to Agriculture; The Foundry Trades Exhibition in London; The Strike and Its Effect on Hardware Imports and Exports; Ironmongers and the Trading Policy of the Oil Companies.

Bouverie House Service

GARDENING ILLUSTRATED gives, and we hope always will give, all the service to the art of gardening that can be rendered within the limitations of the printed page. That is our chief and first principal function. We are now, however, in a position to offer something else, something quite new in the realm of journalism—a service which we believe will be welcomed and accepted and recognised as a proper part of our functions as the promoters of the interests of the pursuit we serve.

Bouverie House will, we hope, partake of the nature of a club to which all subscribers and readers of GARDENING ILLUSTRATED have the privilege of honorary membership. We shall open on July 1st our spacious reception room, which will rival in artistic and decorative interest the best of the reception rooms of the best of the London clubs. This big room will not be used as our offices; it is hoped that it will be used by our friends. Its purpose is to provide a meeting place where readers from the provinces, and inquirers after information in connection with gardening, can find all the comfort and help and assistance that they require from time to time.

Subscribers to GARDENING ILLUSTRATED are invited to make their appointments at Bouverie House, where every convenience will be found for conversing with their friends in comfort, and where telephones and correspondence facilities are entirely at their disposal. Letters may be addressed to subscribers, in our care, to await their arrival, and will be handed to them upon calling at Bouverie House. Telephone messages may be sent through and will be preserved in the same way until our subscriber visits us.

Trade Notes

Liming

The question of liming is no new one, but how many gardeners neglect this most important part of their soil treatment. It should be remembered that where lime is deficient no amount of manuring or fertilising is of use. Probably the best and certainly the most convenient form of lime to add to the soil is finely-ground carbonate of lime which is immediately available for use by the plant. It is generally supposed that slaked lime is the best form of lime to use, but this material when added to the soil must first be changed back to carbonate of lime before it becomes of any use to plant life. Then, again, slaked lime and burnt lime are both caustic and have a burning action destructive to the humus in the soil. Carbonate of lime has, therefore, many advantages, of which we understand "Ferry" phos-lime, manufactured by The Briton Ferry Chemical and Manure Co., Ltd., contains 45 per cent. There is also present 35 per cent. of phosphates, equal to high-class basic slag.

The Eclipse sprayer

The Eclipse sprayer is both simple and efficient; it possesses obvious advantages over the ordinary syringe pump or the knapsack type of sprayer. There are no intricate parts to get out of order; nothing weak in its construction, and, as no pumping is necessary, the operator has both hands free to direct the spray. The hose ordinarily supplied with the sprayer is 10 feet in length, but hose up to 200 feet can be used.

Player's Navy Cut

It is over 40 years since pipe smokers began to appreciate the merits of Player's Navy Cut, and it has grown in favour year by year. A new packing has been introduced which saves the smoker rubbing the flakes with his hands preliminary to filling the pipe.

LATE NOTES

Spraying Potatoes against blight

The first specimens of Potato foliage attacked by "blight" this season have been received at the Ministry of Agriculture's Plant Pest Laboratory at Harpenden, and the occasion is taken to suggest to Potato growers that they should take in hand immediately the spraying of their crops against this very dangerous enemy.

To be effective, spraying should be done before the blight appears, and should be repeated when weather conditions make it necessary. If heavy rains wash the spray from the leaves of the plant, the operation should be repeated at once. This second spraying is the more important because in wet seasons the fungus finds conditions favourable for its rapid multiplication, and it is that which makes a second and sometimes a third and fourth spraying imperative. As a general rule crops should be sprayed at least twice.

Both Bordeaux and Burgundy mixtures are efficient for the purpose, but where good lime is not readily obtainable, Burgundy mixture should be used.

For small areas, the sprays are best applied by means of a knapsack sprayer, and the operator should aim at covering the under as well as the upper surfaces of the leaves. On no account should the plants be "washed," as it is a mistake to apply too much fluid. The thinnest covering of the fungicide is sufficient. If a knapsack sprayer is not available, a syringe fitted with a nozzle which throws a mist-like spray is sufficient for small plots. Large fields of Potatoes are best covered by a horse-drawn machine. Where any kind of spraying is difficult, "dusting" or "dry-spraying" with a prepared powder containing copper salts may be resorted to. The dust should be applied when the leaves are wet with dew or rain.

The first spraying of second early and maincrop Potatoes should be taken in hand at once before any blight develops. The second spraying should be done about three weeks after the first. Where, however, the crop is found to be damaged by aphides, it should be noted that spraying is likely to cause serious injury to the foliage, and should not be carried out.

Silver Leaf Order of 1923

The Ministry of Agriculture and Fisheries desires to remind fruit growers that they are required under the Silver Leaf Order of 1923 to remove and burn all the dead wood of Plum or Apple trees on their premises before July 15th in each year. Where such dead wood is in the trunk of the tree and extends to the ground the whole tree, including the roots, must be grubbed up and burnt. Growers should pay immediate attention to the condition of their Plum and Apple trees in order that any necessary work may be completed by July 15th, after which date Plum orchards will be receiving special attention from the Ministry's Inspectors. Failure to comply with the provisions of the Order involves the risk of prosecution and a fine of £10.

Lecture by Sir Jagadis Chandra Bose

On the occasion of the Royal Horticultural Society's fortnightly show, on June 29th, Sir Jagadis Chandra Bose, C.I.E., C.S.I., F.R.S., the distinguished Indian man of science, will lecture at 3 p.m. on "The Autographs of Plants." The chair will be taken by Professor Sir Frederick Keeble, D.Sc., F.R.S.

LATE REPLIES

Rust on Chrysanthemums

(Llew. Hughes).—The rust resembles spots of rust or reddish-brown powder on the underside of the leaves. These spots rarely appear on the top or upper side of the leaves, so that it will be necessary to examine closely every leaf. This rust spreads quickly. The obvious thing to do is to separate the tainted plants from the healthy ones and in every case to so arrange them that air can pass freely through them. The syringing of the plants must also cease. Bordeaux Mixture may be used, but we prefer to use ½ oz. of sulphide of potassium to 1 gallon of water, so directing the mixture that it falls in a spray on the leaves, and seeing that the fungicide thoroughly wets both sides of the leaves.

Striking Dahlias

I should be greatly obliged for information on the best way to strike cuttings from the side shoots of Dahlias. These thinnings would otherwise be thrown away, and I have one or two varieties that I should like to propagate from. DAHLIA.

[To propagate the side shoots of Dahlias would not be difficult, but at this late time of the year is labour wasted because little tubers are not likely to form, and therefore there is a very great chance of young plants so managed dying in winter. The better plan is to take care of the old roots after flowering. Place these in warmth in early spring and then root cuttings.]

Lathyrus pubescens

(C.).—This Pea must not be classed as a true hardy perennial, and its best place would be a cold or cool greenhouse. It is of a rather shrubby habit, and does not spring from the root each year, as is the case with the true herbaceous perennial Peas. When grown indoors it can either be planted out or given a large pot. The best way would be to plant it out in a cool house, where it could have sunshine, although slightly shaded in summer.

Insects on Fern

(J. L. W.).—The insect attacking your Maiden-hair Fern is the black Vine weevil (Otiorrhynchus sulcatus). These b very annoying and do much damag kinds of plants. They always feed remaining hidden during the day. \ recommend you to place the plants suspect harbour these weevils on sheet and examine them with a goc the evening. The insects generally feign death when disturbed; if no to the sheet hold the plant upside shake the fronds well over the sh grubs of this insect are very dest the roots of many soft-rooted plants

Daffodils

(Spelsbury).—Assuming the fol sents no signs of decay—*i.e.*, brov figured points to the leaves—it wou to be merely a case of deterioratic by overcrowding of the bulbs belo In such case your remedy is clear. foliage has again matured lift the cl separate them, finally replanting another position if possible, w guarantee fresh soil. If this canno your next best plan will be to deep well stir the ground, adding a littl and replanting thinly in the old posit bulbs will recover in a season or tw

Bunch Primroses

(Miss Tate).—Of hybrid Polyar Bunch Primroses we know of strains than the Munstead st Spetchley strain. In the Munste there are no red or pink colours, th been rigidly excluded by Miss Jek famous garden at Munstead Wooc coarse-growing weeds on the golf l advice given, viz., to cut them dov bably right, but it would be necess tinue to cut off the tops repeatedly by carrying out this work persis you hope eventually to destroy the

Plague of ants

(E. E. C.).—The only practical w ing the ants is to find their nests a them. This is, however, in many c what difficult, but if the nest car and opened, the ants can be got pouring boiling water into it, or th killed by driving a hole into it, po few drops of bisulphide of carbon closing the hole so that the fun escape.

Transplanting the autumn Cr

(H.).—The best time for planting Large quantities are, however, pl that time. When transplanting a are actually necessary the best ti ing the bulbs is in July, when th well matured. This done, the repl follow in the course of a month, a posing that immediate replanting venient. Dry corms may be re into the autumn, but these late-pl take some time to recover.

SMALL ADVERTISEMENT ORDER FORM

Two Lines (fourteen words) Two Shillings: every additional line (or portion) One Shilling.

For use of Box Number there is an additional charge of 6d.

The above form, together with remittance, should reach the Advertisement Manager, "Gardening Illustrated," Bouverie House, Fleet St London, E.C. 4, not later than Wednesday morning for insertion in the current week's issue.

GARDENING ILLUSTRATED

68—Vol. XLVIII. JUNE 26, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

Bricke- 372
autumn 373
eds, old ... 372
e—abnor- 373
peta mus- 373
emums, ... 378
emums, ... 382
ens as a *imber* ... 382
sciation 381
Cucumbers 380
Currant, Black, trouble 381
Daffodils, late 372
Felicia rotundifolia 382
Ferns, seedling 381
Flowers, hardy, some pleasing groups of 373
Flowers, some hardy white 377
Fruit outlook, the ... 372
Fruit trees, newly-planted 372
Garden, making a bog 382
Garden, making a moraine 382
"GARDENS, LONDON" 378
Garden, the Kew rock 371
GARDEN, THE WATER 377
Grubs for name 382
Holly, the flowering ... 371
Importation of Raw Cherries Order of 1926 372
Irises, French, two new 374
IRISES, JUNE-FLOWERING, AT VINCENT SQUARE 374
Lettuces, three good summer 380
Manure, soot as 380
Myosotidium nobile ... 370
National Rose Society's summer shows, the 370
Obnoxious Weeds Act, the 370
Onosma, the Blue ... 371
Peaches failing 381
Pear trees, caterpillars on 381
Plant breeding, challenge trophy for progress in 370
Plants, hardy flowering, mulching 373
Plants, old-fashioned 373
Plant to name 382
Potato leaf curl 381
ROSES, BUDDING ... 369
Roses, pruning climbing, in greenhouse ... 382
Royal Horticultural Society, appointment of Secretary of the 370
Scarlet Runners, cultivation of 372
Season, some curious features of the present 372
Slugs, destruction of 380
Sowing and thinning 380
Spiræa Veitchi 369
Sun, the clock and the 371
Swedes, garden 371
TULIP MRS. HOOG 373
Tulips, Darwin and Cottage 382
Veronica filicaulis, the vitality of 370
Viola, the hardiness of the 370
Wallflowers for next spring 373
Watsonias, the 370
White Cup (Nierembergia rivularis) ... 377
White fly (Alæurodes vaporariorum), the 382
Worms, cut 382

Budding Roses

st time to bud Roses is when they the first flush of beauty, which will out the end of June or beginning ; then, under the influence of the ng sap, the bark will rise well, and es work freely the chances of succnall. It is best to bud during the or evening or in dull, cloudy s then there is less strain upon the uds before they become united to parents. Even a good workman gling work with a bad tool, so the be keen. A clean-cut wound heals kly than when the bruised. In the case of Briars the buds should l close to the main rubbing off all the make a clear field for and to permit of the rial being drawn close wounded part to keep

ars should be done e Manetti will work a longer period than There is not so much r standard Roses as formerly, yet there is iderable number budlly, and they will command attention ateurs. Wherever we cottagers and people a few Briars, they ve standards, even y lose so many in ers.

s a very simple operaody who has seen it an do it. The failures from lack of judgecting the period for operation than in its . If the bark works y with a sharp knife s much success as an gardener; but exof value in telling ect the buds of the and when to perform n. The operation it- in making an upudinal cut 2 inches e upper side of a in the case of a se (or on the smooth arf); then making a at a ½ inch below the the long cut (in both t to be just through the bark only), and with the smooth ivory handle of the knife gently raise the bark and slip in the bud.

Make the shield of the bud fit in closely by cutting it square at the upper end, after it has been gently pushed home. Of course, an experienced budder would put in many buds while we are telling how it is done. The shield of the bud need not be larger than ½ inch as large shields in the hands of inexperienced budders tend to make the operation more difficult; and in removing the buds, which is the most important operation in budding, there is no necessity to cut very deeply into the wood, just a thin slice that will be easily extracted by taking hold of it at the lower end with the point of the knife and the finger and thumb, and gently drawing it out, as if the eye of the bud comes away with the wood the buds cannot grow. The leaves should be removed from the wood containing the buds to be used.

As soon as the wood is cut, the ends of the shoots should be placed in water, as it is important that buds be used in a fresh condition. Buds can be sent long distances by post, and nurserymen having a large stock of Roses might do a good trade in buds if they were to advertise them. The tying material should be soft, but yet strong enough to bear the pressure of being drawn up tightly, not so tight as to cut the bark, of course, but still the buds must be held firmly in position. We like raffia best for tying in, budding, or grafting.

One bud to each stock is enough, though there is no objection to two in the case of standard Roses. Dwarf Roses, both the Briar and Manetti, are best budded low down, removing a little of the surface soil round the stem, putting the bud under the soft, moist bark just uncovered. In the hottest, driest weather, by the removal of a little soil with a sharp-pointed stick, a place can be found for inserting the bud with every chance of success. Some people in budding standard Roses, and also dwarfs, head back the stock to make the buds start, but dormant buds make the best plants the following year.

A sentry box clothed with Rose Lady Godiva in the garden of Mr. S. W. Burgess, Red Roses, Tonbridge

Notes of the Week

Spiræa Veitchii

A REALLY fine shrub is this during the month of June, when its gracefully arching shoots are laden with pure white flowers for 3 feet of their length. It is one of the handsome shrubs which are seen to the greatest advantage when grown as a specimen rather than grouped together, for when treated in the

former way its drooping wreaths of bloom are enjoyed from all points. It is one of the very best of the Chinese species, being of strong growth, flourishing in almost any kind of soil, and reaching a height of about 10 feet.

M. S.

Challenge Trophy for progress in plant breeding

At the Staffordshire and Midland Counties Show, to be held at Burton-on-Trent on August 11th and 12th next, Messrs. Abol, Ltd., are offering a Championship Trophy—a handsome silver cup, value 70 guineas—for progress in plant breeding. It will be awarded in open competition for the exhibit which demonstrates the greatest strides of progress achieved of recent years in the development of new strains, types, or varieties of any one family or tribe of plants, and may be competed for by any trade, private, educational, or experimental cultivators and producers of plants. Messrs. Abol are also offering a handsome silver cup (value 55 guineas) for a display of Roses, 10 feet by 5 feet, at the Peterborough Agricultural Society's Show on July 13th, 14th, and 15th.

The National Rose Society's Summer Shows

This being the jubilee year of the National Rose Society great interest is centred in the forthcoming exhibitions. The great summer show will be held on Friday and Saturday of July 2nd and 3rd at the Royal Botanical Gardens, Regent's Park, N.W., and a great exhibition of Roses will be held in Roundhay Park, Leeds, on Tuesday and Wednesday, July 13th and 14th. A special show of new Roses will be held at the Royal Horticultural Society's hall, Vincent Square, Westminster, on Friday, July 23rd, and another exhibition of Roses will be held at Southport in conjunction with the third annual Southport great flower show on Wednesday, Thursday, and Friday, August 25th, 26th, and 27th.

Appointment of Secretary of the Royal Horticultural Society

The Council of the Royal Horticultural Society at their meeting on Tuesday, June 15th, appointed Lt.-Colonel F. R. Durham, C.B.E., M.C., to be Secretary of the Society. The President, Lord Lambourne, took the opportunity of expressing the unanimous appreciation felt by the Council of the services rendered to the Society by the Assistant Secretary, Mr. A. Simmonds, since the death of the late Secretary, Mr. W. R. Dykes.

Lt.-Colonel Frank R. Durham, C.B.E., M.C., M.Inst.C.E., is 54 years old and was educated at Rugby and at University College, London. After leaving college he was engaged in engineering, and in 1914 joined the Army as a private, and was gradually promoted to the rank of major, receiving the following decorations:—O.B.E., M.C., and Chevalier Legion d'Honneur. In 1919 he was appointed Director of Works of the Imperial War Graves Commission, the appointment terminating on December 31st, 1925. For services rendered to the Commission he was promoted to the rank of Lt.-Colonel and received the C.B.E.

Colonel Durham has always been interested in horticulture; he has collected a number of new plants and has published papers in the "Journal" of the Society. He comes of a distinguished family, which includes Dr. H. E. Durham, the authority on cider and Perry Apples; Miss F. H. Durham, C.B.E., Chief Woman Inspector of the Ministry of Labour; and Miss M. E. Durham, the well-known traveller and author of "The Burden of the Balkans."

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The vitality of Veronica filicaulis

THE following experiments on the vitality of Veronica filicaulis may interest "L. J. R." (see issue May 1st, page 273) and others. The plants were chosen from the most persistent invaders from which I suffer, Silene being selected as a strong fighter not likely to succumb, and all were placed in an old rockery sloping south with large sunk boulders:—

ROUND 1. Helxine Solierolii *v.* Silene cucubalus.—H running below as if for shelter gets a stranglehold during the spring, but S sends up unexpected shoots which, growing vigorously, appear to ensure victory. H, however, clinching at close quarters, forms a dense mass, smothering the heart of S, bears down the struggling shoots, and the whole withers, gasping for air.

ROUND 2. Veronica filicaulis *v.* Silene cucubalus.—V runs lightly between the outstretched arms of S and sends down threads for supplies. Thus fortified, thickened masses of V bear down S's frantic efforts to keep its head in the air. Relentlessly each despairing attempt is suppressed, and V waves its arms over the prostrate body.

ROUND 3. Winner of 1 *v.* winner of 2.—A fine prolonged contest fought with much determination. H, adopting running-in tactics, secures a strong position on several boulders, which it occupies without interference. Ignoring these, V sends out its light arms and invades H's territory, but his attempts to consolidate his position are frustrated by winter, during which H advances steadily from his stronghold and appears a certain winner. With spring, however, V attacks with surprising energy, surrounds and overruns each closely-held boulder. Apparently dead members behind spring to life, and H weakens visibly. Weak gropings for V's heart fail, for he has none, and H expires under a blue flood.

THE REFEREE.

Myosotidium nobile

In reference to Myosotidium nobile, as described recently in GARDENING ILLUSTRATED by C. R. Drury, Sussex, I corroborate his statement that this plant is much hardier than is generally imagined. It is grown here, inland in Aberdeenshire, and thrives amazingly well and exhibits a profusion of flowers, and a glossiness of foliage that betoken favourable climatic conditions, despite the fact that the climatic conditions as existent in the north of Scotland are none too kindly disposed to plants of doubtful hardiness.

ABERDONIAN.

The hardiness of the Viola

Speaking generally the bedding Viola is hardy in these islands, but a rather close study of this plant over a series of years leads me to the belief that all varieties are not equally able to withstand our varied winters and springs. The late winter and spring were distinctly bad, with a good deal of frost, several rather severe snowfalls, and with long spells of dull and wet weather, so it pretty well tested the Viola, and I may now append the results. Only two varieties came unscathed through the ordeal—White Swan and Buxton Blue. Preston Favourite is also very reliable, and only showed a very small number of blanks. Incidentally, I may point out that Buxton Blue and White Swan are, invariably, finer the second year if permitted to remain undisturbed. Treated in this way they form fine bushy plants that begin to bloom early, and carry on almost a the young plants, while the number produced is marvellous. Improve Grant is another variety that w winter well, but Murray Gillies, Terris, Mrs. C. B. Douglas, Pres and Virgin White usually suffer a and cannot be depended on to mal display the second year. Several of course, are really exhibition although they also answer splendi planted for garden adornment.

Very beautiful and very hard cornuta purpurea, which blooms from early May until autumn. I left in the ground for five years or all it requires during that time beir the old stems cut hard back about February, the ground between the ing stirred with a hand-fork.

V. gracilis is another gem tha lutely hardy and is worth a pla garden. It will succeed even wh the ground for several years. trimming of the longer shoots in e is all it requires. It begins to March, and continues for severa The variety Purple Robe is super type.

Preston House, Linlithgow.

The Obnoxious Weeds

I thank you for your reply (issue page 351) *re* Obnoxious Weeds Ac all Acts of Parliament, there is loophole. I fail to see the re Dandelions are excluded and Dock Of the two weeds I think the Dal most obnoxious, and more difficu cate than the Dock. I find the D it is past flowering and has formed easily be pulled up by the roots, I till the seeds are ripe. On the the Dandelion must be carefully think if the Ministry of Agricultu as many Dandelions in a given have they would be pressing for f lation to include the Dandeli Obnoxious Weeds Act.

"L'A.

The Watsonias

I was interested in the recent cerning Watsonia Ardernei, whic in a recent issue of GARDENING IL because, at one time, I grew rather extensively in cold frames with Spanish Irises, English Ir Sparaxis, and the early-flowerin That the Watsonias were useful saying, but few who saw them know anything about them. C they are not, save in favoured dis hardy, and the protection of a makes all the difference between failure. I may, of course, be wr recollection is that W. Ardernei with W. iridifolia and W. O'B fancy that W. alba might be a for all. Others which I handl angusta, with flame-red flowers flora, with rosy blooms set up like the ears of corn; W. marg mauve or mauve-pink blooms aletroides, rather a dwarf variety tubular flowers tinged with ora were grown in large quantities and they entailed but little labour well repaid. In England, and the southern counties, Watsonias well enough in the open, althou the flowers might be late. At an is no doubt that the family make

ts in a cool greenhouse, and it ap-
be a pity that such a fine and easily-
ant should be so little known.

A SCOTTISH GARDENER.

The Blue Onosma

the plants described by Captain Ward on his last expedition, his osma was, to the rock gardener, in flight as a "thriller." Last sum-end gave me two pot plants of it, ette seedlings, with typical Onosma One of these was at once planted out ny slope of limestone scree in the den, and the other I kept in the ise all winter. The plant on the l before winter was out, though rom cold, damp, or mere ill-temper say. The alpine-house specimen dead as only an Onosma can look , but it did just manage to pull and when this spring it had pushed or two I planted it out on the scree. responded, and is now in full he plant carries six stems, each orked cyme of tubular blossoms the lines of Onosma echioides though smaller. The colour is a it blue, pure and brilliant—the orage. But, alas, it looks uncom- an annual or biennial. I may be t I feel it dreadfully in my bones lue Onosma is no perennial. How- sets seed all may be well, and its charm and colour are such that n annual it would be a welcome the garden.

ite prepared to find—if I can save , like so many annuals and the Blue Onosma is happiest when e open where it is to flower. My nly plant looks more or less of a valid, due probably to treatment it e.

l be interesting to hear what luck eners have had with this promising

CLARENCE ELLIOTT.

e.

he clock and the sun

e of "A Scottish Gardener," on June 5th issue, is rather amusing, ng to this correspondent the only e morning is lawn-mowing. I am e to find other work for my staff grass dries, and, anyway, "A rdener" surely forgets that it is comparatively recent times that hour in gardens and on farms anged to 7 a.m. instead of 6 a.m. least half of my gardening life I n out at 6 a.m., and thought it, and even yet I have a great e morning hours when important hand, for there is more than the grain of truth in the old saying our in the morning is worth two " "A Scottish Gardener's" ent the closing of the houses is legitimate, for certainly where large number of fruit-houses the wn, syringing, and closing can- be carried out, at least during and August, at 5 p.m. summer a little arrangement it is surely have the staff take turn about at nd so prevent one or two of the tied to this extra work. I have iscarded watering in the after- g this done first thing in the d, as far as I have been able to plants are quite as happy or even n when this operation was carried evening. What, mainly, led me rning watering of pot plants was t frequently something turned up oon that prevented the work be- in good time, with the result the watering was badly done and the plants, of course, suffered, whereas, when morning is the recognised watering period, it is carried out systematically and thoroughly, and flagging plants are but seldom met with.

ANOTHER SCOT.

Garden Swedes

"F. H." is quite correct when he states the value of the garden Swede for table use in issue June 19th, page 365, and, as he says, there are not so many beds grown as may be. When properly cooked and served the true garden Swede is a delicious vegetable, and is far more appetising than any Turnip. To obtain the best flavour the roots should be subjected to several frosts before lifting. "F. H." advocates sowing the seed early in May. I find that June is early enough, and the roots grow on into October and become quite large enough for table use. If sown earlier they are apt to become rather coarse and stringy towards winter. I wonder if any readers are aware of the value of the tops of these roots when forced in the same manner as Seakale. It is now many years since an old gardener I served under tried this method, and there was much consternation both in the kitchen and dining-room at the appearance of this new vegetable. They throw numerous succulent shoots which, if treated as Seakale, form a splendid and cheap substitute, while the flavour is all that can be desired.

W. E. WRIGHT.

Stockton House Gardens, near Rugby.

The flowering Holly

A good number of years ago I had brought to me a spray of Desfontainea spinosa, the so-called "flowering Holly," with the information that a local clergyman had seen it in a garden, and with the request that I would tell him if I had ever seen a Holly in flower like that. As the Desfontainea was at once recognised the error of thinking it a Holly was corrected. The mistake was not so absurd after all. With its Holly-like leaves the shrub bears a close resemblance to some of the Hollies. This Chilean plant has not only this attractive foliage, but pretty scarlet and yellow pendulous flowers give it quite an attractive appearance. It has proved hardy in most places, but is possibly a little tender in exposed positions, and is, therefore, all the better for the protection of a wall.

S. ARNOTT.

The Kew rock garden

Some of your correspondents who have written in reply to my criticism of the Kew rock garden have suggested that I only want to see "ramping masses of Aubrietia and Arabis," and infer that I neither appreciate nor care for rare plants. I venture, therefore, to append a list of some of the less common alpines, all of which I should expect to find in good big clumps at Kew and growing well amongst well-laid rocks. I give the names just as they come into my head, and, of course, anyone with a fair knowledge of rock plants could easily add to them. I have not included ordinary plants which anyone can grow, but only those which require some little skill, and I have left out some really difficult ones like Eritrichium nanum, which I am not so unreasonable as to expect to find growing so near London. I may say that I have nearly all the plants growing in my own garden, that they are all perfectly hardy, and although a few like Tecophyllæa and Primula Reidii may require a sheet of glass over them in the winter, I think it is not unreasonable to expect to find them in what ought to be (but is not) the premier rock garden in England. When I fail with a plant I wish to be able to go to Kew and not all the way to Edinburgh to see how it is grown, but I imagine some of the plants would not be easy to grow in the *existing* rock garden, even with all the expert knowledge of the Kew gardeners.

All Kingdon Ward's new Primulas
Primula Winteri
,, Allioni
,, vittata
,, Littoniana, Reidii
,, pubescens alba
,, marginata Linda Pope
The old double white, yellow, lilac, and crimson velvet Primroses
P. sikkimensis
,, pulverulenta, Bulleyana, Beesiana, helodoxa
,, chrysopa
Narcissus minimus
,, minor
,, nanus
,, triandrus albus
,, cyclamineus
,, Bulbocodium
,, Johnsoni (Queen of Spain)
,, juncifolius
,, gracilis
Campanula Allioni
,, excisa
,, cenisia
,, Raineri
,, Thomasiniana
,, valdensis
,, Zoysii
,, Waldsteiniana
Dianthus alpinus
,, neglectus
,, microlepis
,, Spencer Bickham
Daphne Mezereon
,, Cneorum and var. album
,, Blagayana
,, petræa
,, retusa
,, Genkwa
,, tangutica
Aquilegia alpina
,, glandulosa
,, pyrenaica
,, chrysantha
,, cœrulea
,, Stuarti
Epigæa repens
Weldenia candida
Townsendia Wilcoxiana
Calypso borealis
Orchis in great var.
Ophrys ,, ,,
Celmisias in var.
Cypripedium Calceolus
,, pubescens
,, parviflorum
,, montanum
,, Californicum
,, spectabile
,, ventricosum
Jeffersonia dubia
,, diphylla
Pyrola rotundifolia
Shortia galacifolia
,, uniflora
Ourisia coccinea
Nomocharis pardenthina
Deinanthe cœrulea
Trientalis Europæa
Sisyrinchium grandiflorum
,, pilosum
Cyananthus lobatus
,, Farreri
Oxytropis montana
Spigelia Marylandica
Clintonia Andrewsi
Oxalis adenophylla
,, enneaphylla
Asperula Athoa
Erythræa diffusa
Houstonia cœrulea
Mimulus radicans
Omphalodes Luciliæ
Roscoea cautlioides
,, Humeana
,, purpurea
Crocus species in great var., spring and autumn varieties
All the Tulip species from Kaufmanniana and præstans to Sprengeri and persica
Tecophyllæa cyanocrocus
Gentiana acaulis
,, verna
,, bavarica
,, Pneumonanthe
,, septemfida
,, Farreri
,, lagodechiana
,, sino-ornata
,, Kurroo
,, excisa
Rhodora canadensis
Ledum Lyoni
Lithospermum prostratum
Moltkia petræa
Parochetus communis
Polygala Vayredæ
Lilium rubellum
,, tenuifolium
Linum viscosum
,, salsoloides
,, flavum
Fritillaria coccinea
,, armena
,, pallidiflora
Soldanella alpina
,, montana
Schizocodon soldanelloides
Androsace villosa
,, carnea
,, sarmentosa
,, lanuginosa
,, foliosa
,, pyrenaica
,, Tyrolensis
Armeria cæspitosa
Acantholimon venustum
Œthionema Warley Hybrid
,, Warley Rose
,, grandiflora
,, coridifolia
Ononis fruticosa
Xerophyllum asphodeloides
Phyteuma comosum
Edraianthus serpyllifolius
,, Pumilio
Adiantum pedatum
Thlaspi rotundifolia
Phlox Douglasi
Pinguicula grandiflora
Ramondia pyrenaica
,, serbica and Nathaliæ
Haberlea rhodopensis and var. alba
Geranium Endlicherianum
Lewisia Howelli
,, Tweedyi
Arcteria nana
Gaultheria tricophylla
Vaccinium numulariæfolium
Cassiope tetragona
Andromeda polifolia
Onosma tauricum
Pteridophyllum racemosum
Pentstemon Davidsoni
,, campanulatus
Callirhoe involucrata
Calandrinia umbellata
Trillium rivale
,, sessile
,, grandiflorum
Adonis vernalis
Anemone fulgens
,, St. Bavo
,, coronaria
,, Robinsoniana
,, Alleni
,, rupicola
,, alpina
,, palmata
Meconopsis Baileyi
,, simplicifolia
,, integrifolia
,, grandis
,, Wallichi
,, quintuplinerva
,, paniculata
Zauschneria californica
Cyclamen Atkinsi
,, Coum
,, repandum
,, Europæum
,, Neapolitanum
Kniphofia Nelsoni
Nerine Bowdeni
Viola calcarata
,, Bosniaca
,, Thuringiana
,, gracilis
Cornus canadensis
Rheum Alexandræ
Trollius patulus
,, Ledebouri
Dwarf Fuchsias in many vars.
Œnothera speciosa rosea
Onosma tauricum
Hypericum fragile
,, Coris
,, olympicum
Iris histrioides
,, reticulata
,, Vartani
,, Heldreichi
,, Tauri
,, gracilipes
,, chrysographes
,, Californica
,, montana
,, Chamæiris in the best vars.
Helianthemums in the best vars.
Uvularia grandiflora
Dodecatheon Jeffreyanum
Œnothera riparia

The above is quite an incomplete list of what I consider to be good rock garden plants. Many more varieties of Campanula, Iris, Narcissus, Primula, Dianthus, and

Anemone might have been mentioned, but it is sufficient to show that I do not confine myself entirely to Aubrietia and Arabis. I have not included any dwarf conifers or shrubs, such as Cytisus Kewensis, Beani, Ardoini, etc., except the Daphnes, nor have I mentioned any dwarf Rhododendrons, some of which are already growing at the Cumberland Gate end of the rock garden. X.

Old Asparagus beds

In answer to Bruce Hewitt, the amount of salt applied on light soils is 4 ozs. per square yard. This is repeated in a fortnight, then in about another fortnight the superphosphate of lime and soot are put on in equal parts at the rate of about 3 ozs. per square yard. The soot is used as slugs are troublesome, otherwise it would not be used on light land. From the time cutting starts till it is discontinued ½ oz. of nitrate of soda per square yard is given and watered in if weather is dry. I do not advise the use of salt on very heavy retentive land. Liquid-manure is given when cutting is finished. It is not advisable to use it while cutting as it is known to flavour the grass. Liquid-manure is used here about once a fortnight from the middle of June till the middle or end of August.

G. T.

—— I have noticed several letters lately in GARDENING ILLUSTRATED about Asparagus beds, but no mention of *how* to cut the beds. This I consider most important. My rule is not to cut any of the largest sticks from the start, only the small. This I learnt many years ago from an English gardener in South Wales. The sticks were like the French sticks, an inch through, and the sticks left much thicker. I looked at the beds some time afterwards and one bed had been badly cut by the new man, as the old gardener had died (this bed had been planted about 1678), and the sticks were quite small. The French grow their Asparagus in a raised bed; the plants are about 2 feet apart planted on a mound in rows. The mound is covered with manure quite deep. It is hard to get men to cut, as I say, never having heard of this being done. A. W. L.

Surrey.

Late Daffodils

Like my friend Mr. Guy Wilson, I have for some years been endeavouring to prolong the season of the Daffodil by breeding late-flowering varieties, and I think I may lay claim to some good novelties, in the poeticus section especially. I would, however, warn Mr. Guy Wilson that he must not expect encouragement for his efforts in this direction from my colleagues on the Narcissus Committee of the Royal Horticultural Society.

On May 4th I submitted to the Committee a Daffodil which I thought about as good a variety as I had ever put before them, but I heard no more about it. On venturing to ask a member of the Committee what had happened to it he replied that they considered they had given enough awards to Daffodils for this season. Now let it be thoroughly understood that I make no complaint. The Committee are quite in order in taking this point of view if they think fit. Perhaps, after all, most people *do* get tired of Daffodils at the end of their season. I am sanguine enough to hope that Mr. Wilson will continue his efforts in spite of my rather pathetic experience. F. HERBERT CHAPMAN.

Cultivation of Scarlet Runners

In the issue of GARDENING ILLUSTRATED dated June 19th, page 364, appears an article under the above heading, signed "T." In this the writer states: "The ordinary method of sowing is in double rows, these being about 12 inches apart, and the seed frequently a less distance asunder, nearly every plant receiving a stake so disposed as to cross near the points, girding stakes connecting the whole." His plan, which he considers more profitable, is to grow them in single rows, eventually thinning the plants to 12 inches apart. To each plant he places a stake, and lacing these together with more stakes in a line 12 inches from the top. This method, I contend, would entail far more labour and expenditure than the ordinary method. By his method two trenches would have to be dug instead of one, while far more labour would be necessary for lacing each single stake to the supporting ones, while for the ordinary double row one tie is sufficient for two stakes, while there would be far more danger in the single row being blown down than there would be in the double lines, whilst the crop would be quite as profitable.

W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Anagallis Bricke-Rouge

Everyone knows our native Anagallis arvensis, the Scarlet Pimpernel, "The Poor Man's Weather-Glass," a humble creeping annual weed. A. bricke-rouge has the same character of opening its brilliant scarlet flowers, which are half an inch across, only in full sun, closing them up at night and in cloudy weather. At the present time it is making a fine show, both on the rock garden and in the alpine-house. It is a perennial and can be grown from seed, or multiplied by cuttings, which root very readily. I was not sure of its hardiness to stand our winters, so kept it in the alpine-house.

I got it from a friend last year, who procured it from M. Correvon, Geneva. No alpine in my collection has been so much admired. It is covered with flowers and blooms the whole summer. H. W. L.

FRUIT GARDEN

Some curious features of the present season

MOST seasons give us some curious experiences, but the present year has provided so many remarkable phenomena that one wonders what the reasons are for such. To begin, Rhubarb in this district, for some unexplained reason, has been an almost total failure, the stalks being both few in number and very thin and spindly. My own rows of Victoria are quite good, but a row of Royal Albert is poor and weedy. In my own mind I rather blame the severe and prolonged drought of last summer as the main cause. Most fruit-trees were simply smothered in flower, but Pears, Plums, Apricots, Black Currants, and some varieties of Apples are almost total failures. Frost is not the cause, but it may have been the prolonged easterly winds that prevented bees and other insects from performing their usual part in distributing the pollen. Cherries are a fair set, Gooseberries pretty fair, and Red Currants a bumper crop. Strawberries are blooming well, but have made very little foliage, so if the present dry, hot weather continues the fruits will be frizzled up before ripening. Delphiniums have never been taller, but Lupins growing alongside are very dwarf. Trillium grandiflorum, Trolliuses of sorts, Chinese Pæonies, and the old Tree Pæony are all flowering in wonderful profusion, while such things as the ordinary herbaceous Pæony, Heuchera brizoides, Pyrethrums, border Tulips, Narcissus poeticus, Phlox subulata and its varieties, Gentianella (Gentiana acaulis), alpine Pinks, and a few other things are giving very meagre crops of flower. Among shrubs Laburnums, Lilacs, Hawthorns, Pyrus floribunda, Azaleas, Rhododendrons, and Brooms are l very freely, while Pyrus japonica, V Mahonias, Kerria japonica, and a fe are very poor. Grass is a matter curiosity this season. Lawns ar normal, but the grass on rougher pa this date (June 7th) only a few inches

Among vegetables early Cabbages Peas, Potatoes, Spinach, Onior Jerusalem Artichokes are all doing are all in a forward state. On t hand, Lettuces, Leeks, and all the tribe sown out of doors in March stunted and backward and not yet transplanting. Beet and Kidney Be germinated quickly and well. It ha truly bewildering season, and or wonders how these varied results con

C.

Preston House, Linlithgow.

The fruit outlook

Fruit prospects (June 19th) in thi are not at all encouraging. As befo in GARDENING ILLUSTRATED there found this season a very marked diff the many varieties of all kinds of fr whether or no the blossom was fully during the spell of frost and biting have a few trees of Gooseberries we but the majority are very thin, and t to be the general experience, for selling in local markets at tenpence a long price for the homely Go Black Currants are likely to be ver a loss to the growers, as in some se fine old bushes in many cottage ga responsible for quite a nice bit of n their owners, and we are, fortunatel free from big bud in this district. blooms of Strawberries were cut, but and more abundant flowers set fairly will furnish a moderate crop. W early supply of this fruit is requir good plan to have a breadth on a border so that they can be protected sary in the flowering season. Ra are very scarce, and the remark ab Black Currants applies to them. T saleable fruit at a very fair price, scarcity means a loss to the cott small holder. It is a little early to Apples, but I cannot say the outlo mising, and Pears and Plums are appointing. There was probably n than we bargained for when they flower as well as the biting winds set is a very poor one. E. B

Near Aylesbury.

Newly planted fruit-tr

These call for attention at this where not already done the roots given a good mulch of manure, grass mowings, taking care to wate sary. The other plantations shoul free of weeds and the soil often sti the hoe.

Importation of Raw Cherries O of 1926

This Order of the Ministry of Ag which came into force on the requires all consignments of Cherrie from France to be accompanied by certificate to the effect that the Che grown in a department in which t Fruit Fly is not known to exist. consignments have arrived accomp certificates to the effect that the consignments are free from infeste without the required statement as t dom from the pest of the depar which the Cherries were grown, Ministry has been compelled to ord struction or re-exportation of these ments.

Tulip Mrs. Hoog

ONG the newer Tulips this beautiful ıd is in the very front rank. Tall and ıtely, soft, pale yellow in colour, it ; to the tint of old ivory and is good 'st to last. It is also of much garden s it is one of the latest. The illustra- ·ws it rising from a drift of pale yellow 'rimroses. A backing of purple Wall- shows it off to perfection. G. J.

: pleasing groups of hardy flowers

pleasing effects are in evidence just at in many local gardens by the associa- everal forms of Saxifrage with Violas ng shades of blue. I noticed, the ıy, for instance, nice little bits of S. ı, with tall spikes on a carpet of Mott Viola, and (on a narrow border) of Viola gracilis and S. Wallacei, ɔasing and effective, making one ıow much pleasure can be derived ll-considered ideas in the planting of owers. A corner of the same, just ırly at its best, consists of a big ·lump of Anthemis montana flanked r side by Nepeta Mussini, with a ·elt of the Dropmore variety of at the back. Where space permits, large beds or portions of borders, it ·sting to group many varieties of families together, as, for instance, ıtheras, the Campanulas, and on a scale the Centaureas (Cornflowers, ennial and annual). Antirrhinums, much more satisfactory when thinly in varying heights than when ıd formal lines. E. BURRELL.

ing hardy flowering plants

-growing hardy plants that are their freedom of flowering benefit bly on the approach of their beauty being helped with a mulch. Especi- s so if the season is dry. Mulching always take the form of old manure, se days it is not always possible to but much may be done for Phloxes, as Daisies, Helianthuses, Holly- ıd many other plants by affording a ·essing of old leaves, or even Cocoa- t retains the moisture and prevents aporation. WOODBASTWICK.

Old-fashioned plants

equently remarked that the plants r forefathers delighted to cultivate becoming scarcer, and that were it ·tanic gardens many of them would become extinct. Hard-wooded ch as Heaths, Epacrises, Pimeleas, Eriostemons, and Hoveas are only ıdays in comparatively few places, take it for granted that gardeners ·w grow them. A few facts may, serve to dispel that illusion. In the , gardens have multiplied of late ı rapid rate, and glasshouses have ed in many places out of all propor- ɔ labour available to keep them, or pants properly in order. On that lants that are quickly and easily ve taken the place of hard-wooded sses of colour are wanted not only ver garden, but in the conservatory, wing-room, and also on the dinner- these and other decorations have the gardener to grow such plants trust to produce the desired effect date. He now finds that his novel- s (that are more difficult to manage) le appreciated, even if he could find ill cultivate them, so he reluctantly exchanges them for plants that are capable of spending half their period of existence in apartments, or on the handbarrows travelling to and fro to the houses.

Autumn sown annuals

Now and again the advice is given to sow seed of certain annuals in autumn in districts where the winter is the least severe, but, as a general rule, I think that annuals are not sown before spring. It would be of interest to know whether there is any real advantage, even in mild localities, in getting seed in in autumn. I remember on one occasion when in Devonshire seeing annuals out in bloom very early in June, but I did not know whether to put this down to autumn-sown seed or not. For most people spring is soon enough to begin operations, as the ground has to be brought into condition, and, what is of importance to most folk, there is a certain amount of tidying up to be done before one can think of sowing seed. Some of our southern readers could throw light on the subject I have no doubt. WOODBASTWICK.

Tulip Mrs. Hoog

Wallflowers for next spring

Procrastination in the matter of pricking out Wallflowers from seed beds is often the cause of weak, spindly plants. It is never satisfactory to leave them too long, and even supposing it happens to be a dry time when the work ought to be done, watering the ground intended for the young plants the night prior to shifting them and temporarily shading the plants for a few days until they have got hold are preferable to leaving them in the seed bed. Small plants should not be despised as they often turn out the best. Stocky plants will invariably go through the winter better than big overgrown specimens. Removal should be into ground quite free from any trace of manure. The plainer and poorer the ground is all to the good for Wallflowers during the summer. It is not practicable, of course, to lift soil with plants until the last shift to their flowering quarters in late autumn, but then it will be found worth while to disturb the roots as little as possible and also to make them firm when planting. MIDLANDER.

Catmint (Nepeta Mussini)

The division of old plants of Catmint in spring is not always attended with the best results. Unless carefully done before growth has far advanced, the young shoots droop and die off. Cuttings strike very freely about August or September, and, for the first winter at least, it is well to give them the shelter of a cold frame. I wonder, sometimes, whether it is generally appreciated that during April and May cuttings strike readily in sandy soil in a cold frame or helped with a little bottom heat. I have a number of little plants which were propagated in heat during March, and these, when planted out this month, will not be very long in flowering. WOODBASTWICK.

Alpine Aster—abnormal flowers

I have two clumps of these Asters, one has the usual flowers, but the flowers of the other have very large dome centres and thread petals. The second clump was taken from the other, and this is the first time I have seen such flowers on the plant. Have you ever seen an alpine Aster with these abnormal and ugly flowers? The leaves look healthy. CROYDON AMATEUR.

JUNE FLOWERING IRISES AT VINCENT SQUARE

IT cannot be said that the show held on June 15th was a first-class Iris Show. The fact is, it was a fortnight too late. Originally the Iris Show was fixed for June 1st, which would have been a most suitable date, but this show was abandoned when Chelsea Show was postponed. It is hoped that an Iris Show will be held next year early in June —a show on the lines of the Rhododendron Show. To see the hall filled from end to end with Irises would provide a feast of colour and bring visitors from all parts of the country in great numbers. Some very lovely Irises were on view, and the following varieties, though by no means all novelties, were worthy of special notice :—

Iris ochracea-cœrulea

A curious mixture of old gold and Wedgwood blue

OCHRACEA-CŒRULEA, shown in quantity by Messrs. Barr and Sons. As its name implies, this Iris is of a very curious colour—a mixture of old gold and Wedgwood blue. Distributed by Denis, 1919, it received an Award of Merit in 1922 when shown by the late Mr. W. R. Dykes.

REALM.—A new variety raised by Mr. G. P. Baker and shown by The Orpington Nurseries Company. It is of tall, stately habit with handsome spikes of large self-blue flowers with conspicuous golden beard. Certainly one of the best of the newcomers.

MERCEDES.—We have never before seen this remarkable Iris in such good form. It was shown freely by Messrs. George Bunyard and Co. The standards are lilac-pink shaded brown towards the claw, while the falls are white with deep purple veins at the edge. The style arms are yellow with mauve ridge. As may be gathered from this brief description it is one of those very curious mixtures of indescribable colour that must be seen to be appreciated. Mercedes was sent out by Verdier about 20 years ago, but it still commands a good price.

SIR MICHAEL.—We thought this the finest of the new varieties shown on this occasion. It is remarkable for the gloriously rich colour of the dark purple velvet fall. The colour is rendered more striking by the exceptionally brilliant golden beard. The standards are of a clear lavender-blue. It is the richly-coloured fall, reminiscent of the Duke of Bedford, that is so very telling, but not so deep in colour, for the fall of that variety is almost black in certain lights.

MORNING SPLENDOUR.—This was one of the most conspicuous varieties shown by Messrs. R. Wallace and Co., Ltd. It is a remarkably bright variety with violet-red standards and deeper-coloured falls with large and prominent golden-yellow beard. Near by were seedlings shown for the first time. Some of the seedlings are most promising, notably those which by form and colour we take to be descendants from Bruno.

GEORGE YELD.—A very distinguished variety named in honour of a very distinguished raiser of Irises. This variety was well shown by Messrs. Perry. It is a tall, free-flowering variety with large upstanding smoky-yellow standards and wine-red falls described as crushed Loganberry, and brown reticulations at the haft.

ASIA.—If there is one Iris that stands out above all others this year it is surely Asia. It was well shown from Orpington, Maidstone, and other nurseries. There is, at the present time, a fine clump of Asia in St. James's Park. It is growing at t end of the lake near to Buckingham and the fine large blooms stand out shoulders above other varieties. Asi giving a good account of itself in trials. At the meeting of the Iris S June 16th Mr. G. P. Baker, who returned from Wisley, said that he h seen finer blooms of Asia than thos trial grounds, and as Mr. Baker ga Award of Merit for this variety he how good it can be. This distinct a Iris was raised by Mr. George Yeld The standards are pale silvery- suffused and deepening at the base t yellow, the falls are light violet-purpl bright golden-yellow beard. The wh of the plant in flower is unusual and out as one of the finest Irises in culti

Two new French Iris

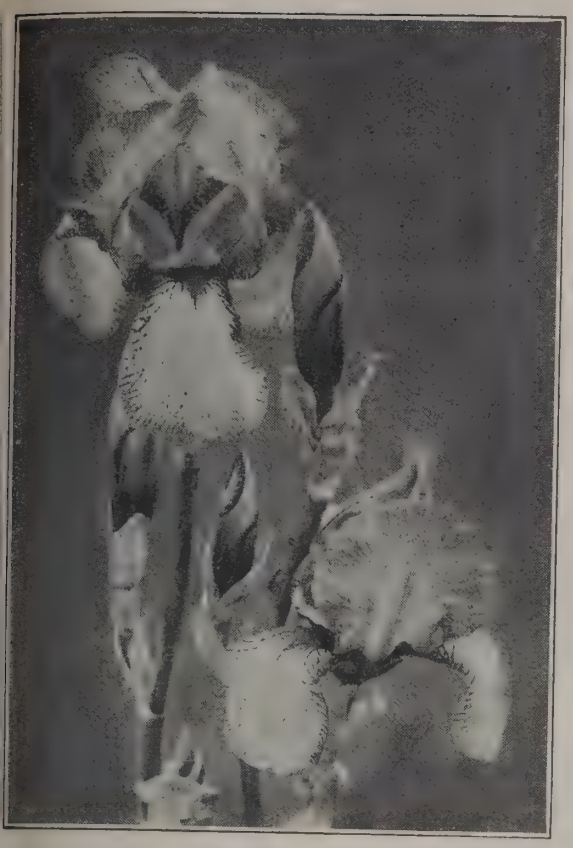
The number of new June-flowerin is increasing rapidly every year, an thusiasm for raising new varieties coming almost as great here as it U.S.A., where there are literally hun keen Iris breeders.

Until recently the raising of new Iris seedlings was in the hands of or hybridists, of whom A. J. Bliss, Geo Sir Arthur Hort, and the late W. R are most widely known by their pro But since the war and the foundin Iris Society this intriguing and fa work is becoming even more popular general superiority of the varieties this country over all others bids fa maintained in the future. Notwith this we must not lose sight of the fa great number of magnificent variet been raised by our friends in Fran is of two beautiful new French Iris am now writing.

The first of these, Germaine Perth I feel sure, become as popular and l as generally all over the world as the ful Iris Alcazar, which was distrib Vilmorin as long ago as 1910 and sti a position in the first flight. Perthuis was raised by M. Millet, o la-Reine, and sent out in 1925, and ceedingly vigorous plant with tall b spikes 3½ feet to 4 feet high. The the flowers is superb, an intense viol self, and the whole flower is lit u prominent buttercup-yellow beard. will never fail to attract the eye in den because of the striking contras brilliant beard on the smooth, richly fall. The whole flower has a w velvety appearance and is deliciously A great Iris and a worthy descen Souvenir de Mme. Gaudichau, one parents.

The second French Iris, which ha impressed me this June is of very character to Germaine Perthuis, and tially a woman's flower. This is which I saw in Monsieur Cayeux's few weeks ago. Ophelia is not ve about 2½ feet—but the flower is o form and great refinement. The indescribably charming and subtl licious medley of warm orange, mauve, and bronze tints lit up wit orange beard. Ophelia needs to b beside rich intense colours which will the delicate colouring of the flowers glorious Iris for indoor decoration a for garden effect, and I am sure women who see Ophelia for the first fall in love with it at once as I did.

OLIVE MU



Mercedes
Pink standards and purple striped falls

Sir Michael
Remarkable for the rich colouring of the dark purple falls

Morning Splendour
rightly coloured but most promising. Standards violet-red, falls rich and of deeper hue

George Yeld
Strong growing, free flowering, tall and handsome, full of promise for garden effect

GLORIOUS IRISES OF JUNE

Four outstanding varieties shown before the Royal Horticultural Society on June 15th and 16th

REMINDERS FOR THE WEEK

Southern and Midland

Celery

The main batch of Celery should now be in a fit condition for the trenches, which should have been previously prepared. Before planting out the seedlings the roots should have a thorough soaking. All side shoots and small leaves should be removed. Celery requires ample supplies of water during dry weather, and the foliage should be constantly dusted with old soot to ward off the Celery-fly. Celeriac should also be planted out on rich soil in rows 18 inches apart, allowing 1 foot between the plants.

Turnips

A further sowing of Turnips should also be made about this date. Model or Yellow Globe are suitable varieties for the purpose. Thin the plants when large enough to handle and keep the surface soil loose by constant hoeing.

Runner and Dwarf Beans

A sowing made of both these useful Beans will form a succession to the earlier crops. If the soil is dry it is wise to soak the trenches previous to sowing, and if the seeds are soaked overnight they will germinate several days sooner.

Dahlias

The plants are now making headway, so the main stakes should be got into position without delay. Where growth is extra thick it is advisable to thin out the weakest shoots. After stirring the soil with the hoe apply a top-dressing of decayed manure or half-rotted leaf-mould. Wakeley's Hop manure is excellent for the purpose.

Roses

There is much to do amongst the plants if the best blooms are to be obtained. Some varieties require disbudding. A careful survey should be given to see if Briar suckers are shooting out, and these should be pulled out at once and not cut off. Green-fly and other insects must be checked by constant spraying with some insecticide. Mildew can be checked by liver of sulphur.

Rock garden

During spring and early summer this part of the garden usually gets the best of attention as many plants are in their glory. Ro es, Sweet Peas, and Carnations come first at the present time. Many alpines may be raised from seed sown now and cuttings taken.

Apricots

The roots of these trees soon become dry when growing on borders beneath south walls, so should receive ample supplies of water. The weakest shoots should be removed. Where the foliage is covering the fruit it should be tied back to allow all available sun to reach the fruit.

Plums

The Plum crop is above average for the last few years, and some trees are carrying large crops. To prevent the overtaxing of the trees and to obtain a good sample drastic thinning should be resorted to. A few props placed under the branches of standards will prevent a good deal of damage to the trees.

Summer pruning fruit trees

This is an important item in the culture of bush, pyramid, and cordon trees during the next week or two. This should be done. All leading shoots or those required for extension should only have the tops pinched, but all side shoots should be cut back to six leaves from the base of the new growth.

Winter flowering Carnations

The final potting of these plants, where not already done, should take place without delay. Do not cover the balls of roots too deeply, as this is often the cause of stem rot. Keep the plants growing in an open position out of doors.

Clivias

These plants should be given every encouragement to build up strong growth for the coming season's flowers. Plants that are well established should be liberally fed with liquid-manure. Ample supplies of water are also necessary at this season and the atmosphere of the house kept moist. When growth has been completed less water is needed and a drier atmosphere to ripen off the growth.

Stocks

Seeds of East Lothian and other winter-flowering varieties should be sown in pans of gritty soil and stood in a shady frame until germinated. When large enough for handling they should be pricked off into small pots and grown on as cool as possible.

W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Kitchen garden

If plenty of Broad Beans has been sown, and if there is likely to be a demand for young pods late in the season, one of the earlier-sown lines may be cut over almost to the ground-level. The plants will break away strongly, and the young growths will provide pods quite late. Do not cut Asparagus after other vegetables begin to turn in except, perhaps, a stray dish for a special occasion. I believe that were Asparagus treated more generously after cutting ceases, and throughout its season of growth, results would be better than in cases in which the feeding is done during winter and spring. Sow plenty of French Beans. Those who desire to have plenty of pods for bottling or for pickling for winter use ought to put out a few lines of Veitch's Climbing French Bean, a most prolific variety which is full of quality. Saladings must not be overlooked, and the main planting of Brassicas of all kinds ought to be pushed forward. If clubbing is known, or suspected, to be present in the garden it is advisable to puddle the roots in a mixture of soil, soot, and lime to which a wineglassful of paraffin has been added. Keep the flat hoe at work whether there be weeds in evidence or not.

Biennials

If the main sowing of biennials has not already been made it is now time that the seeds were sown. Many delay sowing until the season is too far advanced, and good results cannot fairly be expected. Seeds of Wallflowers, Cheiranthus Allioni, Sweet Williams, Myosotis, Canterbury Bells, Foxgloves, Polyanthi, and similar things will now germinate very rapidly, and the seedlings should be transferred to nursery beds as soon as they can be handled.

Summer planting

Beds and borders ought, by this time, to be furnished with their summer occupants. There is, generally, a surplus left, and such plants should either be put in a reserve bed to make good possible casualties or they can be planted in bare spaces in the he borders, where they will add to th ness of the hardy plants. Boxes such plants were grown ought to be dried, and returned to store after hav repaired.

Gladioli

Under whatever name, these flowers can now be planted fror There are fine things in the pi family, and these are very useful foi The hybrid forms, too, should be fr —among these Baron Hulot, althoug not be everyone's colour. Yet in a n the variety is effective and seldom attract attention. As plants from bo at planting, be nearly 12 inches i staking should be done immedia further planting of dormant corms made, putting each at a depth of 4 in is of advantage if a handful of sharp be laid below and round each corm ing goes forward.

Strawberry beds

Mulching with straw, grass, o should be timeously done, and the r be put in position before birds acqui for the softening fruit. If runners to be needed in autumn a line or tw desired varieties may be denuded o and permitted to extend. Those wh batch of Strawberries in pots will, be able to secure as many runners quired from the forced plants after th been planted out.

Staking

The old adage concerning the stitc is well exemplified in respect of plants. At this season growth is r tall plants must, by some means, secure against the effects of wind an There is an art in tying, which ou done loosely yet securely. Nothi more uncraftsmanlike than slo plants or those which have been together until they resemble Birch No one ought to grudge the time taken up by staking and tying, so lo work is neatly done.

Plant houses

The inside men have their hands present time, when the sun is bri plants dry rapidly. The best method is to do the bulk of the watering in noon and to supplement this wit round first thing in the morning. must sometimes be done, the pl watered in the morning and afterw to their own devices for 24 hours, it that they must suffer during hot nig telligent shading, *plus* plenty of vi will assist in lightening the heavy watering during hot weather.

Fruit houses

The work in fruit-houses is, moment, routine. Care must be t inside borders are not permitted t dry. When early Grapes begin to little ventilation should be left contu the apex of the house, increasing th as the season goes on. Keep the s hose at work in the Peach-houses fruits begin to take the final swell precedes ripening. If red-spider footing in a Peach-house it is not cult to dislodge, but the flavour of will suffer. At this season it is a possible to over-ventilate Peach-h orchard-houses.

W. McC

Mabie Gardens, Kirkcudbrightshi

The water garden

ate years considerable attention has 1 paid to beautifying the waterside 1 plants conspicuous for their flowers their foliage, and many charming ıave been attained where the water have been laid out with thoughtful l taste. Nothing is so good for float- :he water as Marliac's hardy Water Of these there are numerous varie- v in commerce, of which the three tinct are Nymphæa Marliacea albida st white), N. M. chromatella (a g pale yellow), and N. M. gloriosa mine-red). There are many others nediate tints which are pretty, and ller-flowered forms of N. Laydekeri ctive. The Water Crowfoot (Ranun- oribundus), Villarsia nymphæoides ow Buckbean), and Pontederia cor- th its blue blooms, are all pretty ants. For the shallow margin of lake, Arum Lilies (Richardia) form exquisite finish, but, although these times grown in the open as far north and, it is not wise to recommend cept for the south-west of Ireland. e in Cornwall they grow in their s and present a delightful picture in days of June when in full bloom. t Spearwort (Ranunculus Lingua) is me plant for growing in shallow nd produces a quantity of large wers.

mp banks running down to the dge numerous flowering plants are In such a position Primula grows rampantly. The Japanese ata or Kæmpferi also succeeds well waterside, its large, widespread eing very handsome, as does the owered I. sibirica, while the yellow ag of our meadows (I. pseudacorus) variegated form, with their noble ves, are decorative even when out r. Day Lilies, Solomon's Seal, vers (Trollius), the Summer Snow- ucojum æstivum), and Spiræas in ay all be naturalised around pond and such wild flowers as the Marsh yellow and purple Loosestrife ia and Lythrum), and Willow ilobium) grow naturally in a like e Mimulus when established often eely. For fine form we have the G. manicata producing leaves 10 ameter, Rhubarbs, the Butter Bur , the Water Dock (Rumex), and eful Reeds, such as the Giant Reed Donax), the Bulrush (Typha), the Rush (Butomus), Sweet Sedge alamus), with Phragmites, Scirpus, . Golden and Cardinal Willows t be forgotten, as their bright e indispensable for winter effect, Royal Fern (Osmunda) flourishes o well as by the waterside.

ting lake margins care should be to overcrowd the verge. Water n by a barrier of tall and thick- bjects is worse than if its circum- levoid of plants. Things should be grouped, with open spaces here and hat the water may be approached us points and the effect studied ndrance from intervening vegeta-

e hardy white flowers

cate beauty of many of the finest ers and their use in many different cut state are undeniable. Achillea he Pearl is immeasurably superior e, the bloom-stalks being much the individual flowers much finer. increased as readily as the older known variety by root division or cuttings. Neither in nor outdoors can there be found a lovelier flower than the white form of Spiræa palmata. It is not so vigorous as some of the other varieties belonging to this particular group of Spiræas, and when broken up for division may be given a place on a well-prepared nursery border for a season before it is transferred to permanent quarters. Long stalks of the double white Peach-leaved Campanula are always in great request for trumpet vases. Anyone seeing for the first time well-grown individual flowers that have been nipped from the stalk for buttonholes (for which purpose it is admirably adapted), will be struck with their purity of colour and fine substance. It may be increased readily by division, and though by no means difficult to grow, is seen at its best in a deeply-dug, well-pulverised soil. Individual flowers of this much resemble a large pure form of white Stock, and are superior to the latter in point of substance and endurance, although lacking the scent. Nearly the same remarks apply to the white form of Lathyrus latifolius (the Everlasting Pea) as opposed to Sweet Peas. Did anyone, having to furnish plenty of white flowers, ever have too much of this white Everlasting Pea? I fancy not; it is, at any rate, always in request, and one of the things of which it may be said that the demand exceeds the supply. It does not take kindly to a new home, although it grows and flowers freely when well established. Plenty of white flowers was wont to be at hand in the Lily season, when L. candidum was doing well, but of late it has not been easy to show good blooms or clean, healthy foliage. Room may be found on the herbaceous border for one or two of the best white Phloxes, also (if they will be required for cutting) a few double white Pæonies and Pyrethrums, and on the shrubbery border a small batch of Gypsophila paniculata. B.

The moat at Bodiam Castle provides a home for Water Lilies

Bodiam Castle has recently been taken over, under Lord Curzon's will, by the Society for the Preservation of Historic Places

White Cup (Nierembergia rivularis)

This is a delightful creeping plant bearing large white flowers over a long period. It thrives in loamy soil in a low position where it can get moisture during the hot season. In proximity to water the plant usually exhibits the greatest luxuriance.

H. Stevens.

"LONDON GARDENS"

Extracts from the speech broadcast from 2LO by the Rt. Hon. Noel Buxton, M.P., late Minister of Agriculture, on Monday, June 14th

ABOUT 20 years ago some of us considered the formation of a society whose object should be to stimulate the interest of Londoners in flower-growing. A small competition in garden and window-box culture was held in Stepney, and another in Walworth, two of the most congested parts of London, and these met with undoubted success. We decided to form a Guild, which would not only assist in the running of flower-growing competitions in other parts of London, but would collect information helpful to town gardeners, and would also offer advice on the technical side. So the London Gardens Guild was formed. I am pleased to be able to add that the Guild has now grown until it has no fewer than 50 branches and affiliated societies, which cover practically the whole area of Greater London. So powerful and beneficial is the work which it undertakes, that in response to many requests the work is now being extended to some of the provincial cities. Birmingham has already launched an ambitious scheme, and following on the heels of the Birmingham Gardens Guild come appeals for assistance for similar movements in other towns.

This growth of interest in flower-growing is very gratifying, but there are still only too many town dwellers who make little or no attempt to beautify their surroundings by clothing them with flowers. I want to urge on those who have patches of land in front of their houses or windows suitable for window-boxes to go in for gardening. They would afford pleasure not only for themselves, but for the community also. Every plant grown in town means healthier conditions. Plants, as you know, remove bad gases from the air and return to it free oxygen. Flowers, even such simple ones as a few Nasturtiums, which could be raised from seed at the cost of a few pence, would do much to cheer the passer-by, and to create what we all desire—a "Brighter London."

In addition to the question of cultivating neglected gardens the Guild has now another problem to face. This concerns the future of the new housing and cottage estates which are rapidly springing up in the suburban areas of London and other towns. Here are large populations drawn chiefly from the inner boroughs. Many of the tenants find themselves the possessors of a garden for the first time. It may be that they know little or nothing of the art of horticulture. Such an organisation as the London Gardens Guild can be of immense assistance in these new towns. It can help in the formation of a Garden Society, or a branch of the Guild. It can, through this local Society, place at the disposal of amateur gardeners technical advice in the form of leaflets, handbooks, and lectures. In this work the London Gardens Guild has the great advantage of the support and co-operation of the London County Council, which makes grants in aid of local prizes, and facilitates the organisation of Garden Societies. Many other local authorities, both London Boroughs and District Councils, also co-operate. On one large housing estate last year as many as 500 gardens were entered for the local garden competition.

And now let me say a word or two about the Guild plans for this year. The "Daily Express" has generously offered to co-operate with the London Gardens Guild in the Greater London Garden Championships. It has offered to give local prizes to 50 districts through the local Gardens Guild organisation, and also to give bigger prizes to the cultivators of the best gardens in all London. Three prizes of £50 each, with Silver Challenge trophies in each case, are offered for the best front, back, and window-box garden in Greater London. First prize winners in the local c tions can enter for the final All competition. Then the first prize in each locality will be again and the special awards made. Gold and the sum of £10 will be given garden awarded second place in each classes. For this final judging the G already been promised the services of Hay, V.M.H., chief gardener to His the King, and Lord Lambourne, th dent of the Royal Horticultural Soc myself also look forward to assisting final adjudication.

Local Garden Societies and Gui gladly give fuller particulars of the tions, or if a postcard is sent to the Express" Organiser, London Garden 124, Walworth Road, S.E. 17, a folde all particulars, with addresses of t Secretaries, will be sent to you. The entrance fee. Every resident in London can enter.

The entries for the contests close o day, July 3rd, so that there is still you to enter your garden. All you ha is to fill in a form. The local Soc arrange for a judge to inspect your or box.

If you should be fortunate enough the first prize in your locality your will be visited again, and you may t the All London first prize. In any e stand a good chance of winning on local prizes, which are offered by the Guild branches and affiliated Societie operation with the London County the London Gardens Guild, and the Express."

Please remember the address of t petition Organiser, which is "The Gardens Guild," 124, Walworth S.E. 17.

FEEDING CHRYSANTHEMUMS

BECAUSE the growth of this favoured autumn flower can be made in a few months with huge foliage by the free use of stimulants it may not be advisable. I think this altogether wrong and not by any means good cultivation. Big leaves and stems may be taking to the eye, but they are quite delusive when referring to the bloom. Characteristics of over-fed plants are hollow stems, really undeveloped if large, and the foliage soft too, a state which cannot perfect satisfactory flowers.

One is so certain that the desire to produce giant blooms pretty often leads to over-generous treatment that in my own case no manures of any kind are mixed with the soil for potting. Loam, the best procurable, mortar-rubble, or burnt earth to keep it open, and leaf-mould in the younger stages are simplicity itself in the way of compost. Press firmly, grow the plant perfectly, and build up a solid stem which ripens as it grows. There comes a time, however, when the soil is so filled with roots that these want assistance, otherwise the growth becomes cramped—starved-looking—and this is the time to think of stimulants. It may be when the plants are in small pots, when repotting gets delayed through some cause. But generally, the period is from the filling of the pots with roots in which the plants are intended to bloom, and this would be from July onwards.

What is found a good stimulant for the subject in question? Growers have their fancies in this direction, yet if a favoured one were named I should choose the natural liquid from the heap of manure to be found in the cow-keeper's yard, and means would be taken to secure such after a downpour of rain. Where liquid has to be made, as it were, commend me to that from cows and chickens mixed. Put this in a tub together and employ the clear in such weakly form as just to colour the water given to the plants. Soot-water, again, may be depended upon to keep the foliage in healthy colour while not forcing it unduly. This must be clear, and can readily be made so by placing a bag of it in water—then there is no trouble with the sediment. Here, too, we just colour the water employed in the daily round.

There are conditions when it is better to withhold liquid-manures; that is, in dull, showery weather. The elements then have a tendency to produce soft wood, therefore it would be unwise to induce this by our own action. It is during spells of hot weather when the need of stimulants comes in. Some cultivators are so placed that manures in liquid form are difficult to obtain, but an alternative course is to use one of the compounds sold in tins or bags. The grower who can have liquid would do well to give an occasional change with such as indicated, particularly towards autumn when th buds are swelling. Bone-meal as dressing can also be commended as effective.

One can only treat the stimula Chrysanthemums in a general way knowing the state of particular plan item, however, is that there must b in the way of roots to feed on, then aid good culture. At times there are varieties that seem to resent anythin shape of stimulants; these furnish th flowers on thin wire-like stems prod parently at starvation point. Norma is a variety good in the way of illu Well grown the bloom is excellent and the maroon colour exceptional. pot, poor soil, and little feeding wil such. Mrs. G. Drabble is another. markable white is often badly done of too generous diet and a season o not long enough. Let it go along in way, give it time and it will build u of wonderful proportions. Stimulan are given to keep the growth going virtues of the potting soil have becom and not to make the plants of gigan for it does not follow that the blossom be proportionately huge. When ov however, these will be faulty in shap easy prey to decay.

London has many little gardens—many more than a casual observer would think

This little corner garden, hemmed in on all sides, only gets sun through an aperture between two end houses.

A dignified back garden, with well kept lawn, in Canonbury.

This very small front garden in a crowded street has encouraged other residents to cultivate their gardens.

So small that it had to be photographed from the window. The creeper clad walls give a delightful setting.

An example of undaunted effort. This garden contains a fine Mulberry tree.

All of the plants in this bright garden were grown by their owner from seeds and cuttings raised in the small greenhouse.

ove views are all prize gardens on the Northampton Estates, Canonbury, London, N. 1. The flowers seen in the illustrations e: Fuchsias, Pelargoniums and Calceolarias in pots and planted out, Chrysanthemum maximum, Stocks, Violas, Sweet Peas, Creeping Jenny, Lilium auratum, Dahlias, and edgings of Alyssum

Soot as Manure

WITHOUT doubt soot is an excellent fertiliser, and one, moreover, that is often, even now, not fully appreciated. I think all lovers of a garden should secure a supply of soot whenever it is possible to do so. It must be borne in mind that it must be kept dry, therefore a bin or large cask or box placed in a dry, covered shed should be used for its storage until required for use. It may with benefit be applied to all kinds of land, light as well as heavy, and there is hardly a crop cultivated in the garden to which it may not be applied occasionally with advantage. Amongst kitchen garden crops it is especially valuable in the case of the Onion. This crop is frequently attacked by the maggot, which, if not checked, soon commits sad ravages, and the best remedy is a good dressing of soot. As, however, prevention is better than cure, the land intended for this crop should in almost all cases have a good dressing of this material shortly before the seed is sown, in addition to any other manure which may have been given during the preceding winter. Nearly all plants of the Brassica (Cabbage) tribe are liable to be attacked by what is known as the "club," which frequently proves very troublesome, and the best known preventive of this is called puddling the roots of the plants—an operation easily performed by merely making a hole in the soil near to where the plantation is intended to stand. In this hole place a portion of fresh soot, and to this add a little fine soil and water, and mix up until it acquires the consistency of thick paint, and into this mixture dip the roots of the plants before planting them. Seed-beds of the various kinds of Cabbages, Lettuces, Radishes, etc., when the seed is just about to germinate are very apt to be attacked by birds of various kinds, and this may sometimes be prevented by giving the surface of the beds an occasional slight dressing of fresh soot, the odour of which the birds do not by any means relish. A slight dusting of this material round newly-planted Lettuces and other plants will also go far to keep slugs and snails from attacking them, which they are apt to do before the plants have recovered from the effects of transplantation.

Lawns and grass belts in the pleasure grounds may also frequently be much improved by the application of soot or a mixture of soot, wood-ashes, and fine soil. This appears to have the effect of encouraging the growth of the finer sorts of grasses, and, as it were, assist them to overcome and to finally extirpate the coarser kinds, together with weeds and Moss. Soot-water is found to be exceedingly beneficial to many plants under glass, either when grown in pots or planted out. It drives worms from the soil, and repeated applications soon show their effect in the increased vigour and healthy appearance of the plants. Its effect upon the Grape Vine, too, when applied in the form of a dressing to the surface of the border, whether inside or outside, is soon apparent. The soot is gradually conveyed to the feeding roots by the action of rain or the repeated applications of water, and the texture and colour of the foliage soon show the good results derived therefrom. Strawberry plants in pots may also be greatly benefited by repeated applications of soot-water, which have the effect of driving earthworms and insects from the soil as well as acting as a fertiliser. Indeed, there are few, if any, plants grown in pots which may not be more or less benefited by its occasional application, and I have never known plants to be injured by it except when given in too strong a state or when thick, so be sure and use it clear and quite free from sediment, and then it is of the greatest value. There are, no doubt, many other purposes to which soot may be usefully applied, but enough has been said to prove its value in the garden. S. M.

Destruction of slugs

The slug pest is as serious as ever this year, and we continue to receive many letters from readers on the subject. Owing to serious damage being done to Yorkshire crops last year the Agricultural Department of the University of Leeds undertook to investigate the best methods of dealing with the destruction of this pest, and the following experiments will be followed up with keen interest by readers.

Tests carried out were designed to discover the best substance or mixture of substances that would not only kill slugs, but which would not injure growing crops, and it was decided to commence the tests with preliminary trials. These were carried out on a laboratory scale, which reproduced field conditions as closely as possible, upon which various substances were applied. After very exhaustive tests being made it was found that a combination of copper sulphate and kainit in the proportion of 1 to 20, *i.e.*, 5 lbs. of copper sulphate to 1 cwt. of kainit, appeared to be the most deadly, and field trials were accordingly carried out with this particular mixture.

Trial plots of every size and of different crops were prepared with the mixture referred to, and the results definitely confirmed the laboratory tests previously made. The mixture was applied late at night after slugs had made their appearance, and in every case on the following morning those slugs which were not dead were found to be in a dying condition and finally succumbed.

Readers should note that it is essential that the solution be applied to the ground late in the evening after the slugs have appeared on the surface, so that the mixture comes into contact with the back of the animal's body. It was definitely discovered that when spraying was done earlier in the evening the slug was able to exude its protective slime and crawl away easily.

Throughout the tests no harm was done to the crops, and it was found that copper sulphate is undoubtedly the best medium that can be applied as a slug destroyer. Definite recommendations have been made upon these trials by the University in their report No. 143 on the subject.

Those readers who are interested in the subject can obtain full particulars as to the uses of copper sulphate as a slug destroyer through either the British Sulphate of Copper Association, Victoria Station House, London, S.W. 1, or from the Agricultural Adviser of the Association in their district.

Sowing and thinning

Year by year is the advice given not to sow seeds too thickly, and though to some extent it may be followed, it is none the less certain that at this time of the year there is need of further remarks on the judicious thinning of both vegetable and flower crops. With both these the object of removing part of the seedlings is the same—namely, the removal of a portion of the plants so that those remaining may have room to develop thoroughly and grow sturdily. The season to perform the operation depends on the growth and nature of the plants, but if possible in showery weather, as the removal of a portion of the seedlings naturally disturbs the roots of those remaining, and a shower following settles the soil about them, and they, in consequence, suffer considerably less than under the influence of parching sunshine.

One of the secrets, if so it can be both with flowers and vegetables, is early, because if a whole mass of tiny is left to eke out an existence as can, one naturally becomes the enem neighbour, and mutually robbing eac of the sustenance required for thei being the whole suffer in consequenc fear of attacks from insect pests ofter growers from thinning vegetables enough, and as in this respect it is a to use discretion, the operation should formed gradually, removing a few superfluous plants as soon as they ar enough to handle, and then going ov again at a later stage of their growth.

Taking vegetables, for instance, it cult to lay down any hard-and-fast r guidance as to the proper distance a thin the various crops, as varieties, so localities vary so much that what w advisable in one case would be hardl another. As a guide, however, for th versed in this operation, Onions r thinned from 3 inches to 6 inches ap cording to the variety. Short-horned usually grow well at a distance of inches from each other, while the larg should be allowed 10 inches. Leeks thinned to about 8 inches, and Beet t the same distance. Turnips want a sp inches to 10 inches, and Spinach inches. Dwarf French Beans shoul foot apart, as they make branching and Runners about 6 inches. Many fail with the climbing French Bean o the fact that they grow it too thickly.

In case of flowers of the annual may be said that generally they sh thinned to about 3 inches or 4 inches that is, of course, where they are s patches. Some will not require q much room, while others of a stronge ing character want a little more. T of not thinning are easily discern almost before the seedlings have started into permanent growth the ste either be twisted round each other or so closely that it is impossible for t develop.

Three good summer Lettu

Where a steady supply of Lettuces maintained it is often difficult, durin of hot, dry weather, to do this, man ties that are excellent under cool conditions simply running to seed hearting. After trying numerous so Cos and Cabbage, I have now di three varieties that remain in conditi considerable time even under very u able conditions. These are Carter's Standard, Henderson's New York Gi Webb's Wonderful. They are all "Cabbage" type and of excelle quality. Holborn Standard is excel earliest sowing, but equally fine all the season. It grows to a fair size, th blanching to a nice creamy colour, t quality first-rate. New York Giant very white and is as crisp and tend well-grown Cos. It attains a large s for all that, is never coarse. Webb's ful also grows to a good size and is als when blanched and of fine flavour, th crisp and tender. All three are well place in any garden where first-rate l are appreciated. C. I

Preston Gardens, Linlithgow.

Cucumbers

All superfluous growth should be r and the shoots regulated. Keep the f when of a suitable size for usin plants must be regularly syringed spider will put in an appearance. atmosphere should be maintained, a dress the bed when necessary.

FERNS

Seedling Ferns

OUGH Fern spores may be sown will germinate at any time, yet the g is undoubtedly the best season for edlings, as there is then less risk of young plants from damping off the seed-pots, besides which they to get well established before the winter. The fast-growing Pterises, h are required in various sizes t the year, may be sown at inter- ling to requirements; but it is only large quantities are required that necessary to make more than two wings during the year, as the same ll generally give successive batches s.

ed in raising Fern spores it is of portance that the spores should be t the proper time, for Ferns are other plants in respect to shedding s as soon as ripened. Even with he most prolific Ferns, it is only ertile fronds are taken at the right at really good crops can be secured. es collected in the autumn are more reliable than those taken winter or early spring. In collect- of the slow-growing and choice ust be careful that the plants from are taken have not been growing roximity to such as Nephrodium is tremula, and P. cretica.

THE SPORES.—Before preparing s for sowing spores the soil should bly cleansed from worms and other Many growers go to some trouble g a mixed compost, but this is essary. Some good loam pressed the pots, with a sprinkling of ss, and charcoal over the surface fficient. The crocks and charcoal pounded up fine. If the pots are l before the spores are sown, very ing will be necessary, and in no d the surface be watered. The ed not occupy valuable space. If h glass they may stand under the ided light and warmth are suffi- hough they should not be exposed t rays of the sun, it is quite neces- e them daylight. In sowing the s better to sow thinly, for over- s frequently the cause of failure. lt to lay down any rule with re- ving, for in some instances where r to be good spores are very abun- results are obtained, while with h produce spores sparingly there lty in getting a good crop of seed- e the two Onychiums. From O. hich produces spores, or what ap- good spores in great abundance, it t a good batch of seedlings, while icum the spores are, apparently, , yet there is no difficulty in get- gs.

esting to note the various colours l in spores from different species. diantums; those of A. scutum are orange-yellow, while those of A. e almost black. Those of Lygo- tomum are of a deep yellow, and lens of a lighter shade of yellow. s of Pteris argyrea are quite black, of P. serrulata are nut-brown. a palustris the matured spores are olour. In the Gymnogrammas gold) the spores are nearly black, ed with the gold or silver powder, may be.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FRUIT

Caterpillars on Pear trees

Kindly tell me the name of caterpillar I found on a Pear tree. The tiny creature has done a great deal of harm. Would it be good to spray with an insecticide? A. F. S.

[The specimen you sent is the caterpillar of one of the Tortrix moths. There is quite a number of species of Tortrix moths, the caterpillars of which feed on the foliage of various fruit trees. The pests are not easy to control because they have a habit of spinning several leaves together and feeding between them. It is, of course, difficult to get the spray fluid to reach them. The spray you mention is a good one, and we should advise you to try it, but we consider it would have been much more effective if used earlier in the season. You must remember that the insecticide is a contact wash, and that it is therefore necessary to hit the caterpillars with the spray fluid. If the spraying is well done you should get a good measure of control. Grease-banding is useless against Tortrix moths because the females are fully winged and can fly anywhere.]

Black Currant trouble

(Anon).—We have carefully examined the Black Currant leaves and fail to find any disease present. You should have sent us some of the wood from which the leaves are falling. There are signs on the leaves that aphis (green-fly) has been present, and we are inclined to think that this has been the cause of the trouble. The aphis feeds by piercing the foliage and sucking out the plant sap. If the attack is severe it often causes loss of foliage. On the other hand, you may have used your Abol insecticide too strong. Aphis on Black Currants is a common experience this season, and much damage is reported. Spraying with a good insecticide early in the season before the aphides get too numerous is the best method of control. Some growers are reporting good results from the winter spraying of Black Currants with a miscible tar oil wash. If your young growths show any sign of losing their leaves send us some more specimens, but let us have a whole shoot.

Peaches failing

(Thomas).—Your Peaches are failing, owing to the fact that the drainage is "not too good," while another reason may be that the flowers have set badly. If the young wood fails to ripen well then the trees are sure to suffer, as badly-ripened wood cannot give good results. Your best plan would be to lift the trees in the coming autumn, see to the drainage, and incorporate plenty of old lime-rubble as the work is being done. The fruit you sent had a split stone.

VEGETABLES

Fasciation in Cucumber

(New Reader).—The growing point of the Cucumber plant which you sent us was a very good specimen of fasciation. Instead of the stem being of the normal shape it has become very much flattened. A good deal of research work has been done on the subject of fasciation, especially in America, but little has been discovered concerning it. It has been proved that injury to the growing point will sometimes cause fasciation; certain caterpillars, for example, by feeding in the growing points of some plants are often responsible for the damage. When this is the cause the taking away of the part affected is a certain cure. At other times fasciation appears to be due to some internal factor which upsets the balance of the plant, with the result that these flattened stems appear in place of the normal ones. Many plants besides Cucumbers are affected. We have seen fasciation in Tomato, Asparagus, Chrysanthemum, and Delphinium. Unless you are very anxious to try and save your plants we should advise you to pull up the plants and replace with some new ones. If you would like to try treatment on the plants and are correct in saying that the trouble did not appear until the plants reached 2 feet to 3 feet in height you could try cutting out the parts affected and endeavour to obtain a lateral from below and train it up as a new leader. The beetles you sent in the match-box are popularly called "soldiers and sailors." They are a species of Telephorus, and we believe the larvæ of the one you send feed on a Polygonum.

Potato leaf curl

Could you tell me what is wrong with these Potatoes? When they appear through the ground they come into flower and do not grow any more. JOHN BRUCE.

[Your Potatoes are affected with Potato leaf curl. This is one of the so-called "virus diseases," a section of diseases over which we have very little control. Leaf curl is spread from an infected plant to healthy ones by aphides (green-flies or plant lice) feeding on the infected plants and then moving on to a healthy one. The aphids act as carriers of the disease. When a plant becomes infected, if it produces any tubers they become infected too, and if such tubers are used as "seed" the following year they act like the plant you sent to us. The disease is often spread by allowing aphis to be present in the boxes of sprouting seed Potatoes. We should advise you to take up and burn all the affected tubers to prevent the spread of the trouble as much as possible. It is not advisable to use any of the crop for planting next season. Practise a good rotation of crops and change your strain of Potatoes whenever you see signs of leaf curl present. A good deal of leaf curl is spread by means of "self-sets," that is, tubers left in the soil from a previous crop. If any of these "self-sets" are diseased it spreads very quickly to a new lot of Potatoes, although the latter may have been perfectly healthy when planted. The old set remaining very hard like the one you sent is a feature of certain forms of leaf curl.]

FLOWER GARDEN

Darwin and Cottage Tulips

Can you help me with the names of some good Darwin and Cottage Tulips? I am growing the following at present, but want some fresh varieties:—Clara Butt, Mrs. Moon, Pride of Haarlem, Europe, Picotee, Edwell, Suzan, Rev. H. Ewbank, Margaret, Zulu, Moonlight, Inglescombe Scarlet, and Inglescombe Yellow. I have not been to any Tulip shows of recent years, and catalogue descriptions are too vague to go by.

Somerset. L. B. W.

[We suggest the following:—

DARWIN TULIPS.—Dream, heliotrope and silver; Farncombe Sanders, cardinal red; Glow, vermilion-scarlet; King Harold, blood-red, violet centre; Loveliness, bright rose; Massachusetts, rich Solferino rose; Nora Ware, heliotrope and rose; Princess Juliana, carmine, centre azure blue; Prof. Francis Darwin, glowing cerise; Remembrance, dark heliotrope; Rev. H. Ewbank, heliotrope and dove-grey; Tak van Poortvliet, salmon-rose; Orion, brilliant dark scarlet; Sweet Lavender, soft lavender; Ronald Gunn, purple-plum.

COTTAGE TULIPS.—Blushing Bride, creamy-white and pink; Golden Bronze, glossy golden-bronze; Illuminator, canary-yellow, scarlet edge; Inglescombe Pink; Gesneriana spathulata major, blood-crimson; Moonlight, delicate primrose; Orange King, orange-scarlet; Walter T. Ware, rich deep gold; Velvet King, violet-purple; Retroflexa superba, canary-yellow; La Tulipe noire, black, fine; Psyche, soft rose, an immense flower.]

Cobæa scandens as a balcony climber

(C.).—Yes; this is an excellent plant for the decoration of balconies, or for training round window-sills or for porches. It grows rapidly, and flowers freely in warm weather, and a little cold does not injure it. Cuttings of it put in now and kept in gentle heat for a time will root readily, and make good plants for turning out-of-doors during July. The plants should, of course, be well hardened off previously to being exposed, and if planted in well-drained, rich, sandy soil they succeed well, even in London.

Felicia rotundifolia

(A. B. D.).—This is often known as Aster. We cannot find the variety F. rotundifolia in any book of reference we have. They come from the Cape, have branching stems, narrow alternate leaves, and flower-heads with usually white or blue rays. One of the species, F. tenella is grown as an annual under the name of Aster tenellus.

Plant to name

(Subscriber, Dundalk).—The plant sent for identification is Drimys Winteri, or Winter's Bark. This is the plant under discussion in correspondence columns, see issue June 19th, page 355. The flowers of it, borne on long stalks in clusters, are pale yellow with green carpels. Hitherto Drimys has been placed in the Natural Order Magnoliaceæ, though we hear that it is to have an order of its own named Winteraceæ. Drimys Winteri is the Winter's Bark, native of South America, from Tierra del Fuego to north of the Equator. Its bitter aromatic bark, known since 1578, was brought home by Capt. Winter (after whom it was named) in one of Drake's ships from the Magellan Straits. It was not until 1827 that it was introduced as a living plant. Although grown under glass at Kew, it appears to be fairly hardy. In Kent and Sussex it has stood the last few winters with impunity, and, as "T. M." points out (issue June 19th), the specimen in Argyle is at present covered with creamy-white panicles and is an attractive sight.

Drimys Winteri, now flowering outside in a West of Scotland garden

GREENHOUSE

Manure for Chrysanthemums

Would you kindly let me know what liquid substitute I can use for alternating with soot-water for my indoor Chrysanthemums? I cannot get cow manure to make manure-water and should be grateful if you would inform me what I could use instead. R. C.

[Bone-meal, which may be purchased from most horticultural sundriesmen, if sprinkled on the surface of the soil in the pots would be a capital fertiliser; or, indeed, any one of the well-known artificials advertised in these pages. The sweepings from the chicken-run are used by some growers by placing them in a bag and then in water, using the liquid in a weak sta however, like soot, is of a hot, nature and requires caution. Mix cow manure (in your case difficult to obtain about as good a stimulant fo anthemums as can be named.]

Pruning climbing Roses in gree

When is the best time to prune Roses in a greenhouse?

[The best time for pruning depen variety. If this be a once-flowering Maréchal Niel or Fortune's Yellow immediately after the blooms are ov well back to induce fresh shoots for ing another year. If, on the other variety is more or less perpetual-fl then prune in mid-winter, and in let the pruning be more in the n taking out worn-out branches than back, except to remove the unripen of the longer growths.]

MISCELLANEOUS

Cut worms

(T., Oxford).—The term is comm in America to mean any larva or c which eats or cuts away the young Cabbages, Corn, and Beans. The cut worms are species of Agrotis a related genera.

Making a moraine garden

(A. T. Hearne).—The scree garde always, if possible, be made slightl slope, and not dead level, so that t can percolate through, but not lie on soil should be excavated to a dep inches to 2 feet, and the bottom fi some large and small stones to ens drainage. Over this can be placed a dead leaves and then filled up with mixture, which should consist of t fairly fine, gritty stone and sand, part of leaf-mould or peat. It is vantage to make the top inch or s scree almost pure grit, as this ret moisture and keeps the roots of t cool in the hot weather.

Making a bog garden

(A. T. H.).—The soil should be c the same as for the moraine, and amount of drainage given, then fille almost pure leaf-mould or peat, p the former. It is an advantage if can be made in a position that has partial shade, but not drip from tre is fatal to nearly all plants. If possi ground-up charcoal should be mixed leaf-mould, as the constant moisture to turn the soil sour. Charcoal wil keep the soil sweet.

The white fly (Aleurodes vapora

(John M. Dunn).—Your greenhou have been attacked by the white-fly, very troublesome to get rid of. The killed by XL All White-fly Vapour. insects are on the backs of the lea almost impossible to get rid of in other than fumigation. The plants syringed with advantage with emulsion, Gishurst Compound, water, or any mild insecticide, whi be done frequently so as to keep th check.

Grubs for name

(F.R.H.S., Co. Donegal).—The in have sent in are:—No. 1, larva o Coach Horse (Ocypus oleus); No. 2, a Crane-fly (Leather-jacket) (Tipu No. 3, adult Ocypus oleus; No. 4, c decomposed so badly that it was in to recognise the specimen; No. 5, w

sp.); No. 6, as for No. 4; No. 7, 1, either of a different age or of pecies different from No. 5.

.—The Leather-Jacket is, of course, a est, especially in certain gardens. Leather-jacket or Crane-fly usually ggs on grass or near plants which ty of shelter. They are very fond places. There are two generations ar. Eggs laid in the autumn hatch throughout the winter, pupate in mer, and the flies appear shortly gs are laid by this generation, and summer batch of Leather-jackets. their turn give rise to another win- Keeping down rough grass any- ar a garden is generally a good f control. When Leather-jackets t in the soil a good soil insecticide y reduce their numbers.

RMS.—These are, of course, one of ner's chief pests. They will eat ything and are extremely difficult n a small garden trapping is the s of control. Pieces of Potato nches deep and examined once a good results.

.—The larva and adult Devil's rse are both good friends to the Their food consists of other soil ., they are very fond of wireworm. opened your box containing No. 3 en appeared very hungry, so we on the desk and held out your of the wireworms); this it took fingers and ran behind a book to female Ocypus oleus lays her eggs . These eggs hatch in about a larvæ feed throughout the winter spring. When fully fed they the soil. Your No. 1 was a fully- It has now pupated. The pupa three weeks to a month. The for more than one season. If you some more specimens of Nos. 4 will try and name them for you. r three of each and pack them in a er box with a little more soil.

SHORT REPLIES

.—The only thing you can do is to in a cool place, and if you find ow in coming into bloom give the mewhat warmer place.

effery.—See reply to H. King in f June 12th, p. 362, col. 1.

our Apple trees have been at- aphides. The only thing you can ringe the trees well with Gishurst Katakilla, or paraffin emulsion, h can be obtained from any horti- ndriesman.

AMES OF PLANTS

ublin.— 1, Cytisus Andreanus; 2, 3, Viola not recognised; 4, Viola n; 5, Dianthus seedling form; 6, ndersoni Coquette.

ckyer.—Rose, pink Damask.

A. N. R., Oxford.—Cratægus

artwright.—1, Veronica Chamæ- sperula odorata (Woodruff); 3, sanguineum; 4, Geranium

D.—1, Pernettya mucronata; 2, leata.

ypericum sp.. Should like to see nch.

ALOGUES RECEIVED

rdie, 6, Waterloo Street, Glasgow, ives and appliances.

Bros., Ltd., Norwich.—Summer nts.

ther and Son, 63, Long Acre, Vatering hoses and appliances.

Royal Horticultural Society's Amateur Show

June 22nd

It was a happy thought on the part of the Royal Horticultural Society to hold an all-amateur exhibition. It gives amateurs an opportunity of showing among themselves and competing in friendly rivalry at a time when they are not overshadowed by extensive trade groups. Among the well-known amateurs who were successful in winning prizes at Vincent Square on the above date special mention should be made of Col. Stephenson Clarke for shrubs; W. B. Cranfield, East Lodge, Enfield, for Ferns; Sir William Lawrence, of Burford, Dorking, for flowering shrubs, herbaceous plants, and Gloriosas; Mr. H. L. Wittern, Oxted, for Roses; Mr. Lionel de Rothschild for Roses and flowering shrubs; and Mrs. Hamilton, Claygate, Surrey, for Delphiniums, in which the varieties Mrs. Townley Parker, Robert Cox, Blue Bird, and Ida Elliott were well represented.

Sweet Peas were freely shown. In the open class for 12 vases the first prize was awarded to Major-General R. C. Mullens, of Colchester, who had particularly fine vases of Powerscourt, Charming, Constance Hinton, Leslie Rundle, The Sultan, and Ruby. The second prize was taken by Mr. F. W. Franks, of Tonbridge, and the third by Sir Randolf Baker. In Division B the prizewinners for six vases of Sweet Peas were Dr. Leggatt, of Harpenden, Mr. J. Randall, of Leamington, and Mr. W. Huffey, of Tonbridge, while in Division C Mr. Randall took first place with three first-rate vases of Constance Hinton, Powerscourt, and Charming.

Apart from the competition classes there were numerous non-competitive exhibits, two of which received gold medals, viz., Orchids and greenhouse plants, shown by Sir Jeremiah Colman, and hardy flowering plants and shrubs sent by Lt.-Col. L. C. R. Messel.

Sir Jeremiah Colman's superb collection included many fine Orchids, as Cattleyas, Odontoglossums, Miltonias, and others of botanical interest. In addition there were many bright red Anthuriums, purple-flowered Saintpaulias, also Columneas and Nepenthes such as are all too seldom seen.

Among the flowering shrubs sent by Lt.-Col. Messel from his garden in Sussex were Tricuspidaria lanceolata, heavily laden with drooping red flowers, Leptospermum Nicholsii, and L. Chapmanii, and a profusion of glorious Magnolias, viz., M. parviflora, M. Watsoni, and M. hypoleuca. With this group were many Primulas, including the new P. Florindæ which gained the First-class Certificate at Chelsea this year.

H. C.

Horticultural Societies' News

Gladiolus Shows

The recent reference to the Gladiolus Show to be held at Burton-on-Trent suggests that some particulars of the prize schedule of the 17th annual exhibition of the American Gladiolus Society may be of interest to readers who cultivate these flowers. It contains no less than 245 classes, divided up as follows:—

Section "A," open to all members of the A.G.S., has 67 classes for the large-flowered varieties, 12 classes for Primulinus grandiflorus, which is described as "the ideal in this type, combining the size and dignity of the exhibition type with the gracefulness and beauty of the Primulinus type," and 11 classes for Primulinus type which "shall be of distinctive, hooded bloom, with slender stems as characteristic of the Primulinus type or species." Four classes for seedlings and nine special classes complete this section.

Section "B," comprising 16 classes, is for collections and specific varieties of various originators.

Section "C" is the amateur section, and comprises 15 classes for large-flowered, 12 for Primulinus grandiflorus, and 11 for Primulinus type. The remaining classes are for baskets, etc.

The schedule also contains a short colour classification which exhibitors are asked to consult, evidently to prevent the same variety being placed in more than one colour class. If my recollection serves me, last year Purple Glory was so entered. One paragraph reads, "Any given variety might possibly go into either of two classes; if in doubt ask attendant at the colour classification stand."

The following may also be noted:—

"Greens and blues are omitted, as we have no specimens which can truly be placed in these families."

The Iris Society

A Dykes Memorial Medal and an All-Iris Show

A meeting of the Iris Society of England was held at the Grosvenor Hotel on Wednesday evening, June 16th. The President, Mr. Pilkington, was in the chair.

A motion supported by Sir William Lawrence, Bart., Mr. G. P. Baker, Mr. George Yeld, and others, that a Dykes Memorial Fund should be instituted by the Society for the purpose of commemorating the great work carried out by Mr. Dykes on behalf of the genus Iris, met with unanimous approval. A medal was suggested, but the details were left for further discussion at the next meeting.

Mrs. Dykes was elected a Life Honorary Member as a small but genuine expression of the gratitude of the Society towards one whose name will rank with that of Sir Michael Foster, as having had a most potent influence on the cultivation of the genus in his generation, whose knowledge of it was unfathomable, and whose enthusiasm was unbounded.

Certain points regarding the method of conducting the Iris trials now taking place at Wisley were then discussed. It was resolved that, in addition to the periodical inspection made by the Joint Committee of the Royal Horticultural Society and Iris Society, a general meeting of the Society should be arranged to take place at Wisley during the flowering season. Several members who had recently visited the trial grounds reported that very successful growth had been made, and that the varieties on trial were looking exceptionally well.

It was also resolved to endeavour to arrange an Iris Show during the first week in June, 1927, to be held at Vincent Square.

In his concluding remarks the President impressed on the meeting that, despite the growth made by the Society since its inception, it was necessary to increase its membership considerably if it is to keep its place as a progressive combination active in the advancement of the genus to which the Society is devoted.

The Grand York Gala and the President's Cup

The exhibition held on June 16th, 17th, and 18th was one of the best on record, and we are glad to note that the City authorities continue their interest in the great annual horticultural function. The President of the

Grand Yorkshire Flower Show and Gala Association, Ltd., Sir E. A. Brotherton, Bt., signalised his year of office by offering for competition a magnificent silver cup, to be awarded to the exhibit which, in the opinion of the judges, was the most meritorious in the whole show. This year the Committee decided to ask Sir Edward himself to decide the award. When that onerous task came to be performed it was noted that two of the major groups had been selected for the final decision. Sir Edward decided after very careful inspection that the two outstanding exhibits of the show were the marvellous Carnations staged by Mr. Carl Engelmann and the equally striking group of Sweet Peas exhibited by Messrs. Bolton and Son. Both these well-known firms of horticultural specialists have been exhibitors at the York Flower Show for years past. After much hesitation Sir Edward decided to award the cup to Messrs. Bolton and Son's collection of Sweet Peas, and while it may be said that many of the experts would have decided in favour of the Carnation group, there could be no doubt as to the general satisfaction given when Messrs. Bolton became the first holders of the massive silver trophy. A more entrancing display of colours and shades could not be imagined. Many of the blooms were of brilliant hue—vivid flame softened and toned down by the softer shades of purple, heliotrope and primrose, or deliciously offset by the whites and pale yellows. Many of the blooms were novelties of this season. The group of Carnations, embracing as it did such a bewildering quantity of individual varieties, compelled admiration. Nothing quite equal to it in the way of Carnations, always a popular flower, has been seen in York. Was it to be wondered that Sir Edward hesitated long in making his final decision between these two superb groups?

Trade Notes

The production of fertilisers

In 1847 Mr. Joseph Fison, a pioneer in the field of chemical fertilisers, made the first superphosphate by dissolving with sulphuric acid coprolites collected from Suffolk farms. Since then the business he has established has developed tremendously, and Joseph Fison and Co. now possess the largest works in the country for the production of blended fertilisers. The important awards the firm have secured during recent years are evidence of the value of their owners' fertilisers. In these days when stable and farmyard manure are almost unobtainable, good chemical fertilisers are absolutely necessary, and a firm with some 78 years of specialised experience in the fertiliser trade can be confidently recommended.

Horticultural buildings

Messenger and Co., Ltd., the old-established firm of horticultural builders, of Cumberland Road, Loughborough, Leicester, have issued a most comprehensive and artistic catalogue of some 130 pages. In addition to a very complete series of illustrations from photographs and drawings showing varied types of winter gardens, conservatories, porches, verandahs, summer-houses, and greenhouses erected by the firm in all parts of the country, many practical hints and technical advice on the construction and equipment of glasshouses generally are included. A copy of this interesting book will be sent on application to Loughborough.

Garden netting

Messrs. W. Oliver Allen and Sons, the well-known netting manufacturers of Porthleven, Cornwall, who have been established for over half a century, have issued an excellent little list of all their netting which shows considerable reductions, making the prices practically pre-war. The quality is up to the high standard which has secured them a fine reputation as actual manufacturers.

LATE REPLIES

Onions mildewed

(F. H. D., Rochester).—Your Onions are suffering from mildew. Some people have an idea that it is impossible to check this. All such should try a wash made by dissolving ½ lb. of lime and ½ lb. of copper sulphate in 10 gallons of water. The erect tubular leaves of the Onion do not hold liquid very effectively, so to ensure the spray not running off, it is advisable to add to the wash, before using, 2 lbs. of soft-soap. This will assist the liquid to adhere to the foliage. We have also added, instead of soap, 2 lbs. of treacle, which was even more effective. The bulbs you send have what is known as thick necks.

Tomatoes scalded

(Headley).—The pale yellow colour on your Tomatoes is due to scalding, which is caused when the fruits are, in the morning, damp with moisture, because the house has been shut up, and the sun then scalds them before they are dry. Scalding, too, to a great extent may be caused by defoliating the plants, which one often sees. Rich food is often given in excess, and without foliage to absorb such food it is forced into the fruits, causing bad flavour, spot, and scalding. We do not denude other plants of their leaves in the way one sees Tomato plants treated, and it is impossible to prevent scalding when this severe cutting takes place. The smooth varieties scald much sooner than the corrugated kinds, the skin being probably more sensitive.

Orange flowering the first year from seed

(Orange).—It is unusual for a seedling to bloom the first year, especially to produce a terminal flower, although such a thing has been known to occur before.

Plants wanted

Can anyone tell me where I can obtain Aubrietia Magician and Saxifraga irrigua?

MRS. DEIGHTON.

LATE NOTES

Magnolia Lennei

Among the spring-flowering Magnolias few surpass or even equal in size and colour of flower the above, one of the last to come into bloom. The first week of May finds this handsome shrub at its best, whereas many of the other species and their varieties are rapidly passing out of flower. This late-blooming character of M. Lennei is all to the good as the huge flowers are less susceptible to damage from hailstorms and frost. The magnificent flowers stand erect upon the branches and are probably more striking when approaching the opening stage than at any other time. The large spoon-shaped and thick, fleshy petals are of a charming rose-purple colour outside and white within. The leaves of this valuable Magnolia are larger than those of the majority of the hardy spring-flowering kinds and often exceed 8 inches in length with me. The shrub is also of a more robust habit of growth, the wood being stouter and less dense than in the case of Magnolia Soulangeana and The origin of this fine Magnolia ap have been a nursery in Lombardy was noticed by an Erfurt nurseryma Topf, in 1850, and given the name o in honour of a Royal gardener in Be

The white Spanish Broom (Cytiso and the Heavenly Blue G (Lithospermum)

An effective use may be made of t plant by placing it near a deciduous too dense-growing a shrub, and i chosen which comes into bloom at time a very charming result follows days ago I came across a graceful bu Spanish White Broom laden with flo about 7 feet in height, its twiggy reaching to the ground. Mingled w were growths of Lithospermum w reached a height of 3 feet or more, a also in full bloom, provided a very and instructive picture. This gro two totally distinct shrubby plants is example of what Nature can teach left to herself, and one which we large upon with advantage. Th spermum, which many find difficult successfully, had been planted at a s tance from the main stem of the Bro aided by the light shade so afforded veloped in a manner unknown to m It may also prove of interest to r hear of another of the choicest amo plants which will grow in a similar if placed at the foot of a small Yew low-growing evergreen, and that is montana, which threads its wire-like among the branches, covering them with large and conspicuous white Picea pumila is an excellent host this.

E. MA

Cistus purpureus

Among the Rock Roses there are unusual beauty. The above is on best. It forms a shapely bush abo in height, and when laden with satiny rose-coloured flowers, each inches across and with handsome spots at the base of the petals, the cluster of yellow stamens, it is a spicuous and beautiful shrub. I h two dozen bushes in a group, each feet high, and the effect of such a bloom is very much appreciate glorious shrubs as the Rock Roses which may be easily increased by inserted into sandy soil and placed frame in September, should receive tention, as they make large bush third year. For sunny slopes, stor and bold grouping in any sunny posi pretty evergreens cannot be surpa although the flowers are very myriads of others take their place e

G.

The Bayonet plant (Aciphylla sc

Flowering now is this formidable ous plant, the stiff, spreading leaves are as sharp as a knife and render dangerous plant to employ where small children. The inflorescence i pyramidal spike-like panicle of sma ish-green flowers quite interesting 3 feet 6 inches in height. This extr plant is a native of both the North a Islands of New Zealand, being mos in the mountain districts. Those disposed to give it a trial should pla well-drained and sunny position a the reach of those of tender years. here referred to is growing entire open and in a border raised sligh the surrounding level.

E. M

GARDENING ILLUSTRATED

2469—Vol. XLVIII. JULY 3, 1926 [Prepaid Annual Subscription to any part of the World, 15/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

s, diseased ... 398
fulgens ... 387
grandi- ... 392
s in sum-atment of ... 396
unhealthy ... 398
ns, Border: *g list* ... 386
lanting and ... 396
ithus Mar- ... 391
dropping ... 398
Chrysanthemums for house decoration ... 387
Clematis montana ... 391
Clematis unhealthy ... 398
Coronilla varia ... 391
COWSLIP, THE NORMANDY ... 385
Desfontainea spinosa 387
Dianthus Mona ... 391
Disbudding ... 395
Ferns for baskets ... 397
Ferns, moving filmy ... 398
FRAMED PICTURE, THE ... 391
Flowers, winter, summer arrangements for ... 395
Fruit houses, red spider in ... 397
Fuchsia buds dropping ... 398
Garden, the rock, at Kew ... 386
Greenhouse, the unheated ... 398
Hydrangeas, Blue ... 387
Iris Ochracea-cœrulea, the colour of ... 387
Micromeria croatica 391
Opening of our new offices, the ... 387
PÆONIES, TWO LOVELY ... 392
Peaches, black fly on ... 398
Peach house, late ... 397
Pelargoniums, scented-leaved ... 395
Phloxes, herbaceous: Timely help ... 392
Plant hunting in Sierra Nevada ... 390
PLANTS AT VINCENT SQUARE, NEW AND NOTEWORTHY ... 388
Plants in baskets, watering ... 395
Plants in rooms ... 395
Plants, some British, for British gardens 393
Plants, soot-water for 395
Plants wanted, uncommon ... 386
Primroses, some rare 385
Statices ... 395
Sweet Peas ... 385
Turnips in dry weather, sowing ... 396
VERATRUM NIGRUM 387
Vines, summer growth of ... 397
Viola cornuta and Incarvillea failing 398
Viola septemtrionalis 388
Wall, that bare ... 391
Woodlice and slugs, eradication of ... 387
Zonals for autumn flowering ... 395

Some Rare Primroses

VADAYS the single blue Primrose is wn in most gardens, and from a good in of seed many delightful shades expected. Seed can be sown from July, preferably in seed-pans with a glass over them to prevent evapora- When the little plants are moved out st be guarded from slugs, their chief the early stages of their growth. It also be remembered that Primrose s not germinate evenly; long after plants have been moved out others ear in the seed-pans.

rimrose likes a stiff, moist loam, and ows with full vigour in light, sandy also likes old manure and leaf- nd grows best where it does not get day sun. Sheltered by a hedge or ing north, east, or west it should if the soil is suited to its needs.

then, have so many old and beautiful grown so scarce that they are almost le to find? Were they destroyed by r, an enemy in dry borders; were n by vine weevil grub, or did the ow feeble and perish of old age? nds are increased by division.

ouble white, the double mauve, the ow early sulphur are still hale and ants of which I have some hundreds at the present moment. I also have upply of Arthur du Moulin (double very free-flowering), of Marie double violet or, rather, reddish- I have a few Cloth of Gold, and the uble yellow variety, Latest Yellow,

de Pompadour, double velvety crim- ds shade, and does not increase French Grey, also called blush, be growing rare. And as for the le rose and salmon-pink that once many Irish gardens I cannot find v.

addy or Sanguinea may still be pro- ith difficulty. Also Burgundy (deep and the old double Scotch variety ina plena. All these are worth but many people tell me they have failed to keep them alive. They do ar or two and then the plants pine away. I look at my collection, over from Ireland to Devonshire, ler if the same fate will overtake it. be left with double white, mauve, arly Sulphur, and Arthur du Moulin, out the rest? I have even heard of these hardier kinds disappearing through the activities of red-spider and vine weevil grub.

To me they have so far been the easiest grown of plants, needing, it is true, an annual dividing of the roots, but otherwise little care. If left to themselves too long they form dense clumps all leaf and few flowers.

Then there is the old Irish single green, a curious but not a pretty flower. There is a kind called Galligaskin, or Jack-in-the Green, a flower with an outer fringe of green leaves, and the funny little flower within a flower called Hose-in-hose.

In Scotland a family of double Primroses was raised in a nursery at Aberdeen, but their original home is now closed down, and where the plants have got to I cannot discover. They were called Bon Accord Elegans, Bon Accord Beauty, Bon Accord Gem, etc. Perhaps they have died out. I hope not, and that some day I shall discover their whereabouts.

In the old Irish gardens there were also several rare gold and silver laced double Polyanthi, a Polyanthus Hose-in-hose, and a red and green Pantaloon.

The Normandy Cowslip

However, if these are tricky things to find, and, when discovered, hard enough to grow, we can turn for comfort to the magnificent strains of seedling Polyanthi, Munstead, Spetchley, and the rest. A. W.

Honiton, Devon.

NOTES OF THE WEEK

The Normandy Cowslip

A FEW weeks ago a reader in Shropshire sent to this office a specimen of the Normandy Cowslip. It is very similar to, if not identical with, the true Oxlip, Primula elatior, a species intermediate between the Cowslip and the Primrose. There is a natural hybrid between the Primrose and the Cowslip known as the Oxlip, but the true Oxlip is a distinct species and comes true from seed. The Normandy Cowslip is a suitable subject to grow in moist surroundings at the foot of the rock garden or in the semi-wild garden. In cultivation it is taller-growing than the Oxlip with larger flowers and more of them.

Sweet Peas

The plants have made but little progress during the dull and cold weather that was experienced during the early part of summer, but now more sunshine is available the plants are commencing to flower more freely. To encourage them to give their best the trenches should be freely watered when necessary. If the sides of the trenches are not mulched, which is desirable, the soil should be stirred immediately afterwards with the hoe or hand-fork. Nothing is more injurious to the plants than allowing them to form seed-pods. The rows should be gone over every two or three days, and all flowers should be removed. It is advisable to cut the blooms with the uppermost bud unopened, these opening freely when stood in water. Where growing for exhibition all side shoots should be removed when they become large enough to take hold of with the thumb and finger. The leaders should be regularly tied to the supports. To prevent the spikes becoming entangled with the tendrils there is no harm done by removing these close up to the leaves. Feeding the plants may now be commenced in earnest where large blooms on long stems are wanted. For this purpose there is nothing better than the drainings from the cowsheds or liquid-manure made by immersing a sack of cow manure with a pro-

portion of soot added in a large tub of water. This should be diluted to the strength of weak tea, and may be given twice a week from now onwards. Nitrate of soda or sulphate of ammonia should never be used, as these lead to rapid growth which usually ends in that dreaded disease known as streak. After hot days the plants benefit from light sprayings with clear water given after the sun has gone down. Salmon and other delicate colours may be liable to scorch with the sun, and should be lightly shaded with serim or other suitable material. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Border Carnations: A voting list

The Northern Section of the National Carnation and Picotee Society recently took a vote from among their members on what they considered the best six varieties of Border Carnations and Picotees in each section. Mr. Wilfred Secher, the Secretary of the Northern Section of this Society, very kindly sends the result of the votes recorded, which is given herewith. It would be interesting to know what readers think of this list of varieties. It should be borne in mind that this list of varieties has been voted by northern growers who grow in the open border:—*Best six selfs:* Elaine, Mary Murray, Grey Douglas, Gordon Douglas, Bookham Rose, The King. *Best six white ground fancies:* Mrs. Edmund Charrington, Mrs. G. D. Murray, John Stobart, A. St. Clair Amos, Mrs. Hawkesbee, Fair Ellen. *Best six yellow ground fancies:* Linkman, Viceroy, Paladin, Highland Mary, Enid Lowe, Gondolier. *Best six fancies other than white or yellow grounds:* Mrs. Andrew Brotherstone, Saracen, Cleopatra, Salome, James Griggs, Opalesce. *Best six Clove-scented:* Steerforth, Rose Clove, White Clove, King of Cloves, Border Clove, Mrs. Andrew Brotherstone. *Best six Picotees—(yellow grounds):* Her Majesty, John Ruskin, Eclipse, Santa Claus; *(white grounds):* Savina, Contrast. Mrs. Edmund Charrington was voted the best Border Carnation in cultivation.

Uncommon plants wanted

It has been suggested that many of our readers frequently wish to obtain some of the uncommon plants mentioned from time to time in articles and notes appearing in our pages. Also plants and seeds not generally mentioned in catalogues. In view of this we propose devoting, as required, space in our columns where readers can advertise for plants they want, to which we anticipate nurserymen and seedsmen who have plants or seeds for sale would readily respond. Our object is to put readers in touch with nurserymen who have rare plants which they cannot advertise on account of limited stocks.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The rock garden at Kew

THERE are two forms of criticism, constructive and destructive. So far, the nature of the criticism has been mainly destructive. This is scarcely fair and leads nowhere. Faults can always be found with fatal facility. It is less easy to suggest methods of attaining improvement.

Before attempting to do this it is necessary to appreciate the position a little more fully than "X." appears to have done. I am sorry I must reiterate that Kew, being what it is, a botanic garden, devoted by all its traditions, and indeed its very foundation as a national garden, to the more scientific side of horticulture, must, to justify its existence, pay greater attention to the collection than the disposition of plants. That it has of later years become a national recreation ground does not alter this fact in the least. If it is once conceded that Kew beautiful is a sufficient substitute for Kew useful there are many portions of it other than the rock garden that could be altered with advantage. The herb garden and herbaceous grounds might, for instance, be rendered much more attractive to the eye at the expense of scientific interest.

Since the publication of "X.'s" letter on June 12th I have made a special visit to Kew, and must say that it appears to answer, as well as the area permits, the purpose for which it exists. From one end to the other it was crammed full of plants, very few of which are in duplicate. Spaces rendered vacant by deaths during the winter had recently been made good. I am assured by old Kewites, who have in the past had very intimate association with them, that losses among the alpines at Kew are always very heavy during the winter.

Among the plants there were hundreds of species that I think "X." would scarcely tolerate in the rock garden I assume he possesses. Certainly I would never plant them; therefore Kew must keep them, not to be admired because they are pretty, but for reference and because they represent the foundations on which many beautiful things have been built. Often, too, it is by and through them that other newer plants are classified and rendered intelligible to gardeners. Thus many beautiful hybrids have to be excluded to make room for the less attractive, but not less interesting species. Whatever bare spaces there may have been when "X." paid his visit in the spring, few of them were unoccupied by the middle of June.

There is another aspect of the case. In one of the popular guides to Kew there is a really pathetic reference to the "original intention" in constructing the rock garden, in which occurs the following words: "but owing to insufficient funds at the start," etc. I believe I am right in saying there never has been any serious attempt to create a rock garden on picturesque lines because the difficulty owing to financial considerations has always been so great. Even the meagre additions that have been made from time to time to accommodate the increasing collection of plants have only been achieved with some heartburning on account of the (very moderate) expense incurred. One does not extract this from the staff at Kew, who, being public servants, naturally and loyally adopt the Brer Rabbit position. There are, however, hundreds of men who have passed through Kew and now occupy responsible positions in their profession who are not so reticent.

Now, as the rock garden is fully and necessarily occupied, and is still inadequate for its purpose, of what use would it be to attempt reconstruction within the present area? This is the crux of the whole matter. The area is totally inadequate to provide at once picturesque effects and accommodate a botanical collection. We *must* realise that its botanical aspect will never be departed from. It would seem, therefore, that if we are to have a national rock garden such as we desire, the area must be considerably increased. Suppose we could magicall vince everyone concerned that our an was laudable, that the expense was ju there is very little room to expand arou present site without destroying som that others may value more than th garden. If this site does not offer su room for expansion where is there Kew that does? Do the atmospher climatic conditions at Kew, with I creeping nearer every day, justify the tion of the only sort of rock garde would really content us all? I ask no tions on the matter of finance (it is likely it will be provided from the purse just yet), but if "X." can answe I have put satisfactorily there yet r another. Is there any strong feeling responsible garden lovers that a real and comprehensive national rock gar worth striving for? If there is, the a ment, whether at Kew or elsewhere, not be far distant. But it will nee more concerted and influential effort th casional criticisms of things as the without, after consideration of all the stances, attempting to suggest how the be improved.

It is possible that if X.," "X2," the other unknown quantities, squa otherwise, could meet and frankly the matter, some result might accru would at least check abortive criticis might result in progress, without further correspondence is useless. discussion is futile unless it results in effort. The criticism by "X." doubtedly sincere, although, as I pointed out, not very considerate to who are labouring under difficulties, b cannot as public servants enter int troversy. Can he make some concre gestion that will advance matters? I words, we want a better public rock Can we get it? GEORGE DILLIST

—— I am at one with "S. A." in praisement of the rock garden at When rare and choice alpines and oth plants are grown (to a large extent, a for educative and experimental purpos hardly fair to criticise any such rock because it does not at all times pro striking effect. In a rock garden in a place effect can be produced quic times it may even be possible to c effect with a certain amount of rarity "S. A.," I owe much to the rock ga Kew as well as to that in the Botan dens at Edinburgh, and I may say t both, I have also, like "S. A.," seen striking effects and combinations. I fairly large and fairly representative tion of alpines and of other plants in n garden, but the demand for "effect" be met. This spring, for instance, in minent position I had a group of abt plants of Cheiranthus Allioni, flanl either side by as many plants of For not Ruth Fischer. At a distance the was very fine. I freely admit tha plants, and used on such a scale, wil the susceptibilities of the enthusiast rock plants, but when bold colourings sired what can be done? There is or of rock plant for which I have no roor is the miffy, delicate "rare" plant wh to be coddled and which passes mos existence under a sheet of glass. Far would I use C. Allioni, crude thou colouring in a rock garden may be. however, that I have wandered from r pose, which was to thank "S. A." temperate but, none the less, zealous of the Kew rock garden—not, in truth, needs any defence by those who can a it at its proper, and undoubtedly very educative value. A SCOTTISH GARDE

Veratrum nigrum

ERE are not many plants of important age suitable for use in the spring gar-, but this grand Veratrum is one of ispensables. It is at its best in April ly May, with its large plaited leaves iant green, for later, when the tall -purple spike of bloom rises from them, the vigour of the leaves is over y are drooping and partly discoloured. he root of a near relative, commonly hite Hellebore, though it has nothing ith the genus Helleborus, is made the s so-called White Hellebore powder. ts of both are virulently poisonous. e natives of the mountains of Central

G. J.

Blue Hydrangeas

are, now, so many Hydrangeas roduce blue flowers naturally that little or no point in resorting to the eatment recommended by the writer rticle on Hydrangeas and which ap- n the issue of June 19th. Why grow loured specimens merely for the pur- artificially changing the natural tint owers? The practice is one which I It is very curious that many who ir voices in condemning the practice g the plumes of Pampas Grass and do conspicua are among those who alter the colour of the Hydrangea. practice is as bad as the other, and equally unnatural.

A SCOTTISH GARDENER.

Desfontainea spinosa

ndo dormitat Homerus! In ob- on page 371 that "with its Holly- es the shrub bears a close resemb- some of the Hollies," Mr. Arnott meant "superficial" instead of because, whereas the Holly bears leaves, Desfontainea may be dis- d at all stages of growth by its leaves. This fine shrub hates lime nds vigorously to an occasional rich

HERBERT MAXWELL.

th.

olour of Iris ochracea-cœrulea

fraid I do not agree with your de- of Iris Sunset (ochracea cœrulea), e 26th, page 374. To my mind the anything but Wedgwood blue. To rue colour of Wedgwood you want t a piece of china or Mr. Dykes' Iris d, which is as near true Wedg- olour as it is possible for a flower to falls of Sunset, on the other hand, paler. I should almost call them olet shot with copper, but the colour indescribable.

O. M.

cation of woodlice and slugs

r issue of June 19th I see the of woodlice by scooped-out Potatoes mended. I used this method for ars, and scooped out bushels of and caught thousands of woodlice, hey came in their battalions. Four five years ago I was advised by a al fruit grower to try Phospho supplied by Walter Voss and Co., th meal and then fine-sifted mould kled over the soil. Three applica- tervals of two weeks or three weeks eradicated the pest. My green- o feet long and there are no wood-

sed to spend nights with a lantern slugs. The same adviser recom- tanly's Slugene. I gave three ap- at intervals of two weeks or three t autumn, and have not had a slug f one this year.

also cleared my garden of slugs by adopting the remedy advocated in your journal last summer, aluminium sulphate and lime water. I have no slugs in the garden. Eradication is a thousand times better than trapping, and it is so easy when you know how to do it.

CONSTANT READER.

Veratrum nigrum

Anemone fulgens

The article written by W. McG. on page 365 in your issue of June 19th, 1926, has caused me much surprise. Until recent years I was unable to grow Anemone fulgens satisfactorily, until one day a friend told me that the corms should be taken up, dried off, and broken in pieces every second year. Now I always take them up every second year, and, in consequence, they have increased enormously. In fact, they increase so rapidly that, on taking them up every second year, I am always able to sell at least nine pounds (£9) worth of broken corms. I never allow them to seed, and I always change their site, if possible, on replanting. I have picked 500 blooms at a time off one bed, and I always have them flowering freely from March till May.

A. L. CROSSLE.

Anahoe, Ballygawley, Co. Tyrone.

The Opening of Our New Offices

SIR ERNEST BENN and the Directors of Benn Brothers Ltd. extend a hearty welcome to readers at the Opening of the New Offices of "Gardening Illustrated," Bouverie House, 154, Fleet Street, E.C. 4, on Tuesday, July 6th, from 4 p.m. to 6 p.m.

It is with great pleasure that we make this announcement, as it is one of those rare occasions on which we have an opportunity of extending an invitation to our many friends, and especially those from the country and the provinces.

Invitations have been posted, but if any reader has not received a card of invitation and would like to be present will kindly let us know, the omission will be rectified.

Bouverie House is situated in the heart of Fleet Street, and we have no hesitation in saying that all visitors will find this new and imposing building of special interest.

The reception will be on very informal and homely lines, better described as an "at home," and we look forward to meeting friends from all parts of the country.

R.S.V.P. to
The Editor,
"Gardening Illustrated,"
154, Fleet Street, E.C. 4.

Chrysanthemums for house decoration

Many amateurs to-day in growing Chrysanthemums for house decoration do so in pots smaller than those intended for exhibition, as they not only answer the purpose, but, what is of moment, they are obviously cheaper. Plants so cultivated need more looking after if they are to be a success at blooming time, and now, while they are out in the open, watering is one of the first considerations. One knows how quickly any plants in 5-inch or 6-inch pots at this time of the year become dry, and if one can do anything to minimise the trouble of watering it is worth adopting. The well-known method of placing a board on the sunny side of the pot certainly wards off a good deal of heat, but I have never found anything to beat plunging the pots, or at least partly so, in fine ashes. It will be necessary several times during the season to turn the pots round, as not infrequently roots in small pots find their way into the ashes. An effort should be made to retain what foliage is possible on the plants, as, bereft of leaves, they lose half their attraction. To this end weak stimulants should be given, with a change to soot-water once a week, which will tend to keep the leaves healthy. Be sure and see that the plants are properly supported, otherwise rough winds and birds may damage them. Arrange matters so that each plant stands clear of the next. Give an eye to the earwig and greenfly, making periodical visits at night to the plants so that the buds may escape their ravages. Prevention is better than cure always. Tobacco powder will render matters very unpleasant for greenfly and keep it at bay.

W. F.

New and Noteworthy Plants at Vincent Square

THE most remarkable flower at the Royal Horticultural Society's Amateur Show was a magnificent bloom of Magnolia macrophylla shown by Sir William Lawrence, Bart., Burford, Dorking. One flower only was shown. This species is known to have the largest leaves of all Magnolias. There are a number of specimens in cultivation. The species is at once recognised by its enormous leaves, sometimes 3 feet in length, but the flowers are seldom seen. It is not until the trees attain a good age that flowers may be expected. We know of trees 20 years old that have not yet flowered. The flowers are over a foot across, six-petalled, the three outer petals being much broader than the inner ones. The flowers are white or creamy-white with a faint flush of purple at the base of the petals. The flower shown was not powerfully scented.

PHYTEUMA COMOSUM.—The very remarkable specimen of this rare alpine, shown by Mr. Clarence Elliott, attracted a deal of attention. It is seldom that this plant is seen in cultivation or even in its native habitat. It grows high up on the Dolomite peaks, where it is extremely difficult to collect. This plant has stiff, coarsely-toothed, almost Holly-like leaves. The flowers, borne in dense heads, are pale mauve or purple, the tubular corolla being inflated at the base. The plant shown, illustrated on the page opposite, was by far the finest we have ever seen. It was grown in a pan and carried over 20 heads of bloom. It was a great triumph to the cultivator, and it received an Award of Merit.

LIBERTIA IXIOIDES.—This favourite New Zealand plant, shown by Messrs. M. Prichard and Sons, is flowering exceptionally well this year. It bears slender grassy foliage and spikes of snowy whiteness like some delicate Orchid. The flowers are larger than those of the better-known L. formosa, and it is taller-growing, attaining a height of 2½ feet. The Libertias belong to the Iris order and thrive in open borders, showing preference for a peaty soil.

CAMPANULA BARBATA.—Another interesting plant, shown by Mr. Clarence Elliott. The silvery-blue bells on 9-inch stalks are very hairy. Can any reader explain why the flowers of C. barbata are bearded to this remarkable degree?

CONVOLVULUS CNEORUM.—This good plant is a standby in many rock gardens, especially for late flowering. It is a silvery-leaved shrubby species suitable for sunny positions on rockwork, but it must have free drainage. It also does well against a warm wall. Occasionally plants go off during winter, but cuttings root readily and should be inserted in late summer in gentle heat. The flowers are white with faint pink stripes radiating from the centre. It was shown by Messrs. Waterer, Sons, and Crisp.

GYPSOPHILA BRISTOL FAIRY.—As a florists' flower and for border effect this is one of the most notable introductions of the year. It is a vigorous perennial, much larger than G. paniculata and very free-flowering. Our illustration is of a single spray; the panicles are spreading and highly effective. The plant, shown by Messrs. W. Wells, Junr., Merstham, received a unanimous Award of Merit.

MILTONIA VEXILLARIA SNOWFLAKE.—The superb specimen of this Miltonia, shown by Sir George Holford, was the admiration of all visitors. The plant in question carried no less than 22 spikes and 111 flowers—such flowers too! It was probably the finest specimen that has ever been seen at Westminster, and great credit is due to Mr. H. G. Alexander, the Orchid grower to Sir George Holford at Westonbirt. The plant received a cultural commendation. H. C.

Violas and Pansies

Violas and Pansies were well represented at the recent R.H.S. Amateur Show. In the competitive classes the chief awards went to a northern grower whose blooms for size, quality, colour, and refinement eclipsed those of competitors from the south. Mr. J. Wood, Guiseley, near Leeds, was easily first in Classes 11, 38, and 62, Mr. A. E. German, Hornchurch, Essex, being second in Classes

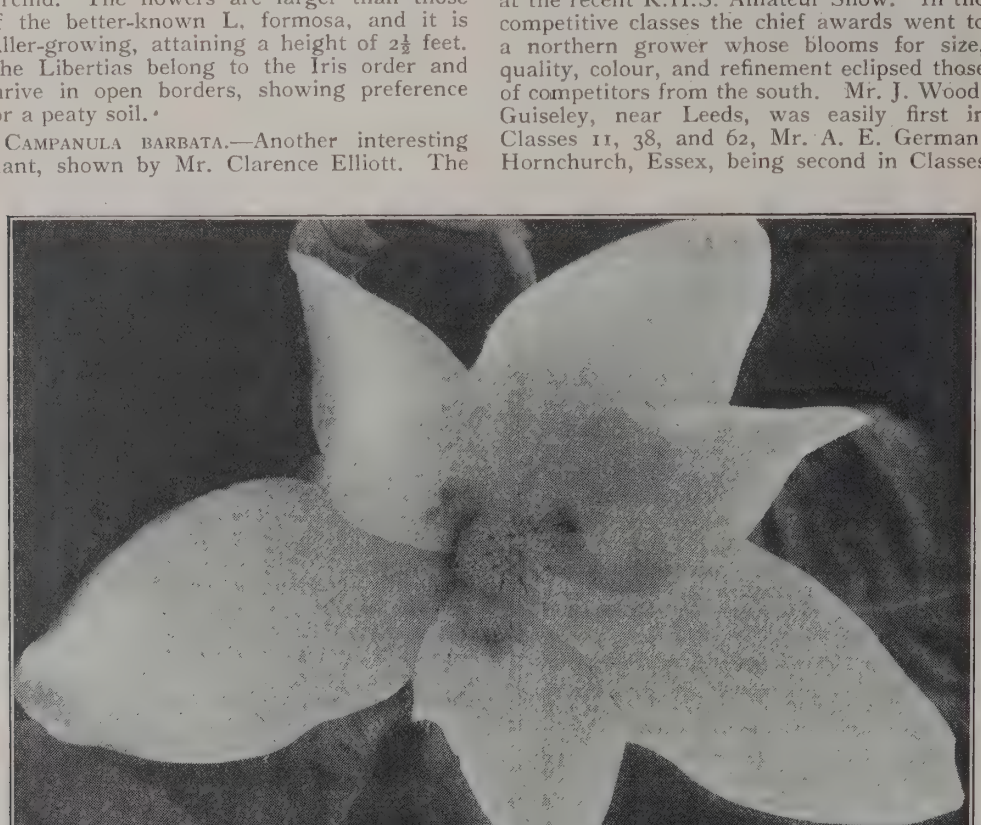
The rare and difficult Phyteuma co

38 and 62, with Mr. A. D. Bates, C Road, Stony Stratford, second in Cl Violas were extensively shown, and all were well filled. Unfortunately, the s growers do not, or cannot, cultivate growers in the north of England an land. The climate undoubtedly favour yet in the south 30 years ago they he own, but now the newer varieties hav the place of the old English Viol Pansies.

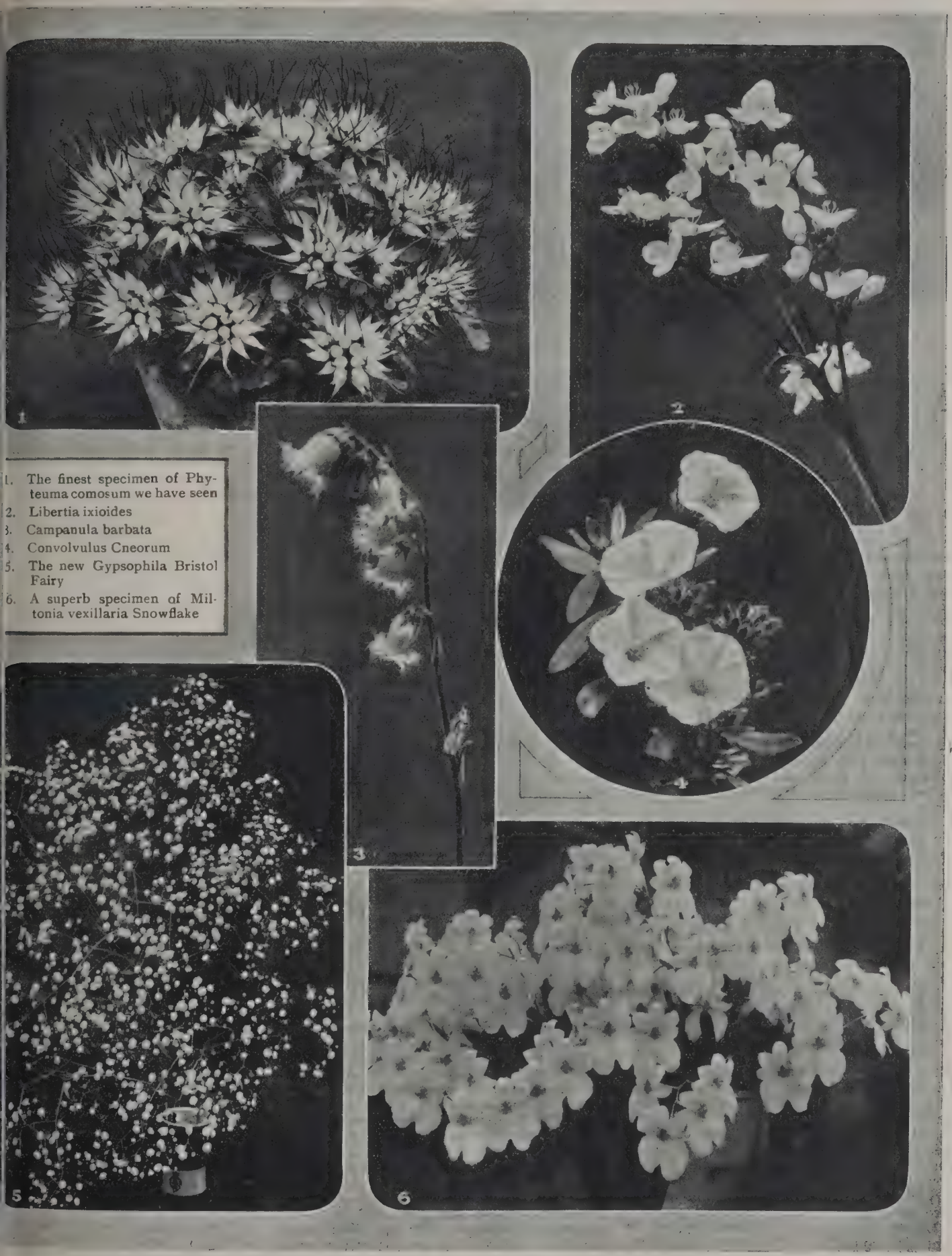
They have been lost to cultivation south and will have to be imported fr north, where they have been tende great care, to southern gardens. The no Pansy classes, but judge the surpr delight with which Mr. T. W. Wils hibit of these refined and dainty flowe hailed by not only expert judges of th show favourites, but by the general ing public. In the opinion of most th exhibit was one of the best, if not th in the show, and fully deserved reco at the hands of the R.H.S. What is gives these fragrant flowers that rare tion which stamps them the aristocra are? Take a blue Pansy, the riban ing a circle) in one is white, that is petals of the upper half and the peta of the lower half, constituting a pe eye. In the next flower the colour exactly the same only the white riban lip or lower petal is replaced by one yellow. Mr. Wilson showed these t tinctions besides many others, and had knot of admirers constantly abou Samples of these dainty flowers not on delight, but conjure up the possibil crosses between these northerners w choicest of the south. A pure yello of Mr. Wood's, measuring just over across, was enough to fill any hybridis delight. C. A. JA

Viola septemtrionalis

This plant is suitable for the rock spreading freely in good soil. It is rampant in growth, and should couraged to spread in a free way. white flowers of good substance on sti rising well above the dense foliage The flowers are veined with purple, adds to their charm. It is best grown low part of the rock garden in shady good, deep, loamy soil which moistened during the hot season. P tion is best effected by division in The divided plants, if planted in go will make strong flowering clumps lowing season. Established plants improved by a top-dressing. H. S

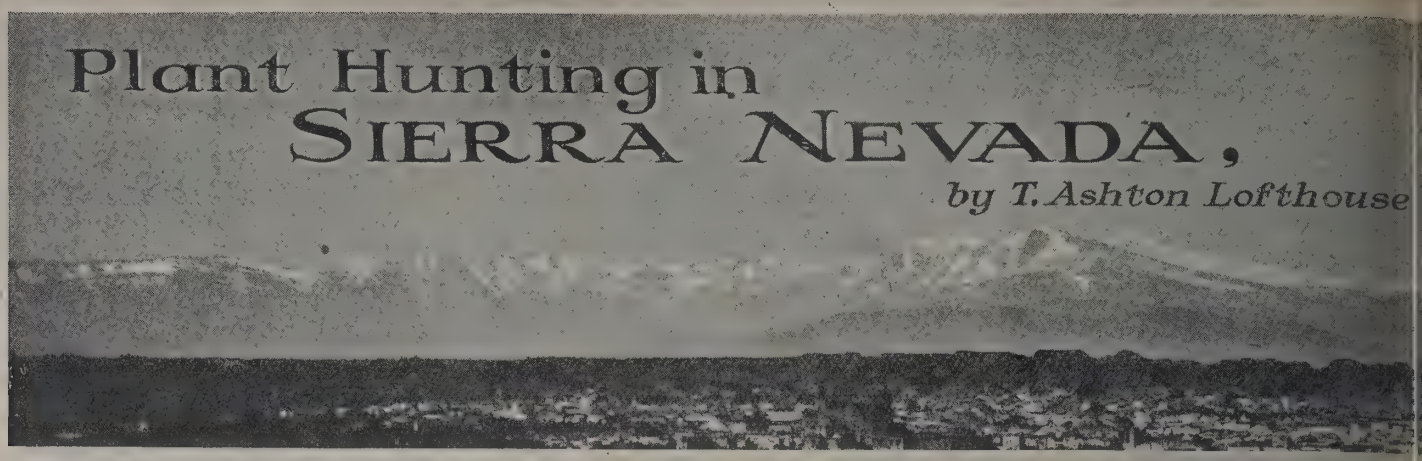


The flowering of Magnolia macrophylla
This bloom was over 1 foot across



1. The finest specimen of Phyteuma comosum we have seen
2. Libertia ixioides
3. Campanula barbata
4. Convolvulus Cneorum
5. The new Gypsophila Bristol Fairy
6. A superb specimen of Miltonia vexillaria Snowflake

PLANTS OF SPECIAL INTEREST RECENTLY SEEN AT VINCENT SQUARE



Plant Hunting in SIERRA NEVADA,

by T. Ashton Lofthouse

(Concluded from page 362)

AFTER journeying for eight hours the Venta was reached, a resting place for travelling peasants, pedlars, etc., providing shelter for man and beast, and which at first sight did not look very inviting; a low one-storey building only about 3 feet above the ground-level on the high side. One entrance served for all, the mules passing through the outer and inner halls on the way to the stable alongside the inner hall, the floor of which provided the sleeping accommodation for visitors, who, Spanish-like, sleep with one eye open, watching that his mount does not depart with another owner. The door to the entrance hall provides, when open, the only ventilation, and dogs, hens, pigeons, etc., lodge in the same apartments. My guide managed to get a sleeping place for me in a hay-store adjoining the inner part of the hall. Although it was somewhat stuffy, I rested fairly well and was not troubled with other *residents* as I was in some much more palatial quarters during my visit. Fold-yards adjoined the building on two sides, and each night were fully packed with an interesting collection of goats and sheep. Pigs also lodged somewhere very near my sleeping place.

An early start was made next morning, the air being deliciously sharp and fresh, apparently after frost in the early hours. Unfortunately, this was soon dissipated by the tropical sun. Augustin obtained what information possible from the occupants of the Venta as to the best route for the snow-capped mountains. This, curiously, was by the highest ridges of mountain after mountain taking them direct, not by traversing round as is usual in Switzerland.

The route, so far as can be made out from the Spanish military map, was by the Cos del Hornillo, the Cos del Lobo (7,220 feet), to Lomas de Los Berchules (8,600 feet).

First climbing up by a track immediately after leaving the Venta, a pretty pale blue Globularia-like flowered plant first attracted attention. This turned out to be Jasione amethystina, a dwarf rosetted plant only found by me on the mountain sides on either side of the Pto de la Ragua. On the slopes further away and higher a pale yellow-flowered dwarf Wallflower was plentiful, Erysimum australe v. alpinum, and it was also seen later.

On the rocky outcrop at the summit of the Cos del Hornillo, Ptilotrichium (Alyssum) purpureum, a lovely dwarf plant with deep pink flowers, was fairly plentiful in the morainy ground. This is described by Farrer as "one of the loveliest conifers anywhere known," "a branching tidy mass of close, congested, silver-sided leaves, covered with clusters of most beautiful bright flowers of purple and pink." A treasure for the moraine, unfortunately it was too early for seeds, and a few plants posted to England took so long on the way as to be useless on delivery. Partly due to easy-going Spanish ways and partly to delay at the English Customs, which is the ruin of many treasures from abroad. Douglasia vitaliana was plentiful on the high moraines, flowering freely only under partial shelter. Biscutella bœtica, a dwarf, grey-leaved crucifer with pale lemon-yellow flowers, delightful at the higher altitudes, but straggling and untidy at the lower levels. Very dwarf plants of Arenaria tetraquetra, with its tiny leaves packed closely together, much smaller than the A. tetraquetra that I have had for some years and which looks quite well on the edge of my island moraine. On the southern slopes the leaves of a Crocus were noticed, which proved to be the desired Crocus nevadensis. Searching around, it was found to be fairly abundant and had evidently flowered well in the shelter of the mounds of prickly Astragalus and Arenaria. A few ripened seed-pods and a number of bulbs were collected. One of the bulbs flowered in the greenhouse in January. In the sun the flower opened flat out like a six-petalled (narrow) star, delicate white petals, lightly pencilled dark blue at back, yellow stamens, and deep orange anthers. If it had not been for this expedition it is probable that my quest for this Crocus species peculiar to the Sierra Nevada and the mountains in North Africa opposite would have been in vain.

In a wet springy position, fed partly by melting snow, Primula intricata, a lovely Oxlip, was a pleasant surprise, the only Primrose of the visit, flowering in a very limited area at about 7,000 feet altitude, with large lemon-coloured flowers. Farrer speaks well of this species for the garden, stating "that it flowers without intermission through the whole year, but most especially brilliant in spring and autumn." Dense masses of Aconitum (Monkshood) were springing up alongside the Primulas, a contrast to the hard prickly sun plants that abounded throughout the journey. A pretty Thyme not hitherto noticed, Thymus capitatus, not unlike the elegant T. membranaceus before-mentioned, only dwarfer, in hot situations high up. Salium pyrenaicum, with its silver-leaved cushions, probably the prettiest of the genus and one of the notable plants in the Pyrenees. The lemon-yellow flowered Alyssum montanum, and very locally on the Cos de Lobos the dwarf white-flowered Iberis granatensis.

The Lomas de los Bercules was reached about 1.30, the highest (between 8,000 feet and 9,000 feet) and nearest point att the direction of the snow-capped sun Mulahacen, Alcazaba, Veleta, etc.

On the high summits plants wc patchy in the stony waste, and mos usual at high altitudes, dwarf, comp wedged in among the stones, or n Such plants as Scleranthus frutic small-leaved Cherleria sedoides-like reminiscent of similar positions in tl A hard-cushioned Silene, not un acaulis, not in flower, and possibly Boryi, one of the Sierra Nevada vi Large mats or islands of the silverl very dwarf Plantago nivalis just com flower, and odd plants of Artemisia tensis that had evidently been missed natives we met here (after travelling f without seeing a human being), wl ranging this out-of-the-way locality plant, Manzanilla real of the Spanian very much collected, being used ext for making an "aperitif," Manzal "tisana," a drink (a kind of Camon taken extensively by the natives. It used for flavouring Manzanilla sher understood them to say they recei pesetas (equal to about 3s.) per litre quart).

In conversation with them we we to understand that we were about fo from the Puerto Vacares, the pass ov Granada side. Seeing that we h $7\frac{1}{2}$ hours in reaching this point, it a luctantly decided to return, the only tive being a night out under the rocks I was not prepared for. It was dis ing, as we had seemed to have th covered slopes of the giants of the within easy reach.

In the shelter and crevices of t cropping rocks were the two Saxifrag in other localities, S. nevadensis glaucescens, the dwarf Arabis alpi Thlaspi nevadense, a good white-f species, but not so fine as T. rotundifo the Alps.

The return was over much th ground, and after a hot, long, and d the Venta was reached about 8.30 p. return to the mines being made the fo morning, collecting various seeds er although, unfortunately, it was too e seed of many of the higher alpines.

After a day spent in collecting a fev packing a few plants (which were also in the post), and preparing for my jou the morrow to Almeria en route to G where two hurried visits into the part of the Sierra Nevada added some interesting rare and local plants.

On the mule "trek" down to the

ispanica, a species allied to the attracted attention with its narrow, tubular cluster of red short stems, growing in very hot, s, an annual peculiar to the Sierra d North Africa. In the same ds of Asphodelus ramosus were d my train being two hours late, s, fortunately, occupied in taking ut of the capsules, revealing that s larvæ were at work eating out

ntain side a little below the ocality was literally alive and the mid-day sun, due to multi- *cicala,* " all singing or whining nd at once with a metallic pulse at had become vocal." Within a ce of the railway station the grey- cium corniculatum was seen with chocolate-spotted flowers. Seeds ed and it germinated quite well, dlings all died off in the damp, ter. In the same rough ground m with deep, vinous-red flowers ems, and bulbs taken. This has identified. Willkomm's Spanish les dozens of Allium species for

T. Ashton Lofthouse.

, Linthorpe, Middlesbrough.

he framed picture

doorway is always a becoming to anything that is seen through ond it, even if the view is of no est, but it is always more satis- n it forms the frame to some landscape. The dark, shady doorway, with the wall and Ivy de, and the near branches of ling almost black against the of the distant wooded ground, rial effect in any case, but chiefly contrast forces the eye to see the and tone value of what is be- he picture of partly sunlit and d lawn, as it recedes to the ance, shows its right gradation stinctness to distant tenderness.

G. J.

Coronilla varia

ite an attractive-looking plant n 1 foot to 2 feet in height and fusion of pleasing lilac-purple or It has, however, one defect in ts spreading habit. If left alone lily grow and spread quickly, he welfare of its neighbours un- ing activities are checked. In there are dry, sunny banks ld thrive and where it might be rm masses a yard or so in dia- g a pretty effect the summer likes a light soil and a sunny aria is increased by division or

S. Arnott.

Dianthus Mona

of the neatest and prettiest of inks. It forms tufts 2 inches which spring numerous flower- bearing a fine rose-coloured or more in diameter. When n good health the flowers are so to completely hide the leaves. the rock garden on slightly ts or fissures between rocks d with gritty loam. The plant equently top-dressed with sandy a handful of limestone chip- placed round about the plant to nd cool. Cuttings root freely if into sandy soil in a cold frame. t plants the first season flower l provide a welcome brightness

The framed picture

during August and September. The flower-stems, unless seed is required, should be removed as soon as the flower is faded, and, if necessary, well watered.

H. Stevens.

Micromeria croatica

For several years I grew this on an exposed pinnacle of the rock garden, and enjoyed its silvery foliage, its pinkish flowers, and its delicious fragrance. It was unscathed through some severe winters, with soaking rains followed by sharp frosts in spring. It is of slow growth, and during some dozen years or so in which it was in my garden it did not reach more than a foot in height. It was growing in poor, dry soil with plenty of stones in it, and was fully exposed to all the winds which blow.

S. Arnott.

Cheiranthus Marshalli

This forms rich green tufts 6 inches to 12 inches high and in spring is covered with orange-scarlet flowers which, from a distance, look like a ball of fire. When well grown it is certainly not surpassed in beauty by any plant in the genus. The best position for it is a crevice where it is tightly placed between two rocks and where the roots can penetrate dry, sandy, or stony soil to a depth of 2 feet. When grown in this way it is extremely pretty, the dryness of the situation keeping the plant dwarf. It is easily propagated from cuttings pressed firmly into sandy soil in pots and stood in a cold frame.

H. Stevens.

Clematis montana

Clematises that bloom in late spring and early summer are not so commonly met with as the larger-flowered sorts that come in autumn. In C. montana we have one of the former most useful for festooning pergola, arch, or arbour, and it grows so rapidly that any space desired is soon covered. I have struck several from cuttings from half-ripened shoots after plants have flowered. C. montana can be grown in a pot in a cool greenhouse, and comes into flower some weeks before the outdoor ones.

Townsman.

That bare wall

Although the season is advancing there is no need to go through the summer with bare walls in a garden, while one may raise from seed very quickly Convolvuluses, Tropæolums, and others. If one or two seeds can be sown in pots and raised in a greenhouse or frame back time can be made up, but in any case it will not be long before the wall is furnished with greenery and flowers.

Woodbastwick.

Pæony lobata Fire King

An intense flaming orange-scarlet form of the red Pæony of Constantinople

Two lovely Pæonies

THE most brilliant Pæony in the garden this year was one which came from Mr. Gifford, of Hornchurch, a few years ago under the name of P. lobata Fire King. It is a single red Pæony; not a purple-red, but a bright fiery red or flaming orange-scarlet; rather more intense in colour than the glorious P. lobata which Mr. Gifford showed in quantity at the Chelsea Show, which exhibit created quite a sensation among hardy plant enthusiasts. According to the "Botanical Magazine" P. lobata and Sunbeam of the trade are botanically known as P. peregrina. It is the red Pæony of Constantinople, a comparatively rare species from the Balkan Peninsula, said to grow wild in Serbia, Macedonia, and Rumania. The flowers are not large, seldom more than 4 inches across, but of perfect form, and the plants are less than 2 feet in height.

PÆONIA OBOVATA ALBA.—This is acknowledged to be one of the most beautiful of the new plants shown within the last two years. At the Chelsea Show last year it received the very high honour of a First-class Certificate when shown by Mr. J. C. Allgrove, of Slough. It was also shown at Vincent Square on April 21st this year. The single flowers are pure white with golden anthers, and the stamens are dark crimson at the base; the beautiful glaucous-tinted foliage stands out in marked contrast to the white flowers. Being an early-flowering Pæony it should, for preference, be grown under a wall or in a position sheltered from spring frosts and the early morning sun. The type plant P. obovata is usually described as having reddish-purple flowers. There is a reference to this Pæony in Bailey's Cyclopedia of American Horticulture, 1901, which is interesting:—"According to Peter Barr every species mentioned in the Index Kewensis has been introduced to cultivation in Europe, except P. obovata, a native of Manchuria, which Mr. Barr hopes to obtain by a personal visit to China." The white-flowered variety here illustrated is unquestionably one of the best plants of recent introduction. It was collected by Mr. E. H. Wilson in Hupeh. It is herbaceous in growth, not very vigorous, and the glistening white flowers are usually about 6 inches across.

We are often asked which is the best time to divide and plant Pæonies. This is best done about the middle of August or in early autumn. Sometimes it is left till spring when the new growth appears, but, in our opinion, this is about the worst time, as Pæonies ought not to be disturbed after growth has started. H. C.

Argemone grandiflo

This plant, better known as t Poppy, is an attractive hardy ann does not like wet a dry sunny spo selected for sowing the seed. The tain the height of 2½ feet and bra therefore space must be left for development. I have never foun plant well, as it sends a long tap r down into the earth without sc fibre. The white flowers are of a ture and very handsome, the mas liant golden stamens in the centre their beauty considerably.

Herbaceous Phloxes: Tin

One may do much for herbacec by affording them attention now. who grows them knows that P gross feeders, and that any weak their vicinity have a poor time of the soil is known to be "almost w it should now receive a good mul dung, or old pieces of turf and ma over the roots will help the plan ably. Opportunity ought also t now to go over each clump and c of the weakly shoots, particular the centre. Give the plants w manure a few weeks before flow to ensure finer spikes. L

The rare Pæonia obovata alba

One of the most beautiful plants of recent introduction

OME BRITISH PLANTS FOR BRITISH GARDENS

By Sir Arthur Hort, Bart.

say at once that it is not my pur- recommend or in any way en- the indiscriminate collection of to enrich our gardens. On this strongly, but to say roundly that s should never be dug up would hile it is not easy to say where line should be drawn. At all is all the difference in the world lless and heedful collecting. By ecting a scarce plant may be rminated, which has probably e of our one Cypripedium, C. dy's Slipper). Mr. Farrer tells ears back, a specimen was seen child's nosegay of wild flowers, fortunately, she did not remem- e had picked it. On the other ssible to possess oneself of even without seriously diminishing indeed, the patriotic gardener by cultivation, actually increase presently establish a new colony in some well-chosen spot. By nt is generally meant one which it may be abundant enough rs; thus the Floras of France lovely Pyrenean Gentian is where it does grow it grows, y, by the acre: and one might or a thousand plants of the imrose (Primula farinosa) from without making any ap- rence. A distinction, then, may ween plants which are rare in of being local and those, such r scarcer Orchids, of which only or two is occasionally found. the latter the patriotic gardener he severest self-denial, while as if he shows a wise discretion he amage. What is really wanted of preventing the wrong people g, such as those who merely s for want of knowing that not grow without its roots, se who dig up things whose their gardens cannot possibly end of mine is making a gar- y of British plants, and will mens not actually collected in hen he is a botanist and a very er, in whose hands the stocks es will probably be increased iminished, which is more than f most of the enthusiasts who countryside without his and reverence for Nature. law, such as that which pro- ms hardly possible; such a law enforced, while the mere f forbidden rarities might only ught-of crimes to the wicked. ther, leaving home for some l her children in her absence e cat, not to go near the fire, concluded, "don't put beans s." Now, the children had of that before, so, of course, soon as her back was turned.

rse, desirable that seeds rather uld be collected, but this is not able; thus, if you notice a de- because it is in flower, it is o early for ripe seed, and you that way again. Again, if the ou may not secure from seed fine form which you coveted. seems to be no simple solution y, but I have relieved my con- I would fain hope that I have . At all events, just as the ane egg-collector does not take the whole clutch of eggs, so the conscientious plant-collector who comes on a colony of a long-desired rarity will take but a bit or two, and will take his bits up carefully, not ruining several in the attempt to get one. If the trowel brings up more than was intended, he will replant the balance as heedfully as the golfer replaces the divet. He will, in fact, behave in Nature's garden as he would in that of a generous friend. Needless to add, he will take nothing at all if he knows that he cannot give it what it wants; he will leave bog plants in the bog if his garden has no water, and he will leave lime-haters in their proper habitat, if his own soil is full of lime. When all is said, in order to grow British plants it is not necessary to have collected them oneself, though treasures thus acquired have the added interest of association with happy days in the past.

After this preliminary sermon may I go on to suggest that, while the wilds of Tibet are searched for the enrichment of our gardens, there are many little-known natives which might well have a place? Moreover, such things grown in a garden may give pleasure and interest to many who would have little chance of seeing them in their own homes. Thus I have often surprised visitors who admired Gromwell (Lithospermum purpureo-cœruleum) or Alkanet (Anchusa sempervirens) or Potentilla rupestris, by telling them that these are plants of our own land. Gromwell is found in a few West Country woods, the Alkanet has a wide range, but is very local, the Potentilla is confined to one mountain in North Wales. In case anyone does not know these plants a word may be added on their habits and requirements. Gromwell is for a rough bank, where it will send out long stems, which root again like strawberry runners. These may be encouraged till a good colony has been formed, after which, unless space is unlimited, they should be treated like strawberry runners; that is, nipped off, otherwise the plant devotes itself to this method of propagation instead of flowering. The trusses of deep blue flowers in May make a brilliant show. I have found the favourite Lithospermum prostratum intolerant of lime, but its British relative seems to revel in it. The Alkanet belongs to the same order, the Boraginaceæ, which gives us so many lovely blues, Borages, Forget-me-nots, Hounds'-tongues (Cynoglossum), Blue-eyed Mary (Omphalodes verna) and its kindred. This particular Alkanet has rather coarse foliage and small Forget-me-not blue flowers. It may be put under trees where hardly anything else will grow and where it can sow itself. It looks best in a good mass. The Potentilla has not the awful meandering habits of some of its race, such as Silver-weed (Potentilla anserina), surely, common as it is, one of the loveliest of British wildings, but quite impossible in the garden: I have been for three years trying to eradicate a single plant. The Welsh species is neat and dainty in growth, and is an ornament to the most select rockery; it will sow itself, but superfluous seedlings are easily pulled up—and, maybe, given away.

Among such local plants of garden value may be mentioned the charming if not showy white Rock Rose (Helianthemum polifolium) from Brean Down, in Somerset, and Torquay; Dianthus cæsius from the Cheddar cliffs, where, fortunately, inaccessible rocks preserve it from extinction; Veronica spicata from the chalk downs, the true dwarf plant, not 6 inches high (the same name covers several more or less tall garden forms); Bee Balm (Melittis Melissophyllum), a pretty Labiate of the woods of the southern counties, including Hampshire. These are just samples whose acquaintance I happen to have made; the list might be indefinitely extended.

I have been assuming that the garden is to be, to some extent at least, a collection of interesting plants, and not merely a place for producing a brave display of a limited number of showy flowers. Gardeners are sometimes divided into two classes, those who aim chiefly at general effect and those who make their plot a sort of live herbarium. I confess that I probably ought to put myself in the latter class. But I cannot see why a compromise between the two ideals should not be possible. Few British plants, certainly not those which I have named, will make such breadths of colour as a bed of Delphiniums or Pæonies or Oriental Poppies or Bearded Irises, to say nothing of the bedded-out stuff which still finds favour in some formal gardens. Yet, even if such things are given their full value—and personally I love them all—it is surprising for how many less brilliant subjects even a small patch has room. In the conventional herbaceous border or in the open shrubbery, with its mixture of shrubs and herbs, the ground between what may be called the leading plants is often left unnecessarily bare, whereas in Nature few plants thrive in the sort of isolation which the gardener is apt to give them. The intersperses may be kept clear of real weeds—noxious weeds—and a certain number of humble natives may be allowed to take their place; as examples might be mentioned the white Dog Violet (which seeds true) or the pretty white forms of Herb Robert (Geranium Robertianum); there is one with green, another with red stems. Such little intruders in the lordly domain of florists' flowers will do no harm; nay, they will shade the ground with a cooling carpet, and, if they become obstreperous, they are not more difficult to keep down than other weeds. In the same category may be placed annuals such as the lovely Campanula patula, which is at least as deserving as many prized exotic annuals, and which, unlike many of those, will not need sowing and pricking out, but will renew itself year by year. The Violet and the Geranium just mentioned are rare varieties of common plants. Now, such things are just what the judicious collector will look out for, and if he discovers such out-of-the-way forms for himself, helps himself to just a bit or two, and cultivates and increases them, he may be helping to make known some of Nature's less obvious charms, and at the same time adding to her stock. There are people who will tell you that all the Primroses in a wood are alike. I have even seen this stated in a gardening paper, whereas a careful scrutiny of almost any Primrosy copse in spring will reveal "forms" which may be worth developing in a corner of the garden, though no garden of ordinary size can emulate the massed effects of the natural wood. Or take the Wood Anemone (Anemone nemorosa), the most ordinary forms of which are, I take it, not out of place in half-shaded nooks even of the choicest garden. But if one hunts about one may find white Anemones of abnormal size, like the variety called Leedsii, or with an abnormal number of sepals, giving the flower a starry effect, while in some woods of the West, for instance, in Cornwall and Wales, varieties more or less blue may be discovered; not, perhaps, as distinguished as the well-known variety Robinsoniana, said to be from Norway, or the incomparable Allenii, raised by

Mr. Allen from seed, but pleasing in their gradation of delicate tints. One very distinguished form, by the way, Blue Bonnet, is said to have been found in Wales, which may encourage the diligent collector with the hope of stumbling on forms equally distinguished. Apart from its beauty, Blue Bonnet has the distinction, so valuable in the garden, of flowering when all the other Wood Anemones have finished. In my garden this year it was not out till about May 15th, and was hardly over by June 14th. These colour forms differ also a good deal in stature and foliage, which may be anything between light green and a dark bronze-green, so tha of flowering also varies, the gar nished with them will have som esting in the Wood Anemone lin several weeks on end.

(To be continued.)

REMINDERS FOR THE WEEK

Southern and Midland

Mulching vegetable crops

It is surprising what benefits are derived from a light mulch of manure or half-decayed leaves given at the present date to some kinds of vegetables, particularly the rows of Peas and Beans. This should not be applied in heavy masses, but shaken up as light as possible. Where large Onions is the object a light mulching will keep the soil cool and moist around the roots during the hot weather. The shorter the material in this case the better, such as Wakeley's Hop manure or the remains of an old Mushroom-bed.

Parsley

This herb is always an essential item when filling the vegetable basket, and a few seeds sown now in a sheltered position as near the path as possible will produce fronds for using during the winter months. Where supplies are needed daily it is advisable to sow where a frame may be placed over the plants during severe winter weather.

Spring Broccoli

It is now time to get the main supply of Broccoli needed for spring use into its permanent quarters. When setting these plants, to ensure the best results they should be planted on firm ground; excellent results can be obtained by planting them out on an old Strawberry-bed. This should not be dug; simply remove the old plants and bore holes for the Broccoli with a bar if necessary.

Biennials

There should be no delay in getting the seedlings pricked off into nursery beds as soon as possible, as if allowed to remain crowded in seed-beds they seldom make satisfactory plants. Wallflowers, Sweet Williams, Stocks, and Columbines should be planted in a sunny spot, whereas Forget-me-nots, Polyanthi, Canterbury Bells, and Foxgloves are best grown in a partly-shaded position.

Herbaceous borders

Work in this part of the garden that requires attention is getting all plants that require staking attended to without delay. When doing this the shoots should not be tied together to one stake like a besom, but secured lightly to several stakes placed in the ground around the plants. Any bare spaces, such as where Tulips, bulbous Iris, and other spring-flowering plants have been grown should be filled up with Asters or other annuals that will not rob the ground unduly.

Rambler Roses

Many amateurs make a mistake by cutting away the young shoots that appear at the base of the plants. These should be reserved and tied loosely into the structures for the time being, and when the flowering period is over these should take the place of the old rods, which should be removed as far as possible. If these young shoots are unduly numerous they may be reduced by cutting out the weakest.

Red and White Currants

It is advisable to go over the trees and pinch back the young shoots to within six leaves of their base. This summer pinching removes the tips, which are liable to harbour aphis as well as to cause the basal buds to plump up for the future season's crop. Black Currants should not be treated in this manner.

Strawberries

Runners are now making headway and should be secured as soon as possible into small pots or other means for forming the new plantation. The best plants are obtained from the first runner that appears on the plant, and not more than three should be taken from any individual plant. The largest and most fertile plants should be selected for propagation.

Chrysanthemums

The main batch should now be in the flowering pots and growing freely in an open position. Do not crowd them in any out-of-the-way corner, as if a proper ash yard is not available they are best stood along the side of the walks in the kitchen garden, making the stakes secure to strands of wire fastened to stout stakes. To prevent worms entering the pots they should either be stood on ashes or boards.

Vines

An important item in the culture of Grapes at this season is to guard against scalding of the berries. This is usually caused by allowing the roots to become dry or through bad ventilation. Ample supplies of water should be given to inside borders, and the ventilators should be opened early on hot mornings, not allowing the temperature to become unduly high.

W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Hardy fruit

It is now possible to estimate how the hardy fruit crop is likely to turn out, and where the trees are heavily laden it is wise to do a little thinning. This is especially needful in the case of Plums, for if some varieties are permitted to fruit too heavily the flavour will, assuredly, suffer. Those who may have a tree or two of Victoria upon a wall will find that both size and flavour are enhanced if the fruits be well thinned. In the case of Gooseberries the thinnings are always in request for tarts and for bottling, but, as has been said, when crops are heavy it is sound policy to thin, with a free hand, at an early stage.

Rock garden

Many of the strictly spring plants in the rock garden are now passing out of bloom, and the spent flowers are better removed. At the moment some of the trailing Gypsophilas, Saponaria ocymoides, Phyteuma Wagneri, and many of the alpine Phloxes, notably G. F. Wilson, are outstanding. The Rock Roses, too, make very effective groups, and the greenish-grey foliage of Anthemis macedonica is not without value, although the plant is inclined to be over-obtrusive and needs to be kept well in its place. A few groups of the annual Nasturtiums, such as the dwarf Empress of India, are useful for furnishing bare spaces.

Hard-wooded plants

These may now be safely p doors. Many put the pots on a but where it is possible to do so better to plunge the pots. Not reduce the work of watering, bu roots cool—a great advantage weather. Even if, at times, th heavy, it is wise to pay attentio pots, for, in some cases, the foli watershed and runs the rain clea

Cold frames

When, for any reason, green have, temporarily, to be put into the sashes ought to be obscu manner. Ordinary whiting m little soft-soap is effectual, bu recognised summer shading equally serviceable. The shadin ought not to be of a too heavy d

Conservatories and greenho

The increasing attractions make plant-houses less popul during the day, but they ought kept as attractive as possible. A a general restaging will carry o —with an occasional "shuffle time comes for the housing o anthemums. Good groups of Lil or of L. speciosum are always place. So, too, is a group or Chimney Campanula (C. pyran white and blue. Well-grown Hydrangeas, Zonal Pelargo Tuberous Begonias, as well as iensis, lend variety. The Balsam appears to be under a cl furnished pieces in 8-inch pots attract attention. For autumn Throatwort (Trachelium cœrule struck plants of Heliotrope m mended. More attention migh the claims of Verbenas as p batch of 50 pots of Miss Willm showy in September, and cuttin May will make fine plants at th

Cinerarias and Primulas

Those who decide to have C Primulas in April of next year, find that this is the right time sow seeds. The keynote throug coolness. Sow the seeds in box cold frame, and prick off the soon as they can be handled. in the boxes into which they pricked off, water sparingly, an clude the frost until potting tin spring.

Vegetable garden

Sow Spinach or Spinach subst quarters and thin the seedlings e severity. Those who like the Spinach, however, must give it border available. Vegetable M Ridge Cucumbers will now be of a mulch. Sow more Fren transplant seedlings from an ea I have, somehow, an idea that French Beans are more prolific grown in the bed in which the even if the latter be well thinne

W. M

Mabie Gardens, Kirkcudbrigh

)OR PLANTS

for autumn flowering

·th of flowers sometimes experi- loors in September or October is en brought about by a want of lay and June. The business of flower borders for a summer sses our attention so much that t of our calculations plants for ien others are over, and assure t what will tide over the green- e summer months will do for . To trust to plants that have summer through is not the best sue to have fresh, bright colours. articularly bright, and none the utumn, provided they are well As far as possible, it is best to for autumn blooming from cut- last autumn, but if this cannot 1 the best and sturdiest spring- Pot these on when rooted at half-rotten loam and manure, and. In the summer the plants the advantage of every ray of rder to ripen growth, and to do stand out-of-doors well clear of so that air and sun may do their ie time the flower-buds, as they l be removed, and stimulants administered above once a fort- may be got under glass in Sep- ly as one needs them, and after iure-water may be applied twice is surprising what a show of iay get from plants so treated, rence in quality between them it have flowered in the house all ear. Too much cannot be said ipening the wood, as when this red a good bloom must result. ints grown with this object will h value for obtaining cuttings ving spring, and prevent the ousing so many at the close of Vhilst there are many single cur to one, the fact that flowers or autumn leads me to suggest of a few double sorts which ssoms for a longer time.

A. G.

leaved Pelargoniums

om a report in a daily paper ie exhibits at the late show of as a Pelargonium with pepper- eaves of a thick velvety nature claim of novelty was made, but not say in what way it differed ie old varieties, also with thick iuve flowers, the leaves being ering altogether from smaller- also peppermint-scented. These Pelargoniums were largely one days, and large specimens le variety were often well . Hudson when he was at House, and attracted well- ition. I grew some 10 or 12 the early 90's, and I think my Rollison's Unique, for it ry handsome flower as well as oliage. It wanted good and , for it was inclined to be a bit and, in common with most of as very subject to aphis. The note, however, was not to call ecimen plants, but rather to 1 occasional bed of these plants garden is an attractive feature, ls material for foliage, cutting gays, wreaths, and anything of er. Most of the varieties are w very strongly when planted out, so individual plants should be allowed plenty of room to develop. In addition to the peppermint, lemon, citron, and nutmeg scented sorts with green foliage there are two or three variegated sorts, and occasional plants of the lemon-scented Aloysia and Eucalyptus can also be added to give variety and height. The two peppermint-scented varieties I have grown were very dissimilar in leaf, the one large like a Zonal, the other very tiny both in leaf and flower.

E. Burrell.

Summer arrangements for winter flowers

It is a good plan for the owners of greenhouses, that at the moment may be bright with a variety of flowering plants, to look ahead and arrange to grow on other subjects that will give beauty during winter and early spring under glass. Besides Chrysanthemums, which most folk take in hand these days, one ought not to overlook Primulas, Cyclamens, Genistas, Cinerarias, and Solanum Capsicastrum (the Winter Cherry), young plants of which can now be potted on and quartered in cold frames on a north aspect for the rest of the summer. It is well, too, to look around to see what the garden will afford in the shape of hardy plants for potting in autumn to place in cold frames in order that in early spring they may be brought into the warmth of the greenhouse. In this connection herbaceous Spiræas, Campanulas, and Dielytras will be found most useful, and the clumps should be marked for lifting late in September. These, along with winter-flowering Stocks, that need but the merest shelter to tide them over the winter, will, along with bulbs, make the house gay after the last of the Chrysanthemums have left us.

Leahurst.

Disbudding

Most of us who have had experience with such fruit-trees as Vines, Apricots, Figs, Peaches, Plums, and some others realise the necessity of reducing by more than one-half the growths that appear if we are to succeed in getting the best fruit as well as the ripening of the wood for the succeeding year. It would be all to the good if we turned our attention likewise to many of the plants that occupy our glasshouses, whether in pots or planted out for the adornment of roof or pillar. Take the case of established plants that have to be annually pruned, such as Bougainvilleas, Fuchsias, Plumbagos, Streptosolen, Daturas, and many others that would be a tangled mass in a very short time if no reduction of new shoots were practised quite in their infancy. Do we remove sufficient so as to get the best result from a floral point of view? By dispensing with the weaker shoots, many of which would produce no flowers, we add strength to those that remain, thus getting the best out of the plant. Superfluous growths such as we discard would, if left on, prevent air and light penetrating and strengthening the shoots that we expect flowers from. The benefit to be derived by this timely removal of redundant shoots that only weaken the plant and lessen the production of the finest fruit or flower is very great.

J. Mayne.

Statices

Blue flowers are comparatively scarce amongst greenhouse plants, particularly such as are of a lasting character. The different species of Statice supply various shades of this colour; the flowers are most enduring, and the plants when healthy keep on producing a succession so long as they are in active growth, added to which, the plants last for a number of years when well treated; but there are several matters connected with their cultivation in which they differ somewhat from the generality of other subjects. To keep the leaves in a healthy condition they must not be exposed to the full force of the sun from the time it gains considerable power until it wanes in autumn, otherwise they assume an unhealthy, bleached appearance, and do not attain nearly their full size. The temperature should not be lower than from 40 degs. to 45 degs. during winter, or the growth becomes stunted. They are free rooters, and require more pot room than many things which attain a larger size. Good yellow loam is the best soil in which to grow them, and when in full growth during spring and summer they are much assisted by frequent applications of manure-water. They require no training for ordinary uses. S. profusa, S. Butcheri, S. imbricata, S. brassicæfolia, and S. Holfordi are deserving of cultivation. Anyone who will keep up a stock of these need not be without their flowers for any length of time. If cut whilst fresh and dried quickly they will retain their colour and form for some time. Cuttings made of moderately-sized shoots kept in a medium heat and confined under a bell-glass strike freely.

Soot-water for plants

We all know how valuable soot is in the garden, but I do not think it is quite so generally appreciated what an asset old soot is for plants in pots. Many of us are apt to have recourse to artificial manures to build up plants for blooming—and these administered according to directions are well enough—but I venture to say that in the case of some of the proprietary manures soot enters into their composition. Old soot placed in a bag and dropped into the water-tank and the liquid given in a weak form to pot plants not only improves the colour of the flowers, but invigorates the foliage as well. Soot should be exposed to the open air for some weeks before use. I have used it with good effect on Pelargoniums, Fuchsias, Plumbagos, and soft-wooded things like Primulas and Cinerarias, and can vouch for its worth.

Midlander.

Plants in rooms

Often during the summer, when we bring fine-foliaged plants from the greenhouse to a sitting-room, they soon begin to show that the removal has not suited them. Missing the lighter and often moist conditions to be found under glass they resent the dry atmosphere of a room. If it is not possible to change them periodically they should at least be given the advantage of what air is possible and be attended to in the matter of sponging the leaves. Plants like Aralias and Grevilleas benefit by this treatment. Aspidistras will stand neglect, but even these show when attention is paid to them by ridding the foliage of dust.

Woodbastwick.

Watering plants in baskets

We are approaching the beauty season of plants in hanging-baskets, and every care should be taken to avoid their becoming dry. Obviously plants in a confined space and suspended are the first to feel the want of water. This can, of course, be given through the can in the usual way, but it is much better, I fancy, to immerse the baskets in the water-tank, as then one is sure of the roots being thoroughly saturated, and, after draining, they can be put back. This involves more trouble, but it is the best plan.

Midlander.

Planting and Feeding Celery

AT this season the amateur is planting Celery for winter use, and few crops are more appreciated when well grown. Few vegetables are grown with less trouble if a few simple cultural details are carried out. There is no lack of good varieties. The choice is not at all limited, and of late years there have been some excellent additions. I am aware many prefer a white variety. I think a pink or red Celery superior in flavour, but this may be a matter of taste. I am sure, however, red varieties of Celery are less subject to "running," and if required for exposed places or later use, the coloured kinds are best, but for late use there are distinct types, such as Standard Bearer and Major Clarke's. For early use White Gem is a fine type—a grand amateur's Celery—as it blanches so readily. Another very early and suitable companion to the Rose is Superb White, which is very much like the Rose in every particular except colour, and is one of the best for early use. As regards

CULTURE.—Planting should be finished as early in July as possible, but for late supplies I have adopted a simple plan of sowing the seed in a bed very thinly, and planting direct into the trenches. This is a saving of time. Another system of culture not often adopted is that of growing on the flat for late use, not in deep trenches. Of course, huge heads are out of the question, but one can have sound Celery well into May by planting thus. Deep drills are drawn in well-manured land 1 yard apart, and moulding up is deferred till late in October. By that date the tissue of the leaf and stalk is well hardened, and this enables the plant to resist severe weather. I have briefly noted this method, as it is one amateurs who have to plant late and who do not care to make deep trenches could adopt with advantage. The first method is a simple one saving time and labour. Many growers, gardeners as well as amateurs, think it impossible to over-feed Celery. This is a great mistake, as when the plant is surfeited with food in its early stages it is often left to starve just at the time there is an increased demand upon it. To make my meaning clear I would point out how many growers place large quantities of rank manure under poor, weak plants, and instead of a sturdy growth a hollow one results, and a thick, woody base. I venture to assert that had the plants been given the food at a later stage there would be better results. It is far better to feed when plants are growing vigorously than at first, before they can absorb the food given, and then leave them to chance.

FEEDING.—It would take much space to go at length into suitable foods. There are many. I will describe simple ones often at everyone's command, and few plants require more moisture than Celery. It is often thought that rain will supply it, but this is not so. The plant, if in active growth, conveys the rainfall to the side of the trench, not the roots, whilst the roots are suffering, and drought is the cause of running, of bad flavour, toughness, and other defects. Again, few plants require more moisture than Celery once growth is active. When more than half grown I have found it advantageous to flood the trenches weekly. When this is done there is no danger of running. Another evil is decay in centre of the plant. This is the cultivator's own fault in nine cases out of ten, and there is a simple remedy—not to mould up too soon. By early moulding-up the growth is checked and decay results. It is often caused by placing too much soil on at one time. I admit by so doing the rows may present a neater appearance, but if half the plants die it is useless. When moulding, place the soil at intervals of, say, two or three weeks, in small quantities; that is, a little and often, not one grand earthing-up, as is often done. By piecemeal moulding the stalk of the plant gets hardened, and is able to battle against cold and snows. When feeding wait until the plants are large enough to absorb the food. Few manures are superior to liquid from animals. To this add a dressing of salt or soot, and there is an efficient fertiliser. On the other hand, beware of too strong doses. Here, again, the old saying "a little and often" is the best. Sewage in a crude state is not good, and when artificial foods are given take care that plenty of water is used to weaken the food. Guano and fish manure make the plants grow splendidly when given in small quantities with clean water. There are other foods, but use them at the right moment. W.

Treatment of Asparagus in summer

When the season for cutting ceases many beds are neglected, but, in my opinion, that is the time the roots require extra food, moisture, and support. At this time of the year, even in ordinary weather, the beds require food, and though moisture may be provided by rainfall, the plants are benefited by liberal supplies of a good fertiliser. As is well known, in many gardens large quantities of manure are put on the beds in late autumn at a season when the roots are almost inactive. The roots are not always able to take the food supplied them, and without top growth it is useless to feed. I am aware it enriches the soil and renders it in better condition to support growth. On the other hand, it would do a great deal more good given as soon as cutting ceased, and in the case of old beds, large masses of manure destroy the roots instead of assisting them. In the case of worn-out or impoverished beds, no matter how much food is given, it cannot give new life if there is no root action, but in the case of healthy plants, food given during the growing season, when the crowns are being formed, gives the help required and builds up better crowns. A heavy dressing of salt—say in the late autumn (November)—does more harm than good. The plants certainly require a certain amount of salt, but not when at rest, as, given then, it acts the reverse of what is intended, souring the soil and keeping the roots at a lower temperature than the surrounding ground.

Another point often lost sight of is the state of the soil. In heavy clay soils the use of salt requires care, and should not be applied earlier than May or later than August, and only in moderate quantities in showery weather. Many beds will have had little moisture since cutting ceased, and these are the beds which will feel the strain next season, especially in light soils resting on gravel. In many gardens the old system of raised beds is still in vogue, and in dry seasons these beds are the first to suffer and the most difficult to keep moist. Beds, or what should more properly be termed rows of plants on the flat, are much better off in such seasons, and where room is no object a yard between the plants will give splendid results. With plants grown thus, irrigation can be carried out.

This is, I consider, the best means of promoting a free, strong growth, and no better use can be made of liquid-manures than for these plants. Where liquid-manure cannot be given, such fertilisers as fish manure, guano, and salt may be given liberally and well washed in. Fish manure i best fertilisers. The proportion i food may be used depends upon the soil. I would advise using month, in preference to strong long intervals between. It is a when ample moisture is given likewise valuable, but though a same way as fish manure, if of t it need be used in smaller quant are other foods, such as soot an fertilisers, that can be used in manures are not procurable. It n that Asparagus is a deep-rootin not readily affected by drought. roots freely if well supported, but its roots soon decay. In the c soils a mulch between the rows sons is of great importance, es young plants. I have used stra this purpose, and it retains moist plants in a richly-made bed are of liquid like older ones, but more frequent supplies of water. be done to support new growth son, as if twisted about by win cease to form the shoots or cro season, so that it is well to growths till they change colour. tion most handy may be emplo stakes and twine, or branches th soil.

Sowing Turnips in dry

It often happens at this seaso main crop of Turnips for the wi requires to be sown, that the lan rough, harsh condition, totally germination of small seeds. So wait for rain, and this I hav done, but I have never been alto fied that I have acted rightly i for not only are delays danger quently at this season if we ha shower it is of no real benefit i porous soil. I find it a better about the right time, and if the and no immediate prospect of r down the soil so that the drills c and, before sowing the seeds, we liquid-manure, made with gua about 2 lbs. of each to 40 gallo covering the seeds with a mixtu and ashes or burnt earth, save purpose when the rubbish-heaps up. This moistening of the soil and for some distance down manure has a wonderful effect c of the plants all through the course, at the time it involves trouble, but then reliance may be having a crop, and it is worth feel free from anxiety on that hea in a place where the Turnip-fly is if the plants be weakly. I am r to this mixture of guano and s things on a porous soil. Lettu and many other crops of which is required to be kept up are gre by having the drills soaked manure at the time of sowing them to make a start, and wh come they have the full benefit ing for rain is, in most cases I i take; even in planting out Broc Greens two or three good w usually be sufficient to establish ing a little dry earth round the the last watering to check evap everyone knows how much pleasanter the work can be do surface is dry. Although I ha tioned guano and salt, nothing value as a manure need come in a liquid form, applied to the d seeds, is very beneficial, as the o appreciates its presence.

JIT GARDEN

mer growth of Vines

t help the grower if his Vines are f laterals with many small leaves, not only shut out light, sun, and ure the healthy main leaves by g them. As the new shoots ickly the Vines require constant d necessitate the regular removal erals while quite small. I know pressure of other work, but this vent daily attention to the Vines. ttention given them in the early the cool of the evening is time Only those who have had years e in growing Grapes have any effect good foliage has upon the e berries. In badly-ventilated hat is, ventilation not judiciously the weather, the Vines will have h are thin and lack substance. perly admitted the leaves will be , and healthy, and towards mid- assume a somewhat bronzy tint short stalks. Leaves of this de- ll take up a large amount of and retain it, thereby helping mensely. I am afraid the name many people means excessive l a high temperature, and when to grow Grapes they try to do so eed throughout the season. The Vines are weakened and unfit to f fruit next season, or if they do il to finish properly. The great keep the Vines in good average year to year, and to achieve this fine the amount of foliage to the on each fruit-bearing shoot, re- n quite small, the sublaterals. ing plenty of these right through just what I like to see, at the arrying a good crop of Grapes. n, that while these new shoots grow, the Vines are not over- weak Vines have to be dealt are deficient of root-action new should be encouraged by allow- r of sublaterals to grow, but so lude light, air, and sun from the The Vines will then be en- make more roots, which will em, and also it will mature the more satisfactorily. If there is nt of leaves between the glass hes black Grapes put on a much Especially have I found this rghs; and, further, they retain nder this canopy of foliage much when exposed to too much light hen we come to the white and d varieties it is quite a different of Alexandria, for instance, perfectly if exposed to sun and is as well to give this exposure the berries have stoned, and it membered, if unduly exposed, many berries will be scalded. Grapes off well there must be osure and a good circulation of nd very warm air through the hen disposing of the foliage see and leaves at the base of the to the main rod are exposed to , as on the maturity of these reat extent the next year's crop.

F. H.

lite Peach house

time at which stone fruit in s at the critical stage of stoning. at must be avoided or the pro- hurried and many of the fruits keep the temperature even and st. When the stoning is completed stimulants can be given. The old brew from the liquid-manure tank is, probably, the best of all. Chemical fertilisers are all very well—their application consumes less time, but much more judgment is required on the part of those responsible for the applications.

Red spider in fruit houses

A dry, cold winter, succeeded by a keen, harsh spring, with the wind blowing principally from the north and east, may well be dreaded by the practical fruit-grower, for he knows how quickly incessant firing, accompanied, perhaps, by dryness at the roots, brings spider and other insects into existence. Spider is sometimes carried from one house to another not only by plants, but by the attendants whose duties take them through every compartment many times in the course of the day. The most common cause of its premature appearance, however, is due to imperfect cleansing in winter; it may be of the bark of the Vines, or it may be of some part of the structure itself. Be this as it may, the most fertile cause of its spread is dryness of the atmosphere from incessant fire-heat, imperfect ventilation, and an insufficiency of water to the roots.

Dryness being the cause of its development, it is but reasonable to assume that water is the best agent of destruction; but then it, unfortunately, happens that incessant syringing soon destroys the bloom and renders Grapes unmarketable, if not uneatable. Still, whatever insecticides may be used, water to the roots, water wherever it can be applied, must be accepted as one of the most potent auxiliary agents in its destruction. Soft water, free from lime, is best, and a thorough drenching that will wet every leaf and berry will do less harm than light showers of spray; but, prevention being better than cure, I have always made a practice of putting in a syringeful of soft water wherever it can be driven against the foliage without running the risk of wetting a berry. Rather late in the evening is the best time to apply this preventive remedy, and some little practice with a good syringe is necessary. When this does not produce the desired effect, and the spider from old spurs fastens on the leaves immediately above the bunches, sponging with soapy water, a decoction of Quassia chips, or Tobacco often nips the enemy; and, last of all, in one or more of its many forms comes sulphur, which, however, is not always a harmless remedy. This remark need not deter careful people from using it, as we frequently hear of mishaps brought about by the injudicious application of some of our oldest and best-tried insecticides. Sulphur, in the first place, should never be applied to the pipes until after the Grapes have passed the stoning stage, otherwise rust will most likely follow, and then even tender varieties, like the Frontignans and Chasselas Musque, often suffer. In the second place, it should never be applied to brick flues, if such still exist, to iron that has been heated in the fire, or newly-slaked lumps of lime, at one time so strongly recommended. It may, however, be applied as a paint or wash to the hot-water pipes after they have been heated to a degree that will render them uncomfortably hot to the hand when placed upon them. To prepare a vinery for the fumes it should be shut up hot and dry, at a temperature ranging from 80 degs. to 90 degs., the wash being applied after the sun has left the roof, when the ventilators may be kept close throughout the night. They must, however, be opened very early the following morning, and unless the operation is to be repeated, when shading should be resorted to, the walls, floors, and all available foliage should be well syringed, not only to break up the webs, but to produce vapour that will render the fumes harmless to the leaves. If the first painting does not make a clearance it may be repeated once, or perhaps twice, at intervals of two or three days. Many people paint the pipes first and heat them afterwards, but this is a mistake, as they should be hot enough to vaporise the sulphur the moment it is applied. In vineries subject to annual attacks gardeners use sulphur in the winter dressing, also with the lime applied to the walls, and often distribute it over the stems and leaves with the sulphurator; but the best of all preventives is generous culture, with an abundance of air, water, and atmospheric moisture, and last, but not least, moderate cropping. A. G.

FERNS

Ferns for baskets

A MORE beautiful object I do not know for imparting grace to rooms and corridors than a well-grown basket of Ferns, either suspended from the ceiling or from ornamental brackets in the walls. During the hot summer months the varying shades of green, in their arching feathery fronds impart an elegant and cool appearance, and when two or more sets of plants are grown for the purpose, so as to admit of frequent changes, the interesting features of this mode of room decoration are considerably enhanced. Amongst the best strong-growing Ferns for large rooms are Polypodium aureum, Woodwardia radicans, and Aspidium exaltatum. Their long arching fronds have a grand appearance, especially when the rooms are artificially lighted.

The bottom of the baskets should be covered with a few trailing sprays of Cissus discolor, hanging about in apparent negligence. This Cissus does well in baskets; short pieces of the old wood strike freely in early spring if taken off before growth commences. If the cuttings are put in in February the growth of this plant is so rapid that fine young plants will be ready for filling baskets in April. Almost all the hardier kinds of stove and greenhouse Ferns do well in baskets—not only those whose mode of growth naturally fits them for suspending, but many of the erect growers also; but the bottom of the basket should in all cases be covered with creeping or trailing plants, such as Panicum variegatum, Tradescantia zebrina, Isolepis gracilis, and Lycopodiums. The object should be to hide every wire of the basket, which should be made as plain and simple as possible. Highly elaborate and ornamental baskets are not required; they are more difficult to fill satisfactorily, and the projecting ornamental work to my mind seems out of place. A plainly-made basket, simple in shape, lined with green Moss, and one or more plants planted in it according to the size, the bottom covered with creeping or trailing plants, which should be pegged in till the basket is covered, and then allowed to hang down negligently—this, according to my ideas, fulfils the conditions required in a tasteful basket of plants. My baskets are home-made, and are generally circular in shape. A handy man after a little practice will make half-a-dozen to begin with in a few hours and will soon be able to impart a certain amount of neatness to his work. As the wires are intended to be hid with Moss and foliage, fine workmanship is unnecessary. We use two kinds of wire. A stout wire forms the framework of the basket, and is lashed together with smaller wire; and when finished the whole painted two coats to keep the wire from rusting. A file and a pair of pliers are all the tools required, and such work should be done on wet days. It is always best to fill a few new baskets every

spring, as, by so doing, there is thus always a lot of fresh young specimens coming on to succeed the old ones as they wear out.

F. B.

Moving filmy Ferns

Will you kindly tell me whether I can, without risk, remove to other quarters some well-established filmy Ferns which are planted out? I intend to arrange for them a handsome rockery of sandstone under glass, such as these Ferns require. They have been planted out four or five years, and have grown to a considerable size. T.

[Provided a little attention is bestowed upon the plants after their removal, there need be very little anxiety in connection with this seemingly difficult operation when it is carefully done. It should be borne in mind that filmy Ferns suffer more from exposure to drought (even when only for a short time) than from any other natural or artificial cause. The point of the greatest importance is then the condition of the new place, which should be thoroughly saturated with moisture before the plants are put into it. The material to be used should also be porous and thoroughly moistened. If these conditions are carefully observed the moving of filmy Ferns becomes as simple and as practicable as the moving of any other plants. Whenever possible it is best to select a dull day when the atmosphere is naturally laden with moisture, and the compost being, as previously advised, in a moist condition, the plants may with all security be brought into it. After the operation a slight watering is beneficial, and the plants require to be kept even a little closer than usual for a short time until the appearance of the fresh roots, when they may be subjected to the treatment they received previous to their removal.]

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

Viola cornuta and Incarvillea failing

I enclose some pieces of Viola cornuta. I have lost a lot this spring. There is a small white insect on the roots. I have also some Incarvilleas gone off. There were some eelworms at the roots. I should be much obliged if you would give me any information as to the cause and remedy for the above.

F. T. P.

[It is difficult to give you the primary cause of the trouble on the roots of your Violas. Examination of the specimens showed the presence of several fungi and also plenty of eelworms. At this stage it is impossible to say whether the fungi were followed by the eelworms or whether it was the other way round. Of the several fungi present we think that one causing a foot-rot was the most important. For this we know of no remedy except taking up the affected plants and burning them. After you have removed all the plants showing signs of the disease you should try and give the rest of the plants and the bed in which they are growing a good soaking of Cheshunt Compound. This mixture can now be bought mixed ready for use, or if you prefer to make your own, you can follow the recipe we have given from time to time in these pages. The best control for the eelworm trouble will be to lift all the plants as above and sterilise the bed with formalin solution. The solution should be made by adding 1 pint of commercial formalin to 12 gallons of water. Before applying the formalin solution you should break up the bed well with a fork and then thoroughly soak the bed, using about 4 gallons of the solution per square yard. After applying you should lay some clean sacks over the bed for two days to retain the vapour for as long as possible. Your best plan will be to propagate from clean plants only and put your plants into sterilised soil next season. After soil has been sterilised with formalin nothing should be planted in it for 10 days. The small white creature present on the Viola roots is a springtail, and has nothing to do with the plants going wrong. Are you sure eelworm was the cause of the Incarvilleas going off? Eelworms cannot be seen with the naked eye. If eelworm is the cause of the trouble treat as recommended above for the Violas.]

Diseased Acanthus

(L. S., Dublin).—We have carefully examined the leaf of your Acanthus and can find no trace of a fungus likely to cause the death of the leaf. There was plenty of saprophytic fungi present, but they probably developed during the journey. We are inclined to think that the root-system of your Acanthus has gone wrong. Examine the roots carefully and see if they are healthy. If they are, please send us another specimen leaf packed in a tin box. If a leaf was so packed it would arrive in a better condition for examination than the last one.

TREES AND SHRUBS

Camellia unhealthy

I enclose Camellia leaves for your inspection and advice. The tree had been suffering from neglect and drought for a year or two, but the border was renewed in February-March, and the tree begins to look better except for this (?) blight. The house is a warmer one than Camellias are supposed to like, but this has not seemed a drawback previously. The tree is an old one, but so are others doing well. YORKSHIRE.

[From the sticky nature of the leaves you have sent to us we think that your plant has been attacked by aphis. The sticky material appears to be Honeydew, which is always exuded by aphis. Examine the plant thoroughly and see if you cannot discover the whereabouts of the aphis, paying especial attention to the growing points. It may be that the pest is present on another plant altogether, but in this case the infected plant must be hanging over your Camellia, otherwise the honeydew would not fall on it. When you have discovered syringing or sponging with a r secticide would be a good method Do not use the wash too strong, a men leaves you sent us seem ra soft side and may easily be damag aphides are very numerous fumi XL All would be the easiest way with the trouble.]

Clematis unhealthy

(E. J. Riggs).—Your Clematis pears to be a poor kind—is att fungus commonly known as the which is occasionally met with bushes and Peach trees. After wetting the plant shake flowers freely over all its parts, even abou or if the plant is too high or incon this, spray with a solution consis following:—½ oz. copper sulpha carbonate of soda to 3½ pints of w

GREENHOUSE

The Unheated Greenhouse

(W. H. S., New York).—Thi Mrs. K. L. Davidson, is pu "Country Life, Ltd.," 20, Tavist Covent Garden, London, W.C. 2, p

Fuchsia buds dropping

(Fuchsia).—From the appeara Fuchsia buds sent, the plants th them seem to be growing in a lo lated structure, and also most p some period of their growing plants have been allowed to becor at the roots, and then heavily wate of these causes would be quite s account for the buds falling off expanding. Pay regular attentio ing the plants now, and give th rooted, occasional soakings of w cow manure water in a clear s the plants clear of insect pests, them freely twice or thrice daily. greenhouse abundant ventilation plants as much space as can afforded them. A great evil in s houses is overcrowding, and it o the flower-buds of soft-wooded p as Fuchsias and Pelargoniums, to

FRUIT

Cherries dropping

(W. H. Pechey).—Seeing you showed plenty of fruit which fel stoning, the failure no doubt is due at the roots. Trees on walls are to get dry at the roots, this en collapse of the fruit at stoning ought to have given the trees a go of water and applied a heavy mul manure to retain the moisture fruits had set. It may also be wel you that stone fruits require ple which can be given in the sha rubbish. If this is the case we w you to clear off the old inert so some old mortar refuse and wood either a couple of pounds of fin bones or bone-meal, mixing this the soil you fill in with to take t that cleared out.

Black fly on Peaches

(Mrs. Gore Skipwith).—The leaves afford ample testimony to th the trees have been, if they are n fested with black-fly. This pest dealt with directly it puts in an a and if the trees are in bloom or cli ditions will not admit of an insect employed there is always the safe Tobacco powder to fall back up often a little of this applied with

sold for the purpose, as soon as ed will at once destroy the in- event infestation from spreading. uld advise you to bear in mind nptly if necessary when the trees sh into growth another season. nd until the trees are rid of the foliage looks and becomes clean ntinue the use of Abol. After- t the trees to frequent washings an water. Next winter release, me, and retie the trees. Then ne of the advertised alkali winter g the same at the strength re- by the vendors for Peach trees. ed artificial fruit manure applied ace of the border and lightly with a fork in autumn of this e beneficial. Another important see that the roots of the trees le supplies of water during the

vine

on).—Your Vine has been at- ildew, and to destroy it when obtained a footing many and dies have been adopted. The e treatment is the use of sulphur mpounds of which sulphur forms art. It is in regard to its ap- at the distinction between the dies is made. You made a very ake in burning sulphur in the not only destroying the mildew, ing the foliage, as in the case of u send us. A good way of com- est is to give the hot-water pipes —a coating of the flowers of ed with water or milk, which ere better, the sulphurous fumes e mildew. Another remedy is wers of sulphur on lumps of l lime, which will have a like most effectual of all, however, is flowers of sulphur all over the will in the course of a few days en the sulphur should be washed cible syringing with clear soft wise the Grapes, being covered , would be unfit for use.

s

.—The Fig is particularly happy striction of pot culture, and no managed fruit can be found for . It is a common mistake to the Fig, coming from a hot s not require much water; a luxuriant foliage should show it ving plant. A turfy loam with rubble serves as a good potting n manure should not be added wth is poor. A hard, moderate at is desired for fruit production, greenhouse where plenty of air n suits it admirably. Small, are best for the beginner, but if ofty, standards will be useful as etting near to the glass. For a l fruit Brown Turkey still holds . White Marseilles comes next opularity, and is generally the though called white it is really The two Ischias, Black and l be included in every collection; good" will be the verdict of y them. In my opinion there g more delicious among Figs, e both prolific croppers they will ds save those of the exhibition ltar on which so many good rificed. For two late varieties, rise, most delicious in flavour in size, a regular and constant Negro Largo, a fine large fruit nost black and of very rich finish the season. We should advise you to get plants established in pots. Any nurseryman who specialises in fruit trees can supply those you prefer.

Aphides on fruit trees

I was very interested in the article in last week's GARDENING ILLUSTRATED *re* fruit trees and their pests, and should be very glad if you will tell me what form of pest the two samples of leaves enclosed are suffering from and what I should do to get rid of them. No. 1 is off an Apple tree and No. 2 off a Plum. Both are young trees, and this is only the second year of planting. Both are showing a fair amount of fruit. I have picked off some of the affected leaves, but it seems to be spreading in spite of this. Can you, also, tell me why a large crop of Morello Cherries which had set well have suddenly withered and fallen off, though it has been watered and well tended? It is on an east wall, and this is the second year of planting. M. DURRANT.

[Specimen labelled No. 1 shows a bad attack of Apple aphis. We should advise you to spray your trees with a good nicotine wash particulars of which you will find in our advertising columns. You will find that it will be necessary to repeat the spraying several times, especially if the aphis is attacking the young leaves, which are curled up. No. 2 shows a bad attack of Plum leaf-curling aphis. A good nicotine wash is the best method of control. It is only with great difficulty that any spray fluid can be got into the curled-up foliage. The best time to use nicotine against all aphis is fairly early in the spring. To kill aphides at that stage is fairly easy, but waiting until they have increased in numbers and have obtained protection in curled-up foliage is only asking for trouble. The success of spraying with nicotine depends on how well the work is done. Nicotine wash is a contact wash, and therefore if it is to kill aphides it must hit them; in other words, they must be soaked in it. Many good growers are now using tar oil washes during the dormant season. These washes kill the aphides in the egg stage. As regards the Cherry trees, we should think that the cause of the fruit dropping must be late frosts, or it may be that the trees are dry at the roots. This you should ascertain, and if you find such is the case the remedy is in your own hands.]

American Gooseberry mildew

Year after year my Gooseberries go like the specimens enclosed. They are grown in a cage which in the winter is open to the birds and not closed till June. Treatment with insecticides does no good. Can the soil be the cause? F. C. H.

[Your Gooseberries are affected with American Gooseberry mildew (Sphærotheca mors-uvæ). This is a fungoid disease, and we can therefore understand that the insecticide does no good. Amongst the brown-felted mass of mycelium developed on the berries and at the tips of the young wood the winter-nesting spores of this disease are formed. Later on, when these spores are ripe, they are either washed off into the soil or lodge in the loose bark of the bushes until next spring. Some of the winter spores remain in position embedded in the brown mycelium all the winter. Just as the foliage of the Gooseberry is developing in the spring the winter spores of the mildew germinate and attack the young leaves and berries, forming glistening white patches a little later in the season. The best method of control is to cut off and burn as much of the disease as you can find. Do not leave this work too late in the season because the longer the brown stage is left on the trees the more likely are some of the winter spores to be washed free and so escape, to cause trouble next spring. After cutting away the disease you should spray the affected plants with lime sulphur. Obtain a good brand and use it according to the maker's instructions. Spray again with lime sulphur next spring. At least two sprayings should be given, the first in early April and again three weeks later. To get the maximum amount of protection from lime sulphur you must endeavour to thoroughly wet the leaves on both sides with the spray fluid. The berries such as you sent us can be cleaned easily by rubbing the mildew off. Cleaned berries make very good jam. There is no harm in the mildew from a human standpoint. American Gooseberry mildew was a notifiable disease, but the Ministry of Agriculture now only requires notification of the disease from those persons who grow Gooseberries and Currant bushes for sale.]

MISCELLANEOUS

Destroying slugs

(W. S.).—See issue June 26th, page 380. This article is based on experiments which were very carefully conducted by the Agricultural Department of the University of Leeds. After exhaustive tests it was found that a combination of copper sulphate and kainit in the proportion stated in the article appeared to be the most deadly. In the experiments in question the mixture of copper sulphate and kainit gave much better results than the application of aluminium sulphate.

The gardens at Friar Park

In Monsieur Henri Correvon's book on "Alpine Plants" he mentions that Sir Frank Crisp's garden, Friars Park, near Henley, is open to the public during the summer months on Wednesdays. I should be most grateful if you could tell me if this is so. PUCK.

[We understand that the garden of the late Sir Frank Crisp, Friar Park, Henley-on-Thames, is open every Wednesday from 2 to 6, as in years past.]

Aluminium labels

(Pensioner).—The embossed aluminium labels that you saw at the Chelsea Show are known as the "Helichrysa," from their lasting qualities. They are made by the "Helichrysa" Permanent Co., East Street, Coggeshall, Essex, and we can recommend them with every confidence, especially for alpines, Irises, and Roses.

Liquid manure

(E. Grose Hodge).—When pure urine or that from cowsheds is accumulated in tanks it is in all cases desirable, before using it, that it be exposed to the air for some time before it is applied to crops, also that it be well diluted. We should prefer having a large tub or galvanised iron tank, standing in the garden, not necessarily in a noticeable position, and putting into that 10 gallons of the liquid, adding 20 gallons of water, and allowing it to be exposed to the air 24 hours before using it. Such liquid-manure would be useful for practically any description of crops, given when the plants are in growth, once or twice a week, according to the supply. You would find putting half a bushel of fresh soot into a coarse bag and tying a brick to it, compelling it to soak in the liquid, of great assistance also. Stable liquid is rather stronger than is that from the cow-house, but both should be treated as is advised.

Lime for border

For some years there has been a wide herbaceous border in front of a wall on which are Peach trees. This has been done away

with, and we have a very narrow border planted with Iris stylosa, Rock Roses, and Aster sinensis, and are hoping to plant Tulips in the autumn. Beyond this is a grass path. Should the border be treated with lime, and, if so, will the lime hurt the Iris, Tulips, etc.? The soil is clay. Should the trees be taken down and the wall be washed or sprayed with lime or any other mixture? The trees used to bear quantities of fruit, but have not done so for some years. This year they have quite a fair show again. The trees have had no attention whatever beyond early pruning and tying in, and no nourishment.

V. M. SKIPWITH.

[If the Iris stylosa and other subjects in the border in question are doing well we fail to see what good purpose would be served by applying lime to the soil. If your idea is to supply lime for the benefit of the roots of the Peach trees that would be one way of doing so, but if lime is required we are not quite sure whether it would suit the Rock Roses. The artificial manure we have recommended for the Peach trees would supply lime in another and safer form and would not be detrimental, we think, to the occupants of the border. If it is applied directly the leaves fall from the trees it will have become absorbed by the soil before you will need to plant the Tulips. Another and excellent method of imparting lime to the clay soil would be to fork in some old lime rubbish pounded to a fine condition. But here, again, we do not know whether the soil in the border is really in need of lime or not, a question which can only be determined by someone competent to give an opinion on the spot. We suggest you call to your aid a practical man in your locality to decide this point for you.]

SHORT REPLIES

Stephen Kingmith.—We can find nothing wrong with your Tomatoes so far. Should the spots show further development please send us some more leaves and we will do our best to help you.

W. G. B.—Your best plan will be to let the tree grow as it will. If you prune it in any way you quite spoil the effect. We know of some specimens that have been planted for many years, these in bloom being very beautiful.

NAMES OF PLANTS

J. Fleming.—Rose Harrisoni. As to naming the Rhododendrons you send, there are so many varieties nowadays that it is impossible to name them with any certainty. The best plan will be to visit a nursery where Rhododendrons are largely grown.

H. W.—1, Cistus florentinus; 2, Veronica speciosa var.; 3, Hemerocallis fulva; 4, next week.

A. Donovan.—1, Campanula Rapunculus; 2, Spiræa Aruncus; 3, Calceolaria Clibrani.

A. H. Atkinson.—Phormium Cookianum syns. P. Colensoi and P. Forsterianum.

G. Heath.—A form of Odontoglossum Queen Alexandra.

L. G., Dublin.—Helichrysum rosmarinifolium.

Chas. Jamieson.—The dwarf Russian Almond (Prunus nana var. alba).

Harry E. Obsworth.—1, Geranium ibericum; 2, Polemonium cœruleum; 3, Silene species, no flowers available; 4, Aristolochia Clematitis.

Ulsterunda.—1, Helianthemum Sudbury Gem; 2, Crucianella stylosa; 3, Veronica prostrata.

TRADE NOTES

A good weed-killer

The cloak of green that is covering the garden now can be made to show to good advantage—that is, by sharp contrast to paths and walks. This can be done instantly by ridding them of weeds and Moss. One's attention must be given to a hundred-and-one corners of a garden just now. Such work as weeding is tedious and occupies valuable time, but the application of "Eureka" weed-killer, conveniently sold in tin measures and so quickly dissolved in water, at once frees your paths, walks, and drives from weeds and Moss. As to the lawn, if there be patches of dead or starved soil and Moss to spoil the picture, a dressing of "Eureka" lawn sand is a sure remedy and grass food. In addition, it destroys Daisies, Buttercups, and surface weeds.

Magnum Fertiliser

This fertiliser has recently been put on the market by Harvey Collier and Co., Ltd. It is guaranteed to contain 50 per cent. of plant food, the proportions being ammonia 7·3 per cent., phosphates 32·5 per cent., and potash 10·2 per cent.

Gold medal award

At the Nation's Health Exhibition held in Leicester May 26th to June 5th, 1926, a gold medal was awarded to Alfred Bird and Sons, Ltd., for the excellence of their products—Bird's Custard Powder, etc.

Report on condition of horticultural crops on the 24th June, 1926

VEGETABLES.

Beans (Broad).—Are generally promising and pods have set well; aphis attacks severe.

Beans (Kidney or French).—Plants are rather backward, but now making good progress on the whole.

Beans (Runner).—Germination irregular and growth rather slow; much damage by slugs reported.

Beet.—Growth slow, but now improving, condition fair to good; damage by pests reported.

Broccoli.—Planting out now in progress in most districts.

Brussels Sprouts.—Autumn-sown plants are making good growth, spring sowings planted out and are growing well.

Cabbage (spring-sown). — Plants are making satisfactory growth.

Carrots.—Plants backward, but now growing well.

Cauliflower.—Autumn-sown are a good crop, spring sowings are satisfactory.

Celery.—Planting out done under good conditions and plants have started well.

Cucumbers (under glass).—Plants are fruiting freely and promise almost an average crop, but more sun is needed; good early cuttings being taken. Wilt is present in some places.

Cucumbers (outdoor).—Plants have made slow growth.

Kale.—Plants are very healthy and promising.

Leeks.—Making good progress; planting out has commenced.

Lettuce.—Good heads being cut; later sowings have much improved recently and show good promise.

Marrows.—Germination only fair and growth slow.

Onions.—Spring-sown Onions are patchy and somewhat backward, but now making much improvement.

Parsnips.—Plants backward, but improving.

Peas.—Picking of early varieties has commenced; main crop is growing well though pods are filling out somewhat slowly.

Savoys.—Plants healthy and promising, planting out in progress under good conditions.

Tomatoes (under glass).—Crops are promising in Hertford and elsewhere, not so good in Sussex; fruits ripening slowly. More sun is needed.

Spinach.—An average crop.

Tomatoes (outdoor).—Plants are backward, crop dependent on weather in near future.

Turnips.—Plants are growing look fairly promising.

FRUIT.

Apples.—Considerable damage by much dropping in places reported; only a half-crop expected. Victo Derby, and Grenadier reported fa ley's Seedling very light; Worce main and James Grieve are gen most promising of dessert varie fair to good; Cox's Orange Pip cider Apples are reported a varial Devon and Somerset.

Cherries.—Frost and dropping l reduced the crop prospects and br reported severe in Kent, where lu half-crop is anticipated; some early been marketed.

Currants (Black).—Much runni considerable damage by frost, cold aphis reported; crop is likely to be half normal for the whole country.

Currants (Red).—The earlier pr not been maintained, and genera expected to be 20 per cent. below a

Gooseberries.—A heavy crop quality practically everywhere.

Pears.—Conditions point to a fa Kent, moderate crop in Worc Somerset, generally poor in most tricts; Conference and Fertility ar promising varieties.

Plums (ordinary).—Conditions promising in Kent and Cambridg in Worcester and Middlesex. Czar, and Early Rivers are good Pershore good, Monarch fair.

Plums (Gages).—Prospects are in Kent and Cambridge, averag other districts.

Plums (Damsons).—Promise a c in Kent, but below average gen where; Aylesbury Prune less than

Raspberries.—Canes were da frost, but are now recovering, set fr fruit swelling slowly.

Strawberries.—Hampshire crop quality below average; in late berries somewhat on the small sic in ripening, and prospects in the are for a below average crop.

Benn Brothers' Other Ja

The Cabinet Maker.—Prize-win play Windows: Some Early Tu work.

The Chemical Age.—The Ne Dyestuffs Combine: I.G. Dyest Metallurgical Section: Zircon Hafnium: The I.G. and the Metal

The Electrician.—Full Repor E.C.A. Conference (Specially Illus Exclusive Pictures and Cartoo Telephone, 1876-1926," by H. H. "Battery Locomotives for Mines, Pringle; A New Ernest Benn "Electrical Contracting."

The Fruit Grower.—"Marketi Fruit," by E. M. Bear; Strengt Fertiliser Laws; Merchandise Ma Committee.

The Gas World.—Monthly Cokin Meeting of Waverley Associatio Managers; Mr. C. G. Barrett on Vi Boiler and Water Softening Plant pool Gasworks.

The Hardware Trade Journal.—B petition of the Amateur Wirele Co-operative Window Dressing for Ironmongers; Co-ordination hold Appliance Industry; Views on Standards.

ARDENING ILLUSTRATED

0—Vol. XLVIII. JULY 10, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

rocuring ... 403
emper- ... 403
s, fungus ... 414
agating, ... 409
moupi- ... 405
uleus ... 402
me ... 414
autiful 411
aphonica 403
order ... 408
Border: ... 403
Carrot fly ... 414
Carrots in winter and spring, young ... 413
Catmint, the propagation of ... 402
Ceanothus pruning ... 414
Climbers, wall, beauty in ... 404
Corokia Cotoneaster ... 405
Cucumbers in frames 413
CYTISUS ALBUS ... 405
DELPHINIUMS, MODERN ... 408
Delphiniums, success with ... 409
Brinus alpinus ... 411
Flower gardens, cottage, improving ... 409
FUCHSIAS, THE CULTIVATION OF 401
GARDEN IN THE MYSORE JUNGLE, A ... 411
Garden, the architect in the ... 402
Garden, the rock, at Kew ... 403
Geranium grandiflorum ... 409
Gooseberry caterpillars ... 414
Hollyhocks ... 408
Hydrangeas, Blue ... 402
Incarvillea failing ... 402
Ivy leaves, brown scale on ... 414
Lilac dying back ... 414
Lupins failing ... 414
Magnolia macrophylla ... 404
NATIONAL ROSE SOCIETY, JUBILEE SHOW OF THE ... 406
Onions diseased ... 414
Pæony Fire King, single ... 402
Pansies dying off ... 414
Peach leaves blistered 414
Phlox Vivid ... 411
Phyteuma comosum ... 403
Plants, autumn-flowering ... 410
Plants for British gardens, some British ... 410
Plants, greenhouse, unhealthy leaves on 414
Plants wanted, uncommon ... 403
Plumbago, mealy-bug on ... 414
Plums, silver leaf of ... 404
Poppies, hybrid, the Ryburgh ... 410
Potatoes, seed, certificates for ... 413
Potatoes, spraying, against blight ... 413
Potato trials, 1926, Ormskirk ... 413
Primula sikkimensis with 95 flowers in a whorl ... 403
Prostanthera rotundifolia ... 405
Rose, the Altai ... 408
Seed, saving ... 403
Silver leaf disease ... 404
Swedes, garden ... 402
Sweet Sultans ... 411
Vines, mildew on ... 404

The Cultivation of Fuchsias

he first Fuchsia plant is stated to have been brought to this country by a sailor about the end of the eighteenth ntury. The Fuchsia still ranks as one of the most ornamental and popular of greenhouse and garden plants

chsia is of simple cultivation, and little care can be trained into any At no time does it require a very ature; in fact, it can be grown ssfully in a cool house, but the ater in starting. Propagation is wo ways, by seeds and from cut- best time to take the cuttings is therefore if are intro- heat in here will nty of nice ths for the he cuttings taken off ches or 4 close to the d placed in vith a com- parts loam, and sand, in a propa- The cut- rike root in week, and be potted into small aded from ome time. rooted shift two sizes place the e warmest he house. with clear afternoons

in which are to be now be de- The most ush, pyra- ndard, but o be grown as basket plants if eties are chosen. The bush is form in which to grow the nch the leading shoot when it is s to 6 inches high, which will side shoots to form. These, in ould be pinched when about the and so on, until the size of the ed has been obtained. Grow hout further pinching. If well ey look extremely handsome l with their graceful blooms. y-trained plants are undoubtedly est of all. They form splendid ornaments for the conservatory and greenhouse during spring and summer, and well repay the extra care and attention spent upon them. At the shows of years gone by some grand specimens were staged, but they are seldom seen now. I have seen specimens staged over 6 feet high and nearly 3 feet through, one glorious sheet of bloom from base to summit. Allow plenty of space between each plant so that the light can play on all sides of the plants. To obtain a pyramid keep one leading shoot growing on without pinching. The side shoots must be encouraged to grow, and any shoots growing too fast and robbing the others must be pinched, but on no account must the leading shoot be touched or a good pyramid is out of the question. Most varieties lend themselves to this form.

Single-flowered Fuchsia Swanley Gem, tube and sepals glowing red, corolla pure white and cupped

Well grown Fuchsias are exceedingly handsome when covered with their graceful blooms

The standard Fuchsia, when well grown on straight stems about 4 feet high with good heads of foliage and flowers, is very handsome and will repay the attention and care required. A standard is formed by pinching off all side shoots, leaving only the main stem growing. Keep this growing strongly and tie to a stick to keep it straight until the required height is reached, when pinch out the point and allow the side shoots at the top to grow. Pinch the latter when about 4 inches long to produce other shoots, which, in their turn, must be pinched also until a well-balanced head is obtained. With generous treatment they make a fine display and look effective in the conservatory or as centres for groups of plants at exhibitions. I have formed very fine specimens with Royal Purple, Mme. Aubin, President, and Rose of Castile Improved, but any strong-growing variety will do.

Fuchsias are handsome as basket plants. Although they can be kept in their pots and placed in the baskets they do better when turned out into baskets lined with Moss. Plants intended for this work should be pinched when in the young state, and, as they grow, the shoots should be pegged or tied down to the basket all round. All varieties with a similar habit of growth to Frau Emma Topfer and General Roberts are good for the purpose.

Having decided on what principle to grow the plants they should be shifted into 48's or 5-inch pots. This size is large enough for windows and rooms, but for conservatory or greenhouse decoration they must have another shift into 32's or 6-inch pots, in which they will make fine plants. The soil for this potting should be of a coarser nature and should be composed of three parts good turfy loam, one part leaf-mould, one part well-rotted manure, one part silver sand, and a small amount of crushed oyster-shells. To

each bushel of soil I like to add a 3-inch potful of Ichthemic guano. To obtain very large plants shift on again into 8-inch pots, using a similar compost, but give cool greenhouse treatment. For this size pot they will not be ready the first season. During the hottest part of the day shading will be required, but this must not be permanent or the plants will become drawn. The best form of shading for the house is a movable blind of tiffany, so that when the hottest part of the day is over it can be rolled up and the plants have all the light possible. Air must be given at all times, and during summer a little left on at night. Every afternoon the syringe should be used among the plants to prevent red-spider and thrips.

When the pots are full of roots they will require feeding, and the best I find is a small quantity of Ichthemic guano. Clay's Fertiliser and soot-water are also beneficial. Not only does feeding assist in developing the buds, but it lengthens the flowering period and improves the colour of the blooms. The insect pests troublesome to Fuchsias are aphis, thrips, and red-spider, but there need be no trouble from these if attention is given to syringing, ventilation, and occasional vaporising.

As soon as the flowering season is past and the foliage commences to turn yellow, water must gradually be withheld and the plants allowed to go to rest. Stow them in a dry frostproof place and keep them moderately dry through the winter. Quite early in the New Year prune back the plants intended for specimens, and when growth starts repot into larger sizes, using a similar compost to that previously stated.

F. H.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Aster sub-cœruleus

THIS little plant has been specially fine this year, and one often wonders why it is not much more extensively cultivated. Its fairly large Erigeron-like flowers are of a fascinating shade of bluish-mauve and with a deep yellow or orange central disc. It is of easy culture, being readily increased by division in spring, while it also comes true from seed. While it is truly perennial in habit, I find that it is liable to die off on heavy retentive soils. Where possible a spot not likely to become waterlogged during autumn and winter should be chosen. At one time I planted this Aster in clumps in the hardy plant borders and frequently found that it perished or suffered severely each winter. Two or three years ago I procured another packet of seed and set the resulting plants in a small bed by themselves in a fairly dry part of the garden, and have suffered no loss at all since. I prefer raising from seed rather than by division, and if seeds be sown in February or March fine plants will be ready for their permanent quarters by July. For massing allow 9 inches to 12 inches from plant to plant. The only fault I can find with this plant is the comparatively short time the plants remain in bloom. Of course, when the old stems are cut back some later flowers are got, but, on the whole, it is only the first crop that makes anything of a display. For cutting it is much sought after, most ladies being charmed by its colour, while the wiry stems are about 12 inches long. C. BLAIR.

Preston House, Linlithgow.

Garden Swedes

"F. H." and W. E. Wright do well to eulogise the virtues of this homely root, for few other winter vegetables are so delicious when properly cooked and served, while their wholesomeness is undeniable. Mr. Wright is right in advocating late sowing, for by putting in the seeds early in May the roots get large and coarse, even in our late upland district. I would not scruple to sow even yet, for by providing good cultivation quite decent bulbs will result by the end of November, a very suitable time for harvesting this crop. I pull up the crop, cut off the tops and a small part of the tap root, heap them on the north side of a high wall, cover with clean straw or old mats and a little earth (turves are ideal for the purpose), and have abundance of fresh roots right on till the end of May. All the attention necessary is, in spring, to turn the heap occasionally, removing any bulbs showing signs of decay, and rubbing off the growths. As Mr. Wright says, the tops make excellent substitutes for Seakale, and here the larger and coarser roots can be utilised, they producing the thicker stems. The bulbs should be planted in a dark place in the same way as Seakale roots.

Incidentally, may I point out that many of the so-called garden Swedes are of very poor, coarse quality, a good field sort being in every way superior when grown in the garden. The best variety I have come across is known as Bangholm Field Swede, which grows splendidly in garden soil, producing well-shaped bulbs with a short neck. The skin is purple and the flesh a bright apricot when cooked. This variety is the best keeper I have ever tried. C. BLAIR.

Preston House, Linlithgow.

Incarvillea failing

On page 398 a correspondent has a query regarding the cause of failure of Incarvillea. I have found that old plants of I. Delavayi and I. grandiflora have a tendency to die off after the tubers have attained a large size. They appear to decay and to develop hollows in the centre. This is, I learn from others, not an uncommon thing, and I believe it is better to depend on young plants. As these Incarvilleas produce and ripen seeds freely there is no difficulty in securing a stock of young plants to replace those which have become effete. S. ARNOTT.

The propagation of Catmint

I was glad to see, on page 373, June 26th issue of GARDENING ILLUSTRATED, the note by "Woodbastwick" on this popular plant, for it does not seem to be generally known that this subject is not entirely hardy everywhere; at least, after it is more than two years old. Personally, I think that damp rather than frost causes the damage. It is well, therefore, for all lovers of the plant to propagate a quantity each autumn or spring from cuttings. If inserted in boxes at the end of August and these set in a cold frame, at least 99 per cent. will root, and if pinched in February will form nice little sturdy plants by the middle of April, when they can be hardened off and planted where they are to bloom. These little plants flower quite well the first year, but it is in the following summer that they are at their best. This Nepeta thrives wonderfully when planted under deciduous trees. I some years ago got some plants given to me, and, having no suitable place vacant at the moment, planted them under an old Apple tree, with the idea of keeping them alive and securing later on. Judge of my satisfaction plants not only grew away all flowered splendidly, but also produ dance of fine sturdy cuttings. Sin have placed a "carpet" of Catm the stems of many other Apple tr garden, and invariably with the be Young plants should always be us dom a single plant goes wrong, wh made by dividing old shoots are, at very patchy. C.

Preston House, Linlithgow.

Single Pæony Fire Kin

In the last issue of GARDENING IL you extol very rightly a red sing from Constantinople which you King. I have grown this Pæony 22 to 25 years. It was originally g my brother Arthur, who in those wont to take an early morning rid country. On the occasion of his fi plant he had ridden out in the vicini Denkos and not far off the Black when, getting off his horse, he m secure the plant, which in due co to me.

It is very floriferous and seeds v and from the seeds I have grown away a number of plants to my frie year I took a bunch of blossoms to Horticultural Society's fortnightly beyond a postcard acknowledgme came of it. G. P.

Hillside, Oakhill Road, Kippington, Sevenoaks.

The architect in the gar

No house can be properly planne any relation to its site unless th visualises and definitely plans the of the immediate garden. Every h establish certain formal lines in curtilage. Whether picturesqu balanced formality is aimed at in t a building the tendency to be na and crazy near any building is Irresponsible garden planning justified near a house. Time a will soften the regular lines quick A conscious irregularity near a bui becomes mere untidiness. There thing as a garden architect. architects with no sense of design culturists—the real knowledge of t hard to come by. The latter shoul advisory capacity to the former.

P. MORLEY

Blue Hydrangeas

On page 387 in the issue of ILLUSTRATED dated July 3rd " Gardener" refers to my article tha in the issue of June 19th. The w there are now so many Hydrang produce blue flowers naturally th little or no point in resorting to treatment recommended by me. "A Scottish Gardener" has had experience in the cultivation of H otherwise he would not write in t Possibly he has grown these plan plied direct from the nurserymen. had the experience in raising his from cuttings he would be at on the fact that cuttings taken from plants may turn out anything colour if not treated from the firs growth. I maintain, after 20 yea vation of these plants, that there blue. A letter like the one from " Gardener" is very misleading, an great disappointment. I feel cer are many leading gardeners who too well the secret of "tri

as who will bear me out, and if ish Gardener" can prove otherwise e pleased to know the names of the of which he says there are many produce blue flowers naturally.

W. E. WRIGHT.

e interesting subject raised by "A ardener" *re* Hydrangeas is worthy ace. The flower generally appears ish tint gradually turning to a pale some localities the pale green turns iful blue. The question is WHY? lly the loams of Hampstead Heath eats of Wimbledon are responsible production of blue-flowering s. Artificial means of producing lowers, so abhorred by a "A Scottish" generally result in at least two loured blooms on one plant, and ges artificially accomplished are

BRUCE HEWITT.

hould be glad to know whether a Hydrangea warranted to keep its espective of the nature of the soil t is grown, is procurable. In this have a hedge of the pink-flowering rous and showing thousands of ls every summer. I have given ese bushes away, and in the un- il of another garden not a quarter away they produce blossoms of a . In like manner another neigh- e exquisite sapphire-blue Hydran- ed my envy, gave me young These, when matured, produced listinguishable from our original

L. L. Y. S.

Carnations: A voting list

ery much interested in the list by Mr. Wilfred Secker, Secretary thern Section of the Border Car- ety, that appeared in GARDENING p of July 3rd, page 386. The list if they are the best in northern ey will all flourish in the mid- outhern gardens. I was rather hat amongst the yellow ground mention of Mrs. J. J. Keen was my idea this is the finest and best tees, but unfortunately in many known as a yellow fancy Carna- onsider the following hard to s: Lady Hermione, Elalaine, ouglas, Grenadier, The Grey d Border Yellow. *Yellow ground* s. J. L. Gibson, Viceroy, Pasquin, Shackleton, Highland Mary, and *White ground fancies:* Mrs. E. , Mrs. Hawksbee, Mrs. G. D. Stobart, A. St. Clair Amos, and ener. *Fancies and Nondescript:* gs, Mrs. Andrew Brotherstone, Dr. Connor, Saracen, and *Clove-scented:* Rose Clove, ve, King of Cloves, Fairy Clove, e, and Fragrance. *Picotees:* Keen, Santa Claus, Mark Twain, Margaret Lennox, and Her asked for my favourite amongst Carnations I should not hesitate Lady Hermione.

W. E. WRIGHT.

House Gardens, near Rugby.

e rock garden at Kew

k at rock gardens in very differ- There have been a great many ising the Kew rock garden in lately. What is wrong, I think, ness to any wild natural cliff or lines are so formal, and though llent plan to have each group of little compartment or pocket to few stragglers might be allowed Take the Botanical Gardens at Edinburgh. There you walk between cliffs covered with hanging masses of plants each named and perfectly grown, and looking thoroughly at home. One can wander for hours finding new treasures every minute through formal and also through wild bits, following streams leading to pools and bogs, every plant looking at home. They seem to belong there, which is what should be claimed for every rock garden, but is entirely missing at Kew. People say when you demand colour and effect you can only have it with Arabis and Aubrietias, but it does not follow because you have a rock with a waterfall of Aubrietia over it that round the corner may not be the home of many rare treasures. To combine good effect with interest is my idea of what a rock garden should be, and that I think you see in the Botanic Gardens in Edinburgh.

N. S. C.

Godstone.

Primula sikkimensis with 95 flowers in a whorl

I have just read in a recently-published garden book, under the heading "Primula sikkimensis," the words, "sometimes as many as 60 flowers in an umbel." I am consequently emboldened to forward to you an umbel of that species which, if I can count, contains as many as 95 flowers. This must, I presume, be very exceptional. The stem also is much stronger than usual, as you will perceive. It is not particularly tall—about 2 feet.

This Primula is growing with others of its own and other species, including P. rosea, in a bed composed of about 18 inches (not more) of soil taken from a garden rubbish heap and laid on a bare, slightly sloping, rock in practically full sun and nowhere near water. Our annual rainfall, however, is from 70 inches to 80 inches!

E. C.

Inverness-shire.

[The inflorescence of Primula sikkimensis accompanying this note is borne on a fasciated stem, but even so it is unusual to see so large a number of flowers in one whorl.—ED.]

Phyteuma comosum

It is a pleasure to see the illustration of such a magnificent plant of Phyteuma comosum on page 389. I question very much if such a fine example was ever before seen in this country. One of the chief difficulties growers of this rare Rampion have to encounter is that which arises from the penchant slugs and snails have for this plant. It is almost impossible to protect it thoroughly from their attacks, and it has been recommended that P. comosum and some other plants favoured by these pests should be surrounded by water, a place in the rock garden being set aside for the purpose. But for this, P. comosum would not be difficult in a soil in which lime is present.

S. ARNOTT.

Anchusa sempervirens

I am glad to see that Sir Arthur Hort speaks well of the Evergreen Alkanet, Anchusa sempervirens, in his most delightful article on "Some British Plants for British Gardens," on pp. 393-4. As he remarks, it has a wide range, but is very local. In one area, of a good many miles square, I have only met with it growing in one place, where there were plants occupying some 5 yards or 6 yards in width among the grass by the roadside. This seems one of the plants which look better growing through grass or other herbage than in the border, where bare spaces round each plant are favoured. A. sempervirens gives one a brave bit of blue colour. Lithospermum purpureo-cœruleum appears to be much rarer in a wild state in many parts of the country. If the long, barren runners are cut off it makes a good appearance with its fine blue flowers.

S. ARNOTT.

Procuring rare alpines

I was much interested in the list of the less common alpines given by "W." on June 26th. I have a fairly large rock garden and I find it so difficult to get hold of the rarer kinds; those one sees in the Botanical Gardens, Edinburgh, for instance, and also occasionally in other rock gardens. I look through endless catalogues and inquire at shows and nurseries for treasures, but they seem so difficult to get hold of. I should be so grateful if "W." would say where he gets his, as he mentions several I have not got; Celmisias, for instance, and Phyteuma comosum for another.

N. S. CUNINGHAME.

Godstone, Surrey.

Uncommon plants wanted

The suggestion contained in the editorial paragraph which appears under this head, on page 386 of your last issue, seems to me to meet a want which is no doubt often felt by other readers as well as myself.

This scheme will no doubt put gardeners in want of rare plants or seeds in touch with nurserymen who may happen to have them, but do not include them in their catalogues, either because their stock is limited or that the demand for them is small.

Another advantage of the scheme is that such advertisements would be seen by other readers, who might be able to help a fellow gardener by letting him know where the desired plants or seeds can be purchased.

If this scheme appeals to your readers and is taken up, and, of course, if nurserymen look for the advertisements each week, it ought to become quite a feature of the paper amongst those who are in want of uncommon plants.

C. M.

Salcombe.

Saving seed

It would be foolish on the part of anyone to condemn the saving of seed, but to make a practice of doing so of most things one grows is neither economical nor profitable. Speaking for myself, I want all the plant I am growing is capable of producing, whether it be in the vegetable line or in flowers. When I purchase seed I do so with the knowledge that it has been grown from the best of the first flowers, whereas if I saved seed I should probably be tempted to do so after I had gathered what blossoms I wanted. Take the case of Sweet Peas as an example. It is little or no use starting to save seed at the fag end of the season, after plants have been producing flowers for many weeks, and expect to get vigorous stock another year; yet I have seen this tried, with results so poor as to prove that the "game was not worth the candle." It is the business of the seed raiser to provide me with his best, and he does it, but any feeble attempt after I have had what flowers I can get is never satisfactory. There are exceptions to the rule, I admit, but in a general way the saving of seed is not worth considering, having regard to purity and quality.

LEAHURST.

Cæsalpinia japonica

This shrub is flowering freely with me this year. It is clear that it loves a warm, sunny position in order to flower well. There is no more distinct or handsomer subject among our flowering shrubs than this Japanese subject when in bloom. Its pinnate leaves are each about 1 foot long with decurved prickles along the leaf-stalk, and which, if they become attached to one's clothing, are inclined to hold one prisoner. The beautiful canary-yellow flowers are borne on erect racemes 1 foot or so long, there being as many as 20 to 30 blooms, each 1½ inches across, on the racemes, and each carrying a small cluster of red stamens which enhance their charm.

It is a little troublesome to handle on account of its thorns, but it is certainly one of the most beautiful summer-leafing shrubs one could possibly grow for clothing a south or west wall. E. M.

Magnolia macrophylla

I was interested in the account of above on page 388, as I remember sending up a flower from Claremont some 30 years ago, but this was a partially expanded bloom with the opening some 5 inches or 6 inches across. The tree from which it was taken was a little over 20 feet in height and of thin, straggling habit. This and the fact that it flowered but sparingly was probably owing to its rather unfortunate position on a north-west slope, and rather heavily shaded by large Beech trees. It was probably planted some time in the early '40's. E. B.

FRUIT GARDEN

Silver leaf disease

FOR years Plum trees have suffered damage from the disease popularly known as "silver leaf," so named because affected trees bear leaves of shining silver colour instead of the normal glossy green. The silvering is only a symptom of the disease, which is of a fungal character and which lies deep down in the wood tissue of the branches and trunk. Here the fungus grows and increases at the expense of the tree, and where the circumstances favour its development it increases, and branches may be killed, and in time the whole tree may die. Commercial growers have learnt from experience to control the disease by cutting out all the dead wood and burning it. It must be realised that the dead wood is the chief danger in the spread of infection, for on it the spores of the fungus are produced. "Silvered" trees are still unfortunately quite common in small gardens throughout the country. The occupiers of these are urged to take action to prevent the spread of the disease to other trees in their own garden or to others in the immediate vicinity.

The importance of controlling the spread of this disease is such that the Ministry of Agriculture has issued a special order which requires all growers to remove dead wood from Plum and Apple trees before July 15th and to burn it immediately. Failure to comply with the provisions of the order renders the grower liable to prosecution and a fine of £10.

Silver leaf of Plums

I enclose leaves from six Plum trees, all growing on a wall facing east. The trees, as contrasted with surrounding foliage, have a definitely grey or silvery appearance of their foliage. Are they affected by "silver leaf" disease? They all bear quite a fair crop of fruit, which has stoned well and is maturing. I suppose if this is "silver leaf" all the trees should be destroyed. JOHN PARDOE.

[From the very small specimens you have sent to us we do not care to advise you definitely that the trees are affected with silver leaf (Stereum purpureum). From the six leaves you sent, as far as we are able to judge we should say that they appear to be silvered, but it is unusual for whole trees to become silvered all at once. Generally one branch goes at a time. Usually the branch silvers during the growing season, and the silvered branch, or portions of it, dies during the following winter. The only method of control is the cutting out of the silvered branches. The fungus makes a brown stain in the wood, and to make sure that you are taking out the whole of the infected wood you must make sure you remove the branch down to sound tissue—*i.e.*, down to tissue which does not carry the brown stain. If the whole of the trees are really silvered, as your letter suggests, the removal of the silvered portions would mean the destruction of the trees. Young, vigorous Plum trees often recover from an attack of silver leaf, but there are other signs on the leaves you sent that all is not well with your Plums. They are badly affected with red-spider. This alone will reduce the vigour of the trees and so render them more liable to go under to an attack of silver leaf. We should advise you to give the trees a very thorough soaking of water. If you can do this with a hose so much the better. The whole of the water should be sprayed over the foliage, well washing it and the walls. This work should be done during the evening and repeated several times at intervals of a few days. After this treatment spray the trees with a good insecticide. If the trees are young it is worth an effort to try and save them.

There is a lot of confusion amongst gardeners about silver leaf. Silvered foliage itself is not infectious to other trees; it is the fruiting bodies of the fungus which are produced on the dead wood during autumn and winter that is the source of infection to other trees. It is this dead wood which is bearing the spores of Stereum that according to the Silver Leaf Order must be destroyed at once. It is not unlawful to have silvered foliage in a garden, but it is unlawful to have dead wood bearing the spores of the fungus. On the other hand the cutting out at once of silvered branches prevents the spread of Stereum in the tree affected. If you will send us on some better specimens we should feel more satisfied that the trees are really affected with silver leaf. Send some small branches.]

Mildew on Vines

(Stewart Jobson).—We have seldom seen such a bad case of mildewed Grapes as that you send. We should advise you to cut off all the bunches and put them on the fire. Nothing short of a thorough cleansing of both house and Vine will be of the slightest avail. After the Vine has been pruned free both stem and rods of loose bark, and then scrub them with warm water in which a little soap has been dissolved, being careful at the same time not to injure the buds with the scrubbing-brush. Then gather up the prunings, bark, dead leaves, etc., and burn the lot. This done, give the house a thorough scrubbing, using for the purpose a solution made as follows:—In the bottom of a bucket place a good handful of soft-soap. Work this into a pasty-looking mixture by gradually pouring in ½ pint of paraffin. When thoroughly amalgamated fill up the bucket with boiling water. Pour one-half of this into another bucket, and fill up both with hot water. Scrub every particle of woodwork and glass with this, and rinse down with clean water. Scrape the walls and limewash them, using fresh kiln or lump lime for the purpose with some sulphur added. While this is slaking and boiling pour in ½ pint of paraffin. When it has finished slaking add enough water to reduce the whole to the right consistency, and apply while hot. Then dress the Vine with Gishurst Compound, using the latter at the strength mentioned and as directed in the printed instructions to be found on the lid of the box. Keep a good look-out when the Vine makes new growth, and if mildew puts in an appearance dust the affected leaves immediately with flowers of sulphur. If dealt with promptly in this manner the attack can be stayed, but if it is allowed to develop before resorting to remedies it is then difficult to subdue, and ofttimes the crop is rendered useless. A cold, close, stagnant atmosphere and cold draughts are generally the cause of mildew appearing in unheated houses, and very careful management is required to ward off an attack.

TREES AND SHR

Beauty in wall climbe

FEW garden walls or fences to bare, and the general desire ev seems to be to cover such with delay as possible. In not a few fruit-trees are being planted, but servation I think that flowering climbers are in the majority. For o the latter soon furnish and beautif A proof of this was brought to my n day this spring in a suburban locali the houses had only been occupied of years, but the creepers and climb the house fronts and walls had m progress that it was almost difficult the shortness of time. There is s doubly attractive about a house, the which are furnished with foliage an in their respective seasons, and ev who are not, as a rule, particularly i in gardening are attracted to them almost come to regard the plantin self-clinging forms of Ampelopsis rather out of date, but with the gre stucco in modern houses there seem revival in the use of these irr creepers that need no nailing up o have commenced their career, and for a time until they become troubl making their way into spouts a slates. Ivies seem to be in great some localities, especially on the urban residences, and I notice th ence is shown for the small-leaved, v sorts, which have largely usurped t large leaves. Amongst them one have grown on a wall in my garden years—palmata aurea (yellow), see much in evidence, and if my testim cerning it is of any value I think it the most cheerful-looking plants one on a wall, for the simple reason th all the year round there is somethin at. I use the word *nearly* purposely if—as all Ivies should be—it is de its old foliage in March by cutting pair of shears the new growth fol few weeks after, and by this means not have the wall and stems clogge dust and dirt that otherwise woul gate. Other sorts of Ivies worthy tion are Donerailensis (small brow leaves) and sagittæfolia (pointed d leaves bronzed in autumn). Som silver-leaved Ivies are very pretty w ing too rampant. On house fro value is becoming recognised more flowering creepers it would, I im difficult to point to one half so popu Clematis, as wherever one travels a can grow, there Clematises are to The one with the longest service is, to say, Jackmanni, whose purple b to be seen on house walls from John to Land's End, but in recent years th to be a disposition to plant others, of the Jackmanni group, among there are some very charming s Comtesse de Bouchard (a splendid r Star of India (a reddish-plum), Sn Jackmanni, and Mme. Edouard mulberry-red), but those of the C. la section also, which are noted for markably beautiful flowers wh dispersed more than those belongi previous group. Mention may be Lady Caroline Neville (greyish-whit bars), La France (deep violet-purple Hanbury (bluish-lilac flushed w Marcel Moser (mauve-violet with and C. lanuginosa (pale lavender) an outbuilding or wall requires to b quickly with foliage and flowers one should bear in mind the old montana, bearing clusters of whi

-like blossoms. Two members of ine family are deserving of notice in plants suitable for wall furnishing. e J. officinale, the scent of white f which, borne in bunches from out green foliage, pervades the summer nakes the garden at night a place of fragrance; the other is that precious sitor, J. nudiflorum, that opens its lossoms no matter how cold the may be. Another of our yellow- plants that comes before the leaves advanced, at any rate, and is too arded solely in the light of a shrub, ite amenable to training on a wall, thia suspensa, which will quickly wall space if only it is nailed up. in similar terms of another well- nant grown as a bush in country the Kerria, whose orange flowers ight in May and come almost con- ly with Pyrus japonica, bearing lossoms. Both these are well ut the former is not looked upon in of a wall climber as it should be. sheltered from cold winds the f flowers and foliage of Wistarias recommendation. Once planted lished they continue for many years, in beauty as time goes on, and great attraction to any dwelling. er fail to excite admiration. There ing superbly beautiful about an d climber on a house, of a Magnolia, conspicua or M. stellata, the wax- oms of which reveal themselves in nd April before the leaves. To uch climbers is to possess great in a garden, and unless they are position where it is warm and spring frosts sometimes work sad th the otherwise peerless blooms. us, I fancy, look upon Solanum es as a climber more fitted for the greenhouse or verandah, but in vari- of the country where the winter is felt there they thrive and give pro- their white bunches of flowers, and say of Cobæa scandens, a prolific climber, that the position which Solanum will serve Cobæa scandens ll.

aring shrubs like Pyracantha with its brilliant vivid scarlet fruit, many, and it is a favourite wall ten planted around front doors. It auty a long time. Well has it been Fire Thorn. Another of our shrubs not always associated with but doing well trained as such, is thus, bearing varying shades of rs.

before a pair of villa residences end when at a seaside resort last marked that one house looked so er than the other, although built alike. The difference lay in the of the walls with Roses and and other climbers which just at their best. Whilst we were ad- front garden two ladies passed, ing for a few moments, one said to "Isn't that pretty?" To-day learning that ground about a home ut to good account, and so one ry season that much greater inter- g shown in wall furnishing. The struck me about the two buildings was that one was a house and by a judicious use of climbers, was as attractive from the outside as of the pictures on the walls within.

LEAHURST.

Corokia Cotoneaster

a shrub of unusual aspect. Its earance is due to its twining dis- it of growth and the dark colour of its stems. Although the shoots are sparsely clothed with tiny round leaves this is not very noticeable as the dense wiry shoots make excellent substitutes. The star-like flowers, bright yellow in colour, are produced freely enough to make a good display. They provide a welcome change from other shrubs. It is suitable for the rock garden, and is also an excellent plant for the base of a low wall where a shrub of dense habit is required. The plant is perfectly hardy and will thrive in any soil or position. It is of easy increase by layers.

H. STEVENS.

Cytisus albus

Cytisus albus

THE white Spanish Broom is one of our best-known and most useful flowering shrubs. It is of rapid growth and, if not checked, soon becomes tall and leggy, but its lifetime of good shape may be much prolonged by timely pruning. It is no use cutting back into the hard wood when it has grown up out of shape, but if, after flowering, the young shoots are cut at least halfway back, it will go on for several years in good form. The illustration shows a bush six years old that has been suitably trimmed. Its quick growth makes it suitable for filling up among newly-planted shrubs which, when properly spaced, must at first leave large gaps between. As with other Brooms it is easily raised from seed.

G. J.

Aristolochia moupinensis

Not often seen, but very desirable by reason of its abundant and graceful flowers and leaves, is this free-growing climber now in bloom. The drooping pipe-like flowers, yellow with reddish-purple spots, although not showy, possess a quiet beauty and charm which should endear the plant to growers of distinct climbing shrubs. It is a native of China and quite hardy in our country.

E. M.

Prostanthera rotundifolia

A few weeks ago I saw this shrub trained to a cool greenhouse wall where it had reached a height of 3 feet or 4 feet with a similar spread of branches. The shrub was laden with little bell-shaped flowers of a beautiful shade of blue. It is only during recent years that these choice shrubs have been tried in the open air, and, judging by the example here noted, there is a future for them if planted in a position where light shelter can be provided during severe weather.

E. M.

JUBILEE SHOW OF THE NATIONAL ROSE SOCIET

THIS is the jubilee year of the National Rose Society, and the great summer show was held on July 2nd and 3rd at the Royal Botanic Gardens, Regent's Park, N.W. It was a splendid show, much better than was generally anticipated, for this is not regarded as a good year for Roses and the season is late.

The competition for the nurserymen's championship trophy brought the finest array of Roses we have ever seen in one class. There were ten large groups of Roses competing for this trophy, and even the least of these groups was worthy of a very high award. The combined effect was worthy of the great occasion.

The Queen, attended by Lady Bertha Dawkins, spent a quiet early hour amid the beauties of this great show of Roses, and was charmed with the display. Her Majesty, who has succeeded the late Queen Alexandra as patron of the Society, was met on arrival by Mr. C. C. Williamson, President of the Society, and Miss Willmott. The Queen proved herself to be an excellent judge of Roses. When passing through the large marquee containing decorative Roses she was asked which stand she liked best, and she pointed to a stand which contained many of the choicest-hued flowers. Later the judges, without a knowledge of the incident, awarded for this exhibit the first prize.

The show was favoured by two fine days, and there was a splendid attendance; it was, however, too hot for the Roses, and many expressions of disappointment were heard, especially on the second day, when the Roses had so far flagged that it was impossible to form any idea of their real beauty.

Many new Roses were shown—more than usual—but few were chosen. Of all the new Roses in the seedling tent the finest was probably Dame Edith Helen, that really grand pink which gained the gold medal for Messrs. Alex. Dickson and Sons last year. It is very sweet scented and if eligible should stand a good chance for the Clay Challenge Vase if again shown at the autumn show, when the award will be made.

The standard of new Roses was not so high as usual—it is probable that many of the best and most fragrant new Roses are being held back for the special show of new Roses on July 23rd. Among the new Roses are a number of rich apricot and orange-crimson shades. These colours seem very popular now, but we were pleased to note a of fine crimson-pinks and yellows th the show. Some Rose growe especially those with old-world gard tiring of the bizarre in Roses and ar back to the forms and colours t knew—as might be expected, man modern Roses look out of place in gardens.

The hybrid Musk Rose Penelope
which gained a Gold Medal last year and was well shown again this year

A basket of Rose Shot Silk
Bright cherry-cerise overshot with salmon-orange

NEW ROSES.

GOLD MEDAL.

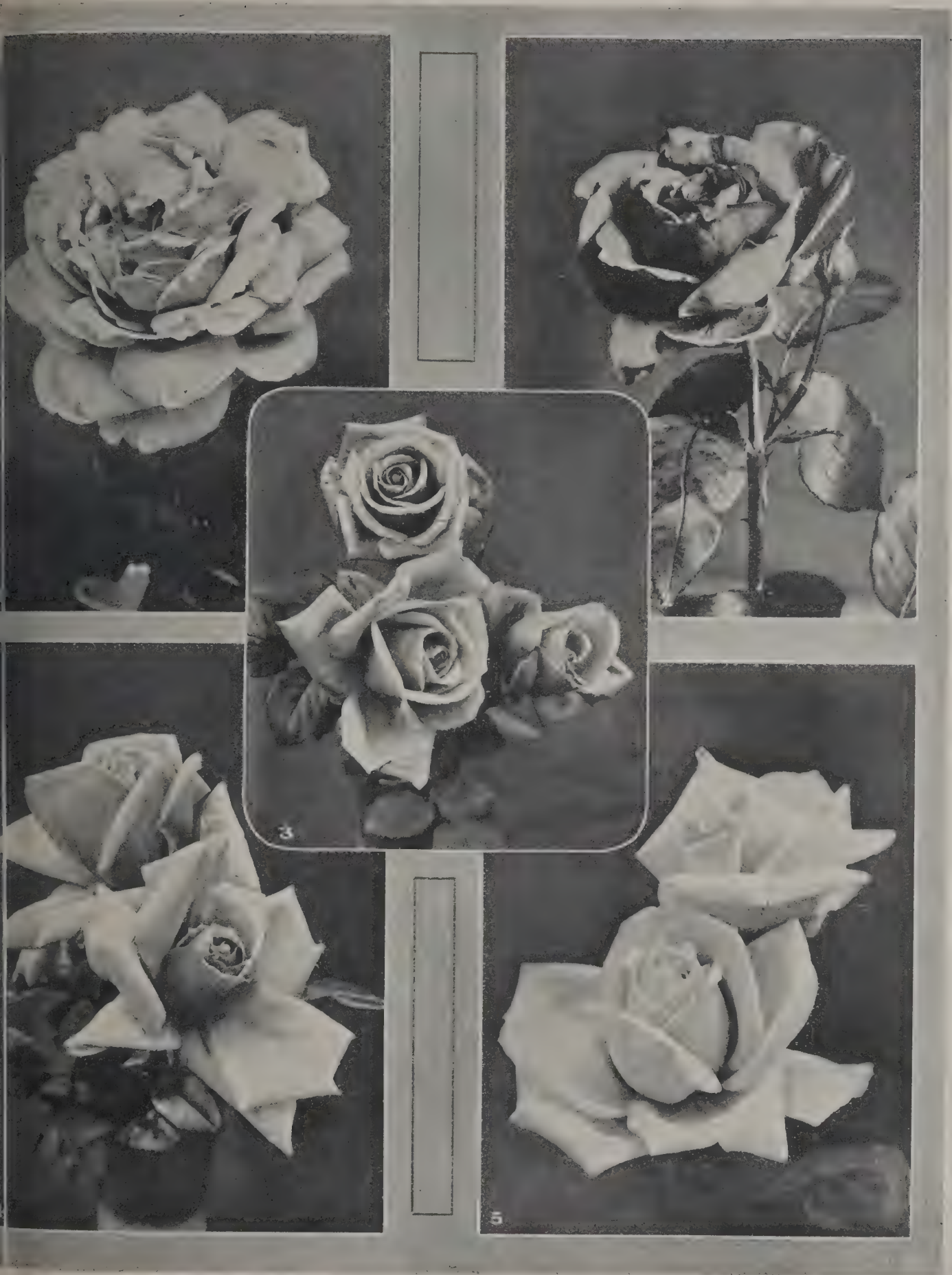
LADY HELEN MAGLONA.—This was Rose to win the gold medal on this It is a crimson H.T. of rich fragr fine form. Shown by Messrs. Alex. and Sons, Ltd., Newtownards. It shown again at the autumn show in tion for the Clay Challenge Cup.

CERTIFICATE OF MERIT.

BILLY BOY.—A grand deep yell double bedding Rose. This variety a good impression and is likely to great acquisition. Billy Boy, toge an unnamed Rose (Lincoln Seedling ceptional brilliance in colour, was s Messrs. Beckwith and Son, He Herts.

BEDFORD CRIMSON.—This very crimson Rose is already widely known preciated for bedding purposes. It wi again in competition for the Clay C Cup. Shown by Messrs. Laxton Bro

EVEREST.—Pure white with ver fragrant blooms, reminiscent of



NEW ROSES AT THE JUBILEE SHOW

ness of Marlborough, shown by Mr. George Prince

r Talbot O'Farrell, shown by Mr. McGredy

3. Mrs. Henry Bowles, shown by Rose growers from all parts of the country

4. Mrs. Tresham Gilbey, an improved Los Angeles

5. Dorina Neave, a lovely pink Rose shown by the Rev. J. H. Pemberton

Pillar. A vigorous grower shown by Mr. W. Easlea.

PRINCESS ELIZABETH OF GREECE, of very striking colour, described as orange-yellow overlaid with orange-lake, or golden yellow shaded terra cotta. It is so far the chief novelty shown this year by Chaplin Bros., Ltd., Waltham Cross.

There is quite an old-world look about the good pink Rose, Duchess of Marlborough, shown by Mr. George Prince. The blooms are very full and the colour of a very pleasing tone. Moreover, the flowers are sweetly fragrant. It is vigorous and perpetual and suitable for garden or exhibition.

Messrs. S. McGredy and Son, Portadown, N. Ireland, showed their two new Pernetianas—viz., Eva Eakins (scarlet-carmine flushed orange) and Mrs. Talbot O'Farrell (lemon-yellow flushed deep cerise to crimson); also the new crimson Hybrid Tea, Sir David Davis, which was rather thin as shown. No doubt it will come better later in the season.

The Rev. J. H. Pemberton was not well enough to attend the "National" this year, but he sent some very beautiful Roses, including the orange and Indian red I. Zingari, resembling the colours of the famous I. Zingari Cricket Club. He was also showing in his group large quantities of the Hybrid Musk Penelope, which is proving a good bedding variety, growing 3 feet to 4 feet high, sending up masses of semi-double pale blush flowers from now till the autumn. This sweet Rose received the gold medal last July. The new Dorina Neave—a large globular flower of a delightful silvery pink with shapely bud—was also well shown from Mr. Pemberton's garden.

We were much impressed by the variety Mrs. Tresham Gilbey (coral-rose shaded salmon). It bears a resemblance to Los Angeles, but there is more salmon in its colour, and it holds its head better, which is a great point in a bedding Rose. It was shown by Chaplin Bros., Ltd., and secured the gold medal on a previous occasion.

Mr. Easlea showed his new Rose, W. A. Bilney, for the first time—it is soft yellow suffused with pink, of very good shape and fragrant. The blooms are remarkable for their very large petals, and it is said to be a first rate garden variety.

Other promising novelties in the seedling tent were Holt Hewitt (rich velvety-crimson), John Henry (rosy-scarlet), and Lady Love (deeper than Mme. Butterfly), all three shown by Messrs. G. Beckwith and Son.

Three varieties of Dutch origin were remarkable for their rich colour—viz., Gondolinder (coral-red and shining golden-orange yellow); Miss Bep van Rossem (deep canary-yellow and pointed buds); and Mrs. G. A. van Rossem (flame-red shaded dark orange, apricot, and bronze). These three varieties were the centre of great admiration. Shown by Messrs. D. Prior and Son, Ltd., Colchester.

The new single Rose, Dainty Bess, raised by Mr. W. E. B. Archer, Ashford, Kent, was used for the decoration of a dinner table, and judging by the crowd gathered round in admiration of this table it was one of the most attractive features of this excellent show. H. C.

The Altai Rose

The Altai Rose (R. spinosissima altaica) is one of the earliest of the single Roses to bloom, and with me the first flower opened on May 5th. It is a very charming plant, flowering with great freedom and yielding above its pleasing foliage its large single blooms of a delightful creamy-white. It is excellent for planting freely, and in the large rock garden may be employed with advantage. It flowers when quite small, and, if desired, can be kept low or allowed to grow 6 feet or 8 feet high. It is sometimes catalogued simply as R. altaica, and was figured in the "Botanical Register" as R. grandiflora.

S. A.

Modern Delphiniums

THE last meeting of the Royal Horticultural Society, held at Vincent Square on June 29th and 30th, was virtually a Delphinium show. Viewed from the balcony the hall presented a sea of blue flowers. It was probably the finest display of Delphiniums that has been seen in London. Large groups of these popular flowers were shown by Messrs. Blackmore and Langdon,

Mr. Gifford's two Delphiniums
The Moor, deep purple
My Lady, pale mauve

Bath; Hewitt and Co., Solihull; H. J. Jones, Lewisham; Bees, Ltd., Liverpool; and Mr. T. Bones, Cheshunt. Among the varieties singled out for very special mention were:—

SISTER CLARE, a tall pale-blue with white eye, shown by Messrs. Hewitt and Co. This variety sends up a good big spike with large flowers and many side growths, giving promise of a continued display of bloom.

R. A. PILKINGTON.—One of the best shown by Messrs. Blackmore and Langdon. Very large strong spike with rich purple flowers, dark brown in the centre. The eye comes light in colour and turns almost black. The spikes of bloom are very broad at the base and tapering like a spire. It is a good grower and an acquisition for garden effect. Mr. Gifford, of Hornchurch, sent up a few spikes of two very handsome varieties—viz., The Moor (deep purple) and My Lady (beautiful pale mauve), both from grand s bloom that will in time becon favourites for flower borders.

Among the best varieties in the e were Blue Queen, Blue Boy, Blue B Lansdowne, Mrs. Townley Park Israels, Mrs. Shirley, Lord Derby, Blackmore, Mrs. Forster Cunliffe, T Lorenzo de Medici, and Clarissa.

Border Carnations

Like all other grey-foliaged pl Carnation is a child of the sun, and season as we have experienced the l none too promising. Growth has b made, but it is of a fragile and pu compared with that made duri seasonable weather, and is liable t infested with aphis, froghopper, a pests. Where these abound there i better than a pair of aphis brushes some insecticide, drawing carefully flower-spike. If the foliage is affe spot or other leaf disease spray t with Bordeaux Mixture. The plan have been staked some weeks prio notes, but as the spikes grow fast t be secured, otherwise they are a damaged by the wind. I find the the best for attaching the stems to t These can be obtained cheaply and in an instant. The largest and be are obtained from plants that have budded. The side buds should be r their young stages, leaving only t one, which should be given every e ment to swell and form a perfect b the variety is liable to split its calyx band should be placed around be happens, as a bloom with a burst unfit for exhibition.

Animal manure does not suit eve tion, but weak doses of soot-w beneficial to the health of the folia plants. There is on the market sev ficial manures suitable for Carnatio nourishment is required these shou sorted to.

During July is the best time to in stock by layering, and as fast as g comes in a fit condition the sooner the better. A top-dressing of sa should be placed around the plants a by watering before layering the sho lower leaves should be removed shoots severed half-way through sloping the cut upwards. These pegged firmly into the compost moist by watering with a rosed can.

W. E. W

Stockton House Gardens, near R

Hollyhocks

In many gardens the Hollyhock, Carrot, is very difficult to manage, a quently attacked by the disease whic too prevalent. I believe that one of of this disease is the planting of H in soil which may be, partly at a worn out by the needs of other plants Hollyhocks, for instance, are no monly put out in herbaceous borders position to robust perennials which been there for some years. My opini in such places Hollyhocks succum disease much more quickly than w are put out in comparatively new enriched soil. When disease is obs infected plant ought to be upro burned without delay. To have healt plants for another year, seeds may b boxes of light soil towards the end placing them in a cold frame sha strong sunlight. Seeds may also be a warm border, where the seedling ceive some slight protection durin

W

:cess with Delphiniums

NGST tall plants that give us spikes owers whose predominating colour ue, there are none to excel the Del- Give them a fairly pure atmo- nd rich soil, and one may have spikes of bloom in abundance. The e for them is the back of a sunny The soil for Delphiniums should good loam and well-rotted dung, hings several times during the sea- l it prove a dry one. They are best clumps of moderate size. To m to grow year after year without them is a mistake, as when the large it naturally follows that the in the middle become weak. To state of things one should divide s every two years or so. It is better plants often than permit them to so is to take up the room which ought en to other plants. Delphiniums, have few enemies. Perhaps the he slug, which eats off the young spring, but dressings of soot on the ill generally clear off these pests. e plants early in the season is ad-

OF SITE.—As with the Hollyhocks, nd that one may grow Delphiniums n one place, so that when the time en it is necessary to divide them, a fresh place should be found the gging in fresh soil and adding the ground they are to occupy. neans the plants do not degenerate, aintains the quality of the flower- . Although they are mostly to be places where the sun reaches them, not to be lost sight of that they longest when they are planted are able to get shade for part of There, too, the spikes, unfolding are often finer. Whilst propaga- nerally carried out by dividing the undertaken in the late autumn— sowing seed should not be over-

.—The culture of Delphiniums is d the results out of all proportion it amount of care necessary. They lmost any position. The soil may friable loam, which suits them any soil, even hot and sandy, if ed and manured, will give excel- s. Dig deeply—trenching is better ty of well-rotted manure, and plant eet apart. Placed in lines, as a l to a border, or in groups of, say, ts at intervals, the effect of Del- s exceedingly fine. They look well so, arranged at the same distance way. They are grand grown in s of separate colours, and may be with shrubs with great advantage, well in shrubberies because of stness. They are most effective th white flowers. If the spikes e done flowering early be cut off th will be produced which will l spikes of blossom. Copious summer will be attended by in- e of spike and flower; in fact, in prolonged drought, water is abso- cessity on many soils if the varie- exhibit their true size and beauty nd spike. Top-dressing is recom- certain soils, instead of the bare the ground being left exposed to

A. G.

ole Arabis propagating

w many years since the double bis made its appearance, and in s it appears to have entirely super- ingle form. This is not surprising when one remembers that the flower-stems are erect and show up well, and that the blossoms last a considerable time. It is a charming plant for the rock garden, for dry banks, and also for edgings. The present is a very suitable season for propagating it from cuttings put in where one desires to grow it or by putting them into pans of light sandy soil in a cold frame. Those who have rough stone walls should insert a few cuttings in the crevices where space is available for pieces of turf and soil. The least piece of a cutting, if treated in this way and shaded for a time, will very soon root.

WOODBASTWICK.

TWO NEW DELPHINIUMS

Sister Clare, tall pale blue — R. A. Pilkington, rich purple

Geranium grandiflorum

Hardy Geraniums do not appear to be too popular in gardens, and I have been a little surprised to find G. grandiflorum so little represented, even where hardy flowers are made a speciality. A good deal was said about it some years ago, but latterly it has been little noticed. Yet it is quite a good plant, although there are some who consider most of the hardy Cranesbills as inferior. This hardy Geranium resembles G. pratense to some extent, but is more prostrate and has larger flowers of a good blue with a white eye. I have employed it with advantage on bold rockwork. It is hardly suitable for the small garden where the dwarfer and more choice subjects, such as G. argenteum, G. cinereum, or G. Traversi, are planted. On large rockwork it is impressive if allowed to trail over the brow of a large piece of stone, where its bright flowers are quite striking in summer. If planted in the border it requires staking timeously as its semi-prostrate habit would cause it to sprawl about in an unattractive manner. It is easily raised from seeds, and any plants which I have grown in this way have come true. Seeds may be sown in the open in May or June. It may be grown in sun or partial shade, keeping its colour longer, I consider, in the latter.

S. ARNOTT.

Improving cottage flower gardens

In inspections for best-kept cottage gardens one notices with satisfaction many old-fashioned plants growing strongly and making a brave show, but there is often a tendency to overcrowd, which spoils the general effect of the garden and prevents individual development of plants. Also when in these days nearly all families of plants are represented by such really good things it seems a pity to tolerate poor stuff. Very poor seedling Pansies, Pinks that burst as soon as they open, and Phloxes with tiny flowers with no substance, for instance, should not find or, at any rate, keep their place in any flower garden, whether large or small. The newer Japanese Anemones, again, are altogether superior to the old form both in substance and endurance, and so, too, are the Michaelmas Daisies. Where the owner of the garden takes sufficient interest in it to raise some of his own plants it will often be found that a few packets of seed obtained from a firm making a speciality of good hardy flowers will furnish something decidedly superior to what is already on hand. I have often found this the case, for instance, with single Pyrethrums and Statice latifolia. A caution may also be given to avoid things which, once planted, are not easily eradicated, as Spiræa filipendula and the old pink Japanese Anemone.

Hardwick. E. BURRELL.

Some British Plants for British Gardens

By Sir Arthur Hort, Bart.

(Concluded from page 394)

We have one other British Anemone, the Pasque-flower (Anemone Pulsatilla), which occurs in various localities on the oolite and chalk formations; but is, I fancy, getting scarcer in at least some of its haunts through the depredations of unintelligent collectors. Now I would put in a strong plea that it should be left alone wherever it still survives. It is indeed one of the most fascinating plants for the garden, but in cultivated ground it loses its original character and develops into large tufts. I have had one with about 60 flowers on it at once. Not that it becomes coarse; on the contrary, few plants are so delicately and perpetually charming on the rockery or at the edge of a border, where, when the flowers have gone, the feathery foliage and beautiful seed-vessels are decorative for a great part of the year. Let us grow the Pasque-flower by all means, but let us not dig it up wild; it moves badly, and only quite young plants are likely to recover. It should be raised from seed, obtained perhaps from a friend, or, if you will, from the downs. By robbing them of the plant I do not think that you can conserve the character of the little wilding.

We have two British Irises — Iris pseudacorus, the yellow flag of the water meadows, and I. fœtidissima, which has the pleasanter English name of Gladwyn. The typical form of the former may well be left to luxuriate by the streams, but if you have a dampish bed (actual water is not necessary) it is quite worth while to grow the lemon-coloured variety called Bastardii, and other forms are interesting, which vary in the size and marking of the flowers. Gladwyn is a plant which attracts little attention in summer, when you may walk past its dull purplish flowers without noticing that they are out. But at Christmas-time the bright green foliage and brilliant coral seeds, which hold on for many weeks after the pod has split, revealing them, gladden the copse side or dry ditch. The plant is a favourite in cottage gardens. Now, there are two yellow-flowered varieties which, unlike the type, are attractive in flower and have equally brilliant seeds, so that they might well be grown instead of the type. One called citrina occurs wild in Dorsetshire, and has flowers prettily veined with brown, worth looking into closely. Do not pick too many of them or you will not see the seeds. I am not sure that the other, which has clear yellow flowers without the markings, is also British, but it will be worth looking out for, and other forms might reward the search. Citrina seeds true; I cannot say if the other does so also, as I have not yet flowered seedlings. Gladwyn, by the way, is a plant to which magic lore attaches; those who grow it should take heed to this warning, which is quoted by Theophrastus, the Father of Botany, who wrote about 250 B.C.: "When one is cutting Gladwyn, one should put in its place to pay for it cakes of meal from spring-sown wheat, and one should cut it with a two-edged sword, first making a circle round it three times, and the piece first cut must be held up in the air while the rest is being cut." Presumably, it was cut for use as a drug, which would not be efficacious without these attendant ceremonies.

To turn to another class of oddities; there are British plants which have pleasing double forms. In general I have no use for double flowers, or at least for those in which the doubling means the loss of the characteristic form. A double Snowdrop, Daffodil, or Columbine I regard as little less than an abomination. Yet one can hardly dispense with double Roses or Pæonies or Carnations, and some double Anemones such as the gorgeous Chapeau de Cardinal give a mass of colour which almost atones for the monstrosity. There are, indeed, we may say, degrees of duplicity. Thus the Anemone just mentioned retains the beautiful centre, as do many so-called double Roses. Of natives the humble Lesser Celandine has a double form, which is quaint and telling, if not exactly beautiful. I do not know if it appeared in cultivation or was found somewhere wild. The double Cuckoo-flower (Cardamine pratensis) grows wild, I have been told, in a certain riverside meadow in North Wales. In gardens it grows, unlike the single type, into biggish tufts and is very pretty and effective. So also is the double Saxifraga granulata, of which the single form is also worth a place as a setting to showier spring flowers. For instance, it is a pleasant companion to Gentians, as I once saw it on an old retaining wall in the Pyrenees. The double forms of Wood Anemone may be mentioned, though I doubt if they are wild; one, for all its doubleness, has beautifully-shaped button-like flowers; the other, called bracteata, is really rather monstrous, but it is amusing with its odd green bracts turning up anywhere inside or outside the flower.

The mention of Gentians brings to mind two British treasures of that genus, the spring Gentian (Gentiana verna), and the Wind Gentian (G. Pneumonanthe), the former found here and there on the Pennine hills (I forbear to be more precise), the latter on damp Heaths in Dorset and elsewhere. Now, G. verna, if not difficult to grow in some gardens, is about as difficult to move from its home as any plant can be, for the simple reason that it is rarely possible to secure a plant with adequate roots without securing also a mass of weeds which protect the plant in its natural surroundings and are kept down by the sheep, but which in the garden will luxuriate and strangle it. I confess that, if we had a prohibited list of British plants, I should like to put Gentiana verna on it. It is dreadful to think of the murders done on it by inexpert collectors, and of the not improbable prospect of its becoming extinct. In the Alps and Pyrenees it is one of the commonest of weeds, and the Pyrenean form angulosa is easier to grow than the British. Let us get it from the nurseryman, and hope that his stock is Continental in origin. It occurs also in the west of Ireland, where it is, perhaps, comparatively safe, but I own to some disquietude when I see the constant advertisements of clumps of the Irish plant. The Wind Gentian is not so choice, nor so rare, but it should not be torn up unless one can provide the dampish peat which it loves. The finest form I have seen was in Southern Brittany, where, among the dolmens and menhirs of Carnac, it grew 18 inches high, pushing up through the Gorse and the Connemara Heath which kept its roots cool. The hint is perhaps instructive.

These notes seem to be becoming more and more discursive, but in truth I have broached an almost endless subject, and can in one paper only touch the edge of it here and there. I am, perhaps fortunately, limited by very imperfect and scrappy knowledge, and I have preferred to speak only of plants which I actually know. I have dealt only with a selected handful of herbaceous pla have said nothing of Ferns, nor of s trees. The subject might well be systematically by some competer botanist who is also a good gardener.

The Ryburgh hybrid Po

Among recent introductions these high place, being equal to a fine strai Shirley, and yet blooming much long they can be readily transplanted, wh ordinary annual kinds refuse to do so Messrs. Stark, who introduced and improving the strain, advise autumn and transplanting in spring, I find t in the north, seedlings of all kinds annuals succumb to the damp. An have excellent results by sowing in wards the end of March and treating to any ordinary half-hardy annual. blooming the seed may be sown u last week in April. After the seed fit to handle they are pricked off i nary cutting-boxes, these being ret the greenhouse until recovered f check, when they are transferred t frame, hardened off, and planted moderately rich soil about the middle Allow 12 inches from plant to pl should the soil be dry, water well un lished. Like most annual Poppies, quire some support to prevent the tumbled about by heavy rains an winds. By far the best method I tried is to drive in some fairly stou that will protrude some 15 inches to above the surface. Over these I la of large-mesh wire-netting, fastening by small staples to the tops of the sta put on before the plants get more th high the stems grow up through and cover the netting, and give efficient su the plants, and that with a mini trouble. C.

Preston House, Linlithgow.

Autumn-flowering plan

It is surprising how many peopl arranging their beds and borders, fa clude plants that flower in late sum autumn. Although our climate is kindly disposed to the culture of flowers all the year round, there is n why one should not have them for th sons of the year at least. Autumn i when conditions are suitable for the of enough blooms to decorate the gar provide a wealth of flowers for cu well. But the right kind of plants s used. Below is a list and brief descr suitable sorts. If you have not planted some of these no delay sh allowed. Experienced gardeners oft perennials, such as Chrysanthemu Michaelmas Daisies in pots or i ground, lifting them carefully an ferring them to flowering quarters.

Among the best perennials for p gay blooms in autumn are:—Mic Daisies, of which no lack of varieti There are tall and medium growin large and tiny flowered sorts in c shapes and colours. Dahlias, too, are class and have flowers in all sha colours. The Cactus, Collarette, flowered, Single, and Decorative t have their devotees. A really good sort of Dahlia which is fast becom dispensable is Coltness Gem, a dwa with brilliant scarlet blooms. Hardy Chrysanthemums are other splendid flowering plants. Late and early sort cultivation, and a few of both sh planted. We must not overlook the of Gladioli when arranging our beds, provide magnificent blooms in g

Helenium autumnale has lovely blooms useful for cutting.

ow we have been considering only as autumn-flowering subjects. Of ere is plenty of choice hardy annuals If these are sown about the middle f May some glorious displays of ours should result before the frost ne blooms. Among the brightest of or such a purpose are:—Chrys- is (annual), Clarkia, Godetia, is, Sunflowers, and Viscaria.

L. D.

Erinus alpinus

a fine old garden where the wall on a mass of red-purple when seen a off. In another garden known to a stretch of wall came under the of a builder in the absence of the and hundreds of plants were care- d out and the joints pointed, with that what was a picture of beauty ng time, and even when there was it foliage, was rendered hard and ese masses are the work of time, nainly formed by self-sown seeds in the crevices of the wall. With seeds a similar effect can, however, d in a year or two by carefully e seeds in the open joints of old putting a little soil on the top. In s, such as the crevices of rockwork, is very pretty and looks much e than in a level or nearly level such as is to be seen in many rock The plant is exceedingly dwarf, st places forms little tufts of de- ormed foliage, not much bigger of the mosses and almost covered r with small red-purple flowers e above the leaves. There is also riety, but this does not come quite seeds. Another Erinus, called h rose-coloured flowers, is claimed be a distinct species, but, save in e distinction between the two is so minute as not to be worth sunny position is desirable, and a much to be preferred, while the some old lime mortar rubbish will beneficial.

S. A.

Sweet Sultans

ultans, although not difficult to e found greater favour with the ce with careful cultivation they improved a good deal. Perhaps st attraction which this flower e fact that it does not wither a day r cutting, but remains in first-class or a considerable time, often for tnight, if it is cut as soon as it r the spring sowing, which should towards the end of March or il, deep digging or ploughing is and manure while not being essen- sable. Care is necessary that the wn evenly, and not too thickly. ry kind of seed does better when paratively thinly and evenly, and s especially to the Sweet Sultan. soil the Sweet Sultan is not over but that of a heavy nature does good results as soil of a lighter and in these days of keen com- is not advisable to run risks by soils which are the least bit un- Apart from this the plant does well inary medium. Success with the low variety is more difficult than the white or the purple, and many d it answers best to sow the seeds tion the plants are to occupy and to about 7 inches or 8 inches apart. is not necessary with the white rple varieties it is the general practice with many growers. In order to extend the season autumn sowings are often carried out, in which case the preparation of the soil is the same as for spring sowing. The seeds should be sown towards the end of September or very early in October. The Sweet Sultan is now grown for market. To get the blooms on the market in good condition great care is necessary, as, if they are packed when the heads are at all wet, disaster may follow from a financial point of view. The blooms are marketed in bunches of 24 or 48, according to quality, but when being packed they are first tied in twelves, the ordinary market blooms being then bunched in fours, whilst for those of special quality half this number is sufficient.

J. W. M.

A garden in the Mysore Jungle

THE Coffee planter has to clear away the wild jungle before he can open his estate. When this is done he turns his attention to the making of a garden. Very quickly the land is cleared, and as the soil is fertile he soon gets the beds in order. In the heavy rain it is almost impossible to grow anything, but when the monsoon is over, the gardens in Mysore are most beautiful, not only Indian flowers, but those grown from English seed, are plentiful.

ARTHUR R. SLATER, F.R.G.S.
Mysore State, S. India.

A garden in the Mysore Jungle

Beautiful biennials

It is a hard task to keep the borders gay during three seasons of the year. Annuals do not always come up to expectations, and some perennials die out or fail to bloom satisfactorily, so that a reserve batch of plants is very useful if only for filling up gaps. Such a class of reserve flowering subjects is offered in certain of the biennials, especially those mentioned below. These are usually raised from seeds sown this month, and they come into flower the following year, after which they die out. The blooms are extremely beautiful, are excellent for cutting, and are mostly borne in great numbers, lasting over a long period.

Prepare a piece of ground and sow the seeds thinly and evenly either over the surface of the bed or in shallow drills. Most of the seeds being small require only a fine covering of soil to effect germination. During very dry periods the beds should be watered, using a can with a fine rose for the purpose. As soon as the resulting seedlings are large enough to handle they should be transplanted into nursery beds, putting them 9 inches apart. Here they can remain until the late autumn or early spring, when planting can be done in their permanent flowering quarters. Good biennials to grow are:—

CANTERBURY BELLS, of which the calycanthema or cup-and-saucer variety is, perhaps, best known. These have very large semi-double flowers in various shades, as blue, mauve, rose, white, and striped. The plants make a wonderful show in the herbaceous border when they are covered with blooms during early summer. Single and double forms are cultivated and have the same range of shades as the calycanthema sort. If the first lot of flowers is removed a second crop is borne.

HONESTY is well worth cultivation on account of its handsome seed-pods, which, when cut and dried, are so useful for the house. Three colours are met with, viz., white, crimson, and purple.

SCABIOUS is often treated as a hardy annual, but it is a true biennial for all that. The seeds should be sown about July. Mixed sorts are the best to grow when cut flowers are desired, but there is a fine collection of separate coloured kinds. Newer introductions have glorious shades and may be had in both dwarf and tall-growing varieties.

SWEET WILLIAMS.—These should be in every garden, as they succeed almost everywhere and the blooms, in addition to being very showy, are fragrant. Two of the most popular named kinds are Pink Beauty, a lovely shade, and Scarlet Beauty. The Auricula-eyed section is well worth a place, as are most of the self-coloured sorts, such as white, crimson, etc.

L. J. D.

Phlox Vivid

It would be impossible to speak too highly of this bright little plant, in colour and habit so distinct from other members of the family. For density of bloom it rivals P. subulata G. F. Wilson. The flowers are of a charming rosy-pink and have rich markings at the mouth of the tube. Unlike P. subulata G. F. Wilson, which will grow and luxuriate in almost any soil or position provided it is well drained and sunny, Phlox Vivid calls for more exacting treatment to give of its best. A sunny position suits it best. A lover of limestone, it requires this material with an addition of loam and sand well incorporated. A top-dressing of grit and small limestone chippings should be given once a year. The plant is easily increased from cuttings, which soon root and become neat plants the following season.

H. STEVENS.

REMINDERS FOR THE WEEK

Southern and Midland

Shallots

Where the bulbs were planted early the foliage will now be changing colour, which indicates they are in a fit condition for harvesting, as, if left in the ground too long, they will commence to grow again. They should be lifted carefully with a fork and laid on some structure above the ground to complete ripening off.

Marrows

These plants are now growing freely and all side shoots should be pinched at the fourth or fifth leaf to encourage fruitfulness. It is advisable to fertilise the first flowers. Ample supplies of water are necessary to the welfare of Marrows, and when the fruits are swelling liquid-manure is beneficial.

Spring Cabbage

It is somewhat risky to sow the main batch of Spring Cabbage before the early part of August, but a few seeds of Harbinger, Wheeler's Imperial, or Sutton's April may be sown now, and if the winter is not too severe there is every chance of obtaining early heads, which are greatly appreciated during spring.

Carrots

A further sowing of Carrots made about this date will produce a succession of young roots well on to the end of the year. The soil should be worked to a fine tilth, and the drills should be 10 inches to 12 inches apart and 1 inch in depth. Keep the soil well stirred with the hoe and thin the plants when large enough to handle.

Border Carnations

As soon as the grass becomes of a reasonable length layering should be commenced. Small mounds of a sandy compost should be placed around the plants, and after removing the lower leaves an upward slit should be cut partly through a joint, afterwards pegging securely into the compost. Keep moist until rooting has taken place.

Plants in tubs

Where these plants are growing on terraces or other parts of the garden and have not been replenished with new soil recently it is advisable to give them a top-dressing of rich potting compost, pressing down firmly. Such plants as Agapanthus, Agave, Bay trees, Hydrangeas, Fuchsias, and others will benefit from this treatment.

Heaths

This is a suitable time to propagate many kinds of the hardy varieties. The cuttings taken from the tips of partially-ripened shoots will root readily if inserted in pots of sandy soil and placed under handlights or kept close in a cold frame.

Canterbury Bells

It is not generally known that these showy biennials will bloom a second time if the spent flowers are pinched off when over and the plants given a stimulant in the form of liquid-manure.

Hydrangeas

This is a good season to increase the stock from cuttings. These should be short-jointed and taken with three sets of leaves. Remove the lower pair and insert the cuttings in small pots containing sandy soil. These should be plunged in a propagating-case, kept moist, and prevented from flagging until roots are formed.

Cyclamens

The old plants that have been resting in cold frames should now be started into growth by increasing the water supply. When this has taken place they may be shaken out and repotted into the same size pot, using a compost of three parts good loam, one each leaf-mould, well-decayed cow manure, and coarse sand. As these plants enjoy lime this may be given in the shape of old mortar-rubble, using one 5-inch potful to each bushel of compost.

Herbaceous Calceolarias

These beautiful plants are not difficult to grow, provided they are grown in cool and moist quarters at all times. Seed may now be sown in pans of light sandy soil and germinated in a cold frame. The seed should not be covered with soil, but a sheet of glass must be placed over the pan and shaded until the little plants appear.

Raspberries

No fruit suffers more from continuous dry weather than the Raspberry, as, being surface-rooting, it is unable to forage deeply for moisture. Regular supplies of water should be given, and a further mulch of decayed manure will be of much benefit if given at this season. Remove all old canes as the fruit is gathered and thin out superfluous shoots.

Summer pruning

A commencement of this work may now be made. I usually commence with the wall, bush, and cordons first, pinching back to about six leaves from the base and retaining any shoots that are needed for extension purposes.

W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Scotland

Coleus thyrsoideus

Those who desire to have a good blue in the stove towards the end of the year ought now to be putting in the cuttings of Coleus thyrsoideus. These root very quickly in the propagating-case and should be potted on until they occupy 6-inch or 7-inch pots. Rather leggy, the plants ought to be pinched in their early stages. The colour of the flowers of C. thyrsoideus is a deep cobalt-blue.

Balsams

A further sowing of these old favourites made round about this time will give plants which will bloom during September. Six-inch pots are, as a rule, quite large enough, but I have, at times, grown a few in 9-inch pots and they make pieces of specimen size. Balsams require plenty of moisture.

Edging plants

In the greenhouse and conservatory edging plants of a trailing description are useful, and young stuff ought to be regularly propagated. Panicum variegatum, the Tradescantias, Campanula isophylla and its white variety, the double blue Lobelia, Kathleen Mallard, as well as some of the single forms are well adapted for this purpose. Some of the ornamental Grasses, although not of a trailing character, are also serviceable—one of my favourites for this purpose is the graceful Agrostis nebulosa.

Feeding pot plants

Some judgment is required in the feeding of pot plants, otherwise disaster is sure to follow. I believe that if Tuberous Begonias are over-fed, especially when chemical fertilisers are used, the tubers are liable t during their next period of rest. liquid-manure from the tank is used be well diluted. Soot-water is a ve tonic for almost every class of plant, too, must not be overdone. Weak d frequent intervals are preferable to applications at longer intervals. Ir cases if plants can be top-dressed a stimulants are unnecessary.

Tomatoes in pots or boxes

When six or seven trusses are plants may be stopped in order th strength of the Vine may be concentr these. Axillary growths, too, must b larly suppressed. It is bad policy to these to grow until they can be carrie by the armful, as sometimes happens. the plants freely, but not lavishly, u earliest truss gives indication of ri when the stimulants must be withhe only clear water, and not too much should be substituted. Ventilate very

Vineries

A look round may be given from time to the bunches of the late Musc is now possible to determine how the are likely to swell off, and small or s specimens ought to be cut out. Give of air to Hamburghs which are ripe which are changing colour. At tim find their way into a house of r Grapes, and they soon do serious d It is advisable, if possible, to forestal and if poison and traps be judicious they will soon be scared off.

Peaches and Nectarines

As soon as the stoning is comple fruits will move off quickly to the swelling. Plenty of moisture is, at tha especially needful, and ought to be a freely. For a week or two before r may be expected no liquid-manure or cal substitute should be given, and borders be reasonably damp no watering should be done until the cro the trees. See that the needful nets position in good time in order that rip may not fall to the ground, but it is more satisfactory, when time can be to go round the trees daily and remo fruits as come away from the branch application of a slight pressure.

Sweet Peas

Where Sweet Peas are grown upo netting or upon trellises the growths times, require to be tied in so that th ing shoots may be enabled to take their supports. At times flower-buds a duced at an early stage; it is wise to these for a time if, indeed, they do n during cold nights. Plants put out production of specially good flowers have their growths kept thin and c regulated. A light dose of sulphate monia just now will be appreciated by Peas.

Kitchen garden

Hurry on the planting of all ki Brassicas likely to be in request in a For a good small Savoy for early use Early Ulm, which may be put out al thickly as Lettuces. The main plan Celery is now due; if possible let thi be done during showery weather. almost impossible to over-water thi Clear off the stumps of the latest B well manure the quarter, and get it readiness for another crop.

W. McGu

Mabie Gardens, Dumfries.

VEGETABLES

ng Carrots in winter and spring

easy matter to provide winter and spring Carrots by sowing in July gust, if the land has previously worked and got into condition for A heavy clay soil is by no means one for Carrots at any season, and the winter supply, as the roots re- e soil and are drawn for use as re- Soil of this kind it will be necessary e by adding materials to lighten it. to labour considerably, but the done is well repaid, as after the e cleared off it is in excellent con- future crops. For heavy land there tter aids than burnt garden refuse, rubbish, chalk, or old leaf-soil or me may say that the Carrot is not hardy to stand the winter, but ng, as, though severe frost would poil large roots, I have rarely seen ots suffer in any way.

ersons have a strong objection to rots at any season, and rightly so. sweet, tender roots are much more indeed, more serviceable in every me supplies, and seed sown in July th or in August in the south will did material for several months. periment with what may be termed rrots was on taking over, at mid- large garden in a bad state. After cleansing the land and using lime reely, seed was sown as advised, an, tender, sweet Carrots were so that it became an annual custom e season named. Carrots sown at amed are much sweeter, and there ce of that hard core that the early rots often have, and which is so ed. Another point I think should sight of, and that is that to have this kind for home supplies is more s there is much less waste. When ow plenty of room between the at the hoe can be frequently used. too thickly.

ds variety, there is ample choice. dvise the very small roots, such as an Forcing, but such as Early Nantes, or those of a good Short In a very severe winter I have tle soil over or close to the crowns, nting splitting. The roots pass st winters uninjured. At the end or early in April the tops com- nake a second growth. It is then n to lift and place all the roots th wall in moist soil. There will supply till the spring-sown roots

W.

g Potatoes against blight

n reported to the Ministry of Agri- t Potato blight has made an early and immediate spraying of their tato growers, as recommended in y's Leaflet No. 23, is therefore

ice of spraying Potato crops with r Burgundy mixture throughout l later periods of their growth has roughly tested in this and other hat there is no longer any real its value. There may be cases in ying appears to be other than a t inquiries by the Ministry show failures are usually susceptible of lanation. Spraying is, propor- its cost, by far the most profitable ssary operations attending up-to- culture. The cost of it is prob- an one-fifth as much per acre as the cost of fertilisers, and may be said to give as good a return, or more, under average conditions. Its value may, therefore, be more than five times that of fertilisers, cost for cost, in an average season. It is true that the incidence of potato blight varies considerably in different seasons and in different parts of the country, and that it is more widely spread in wet seasons than in dry ones. As a general rule growing crops should be sprayed at least twice. The first spraying of second early and main crop Potatoes should be taken in hand at once before any blight develops. The second spraying should be done about three weeks after the first. When the crop is found to be damaged by aphides, spraying is, however, likely to cause serious injury to the foliage, and should not be carried out.

Both Bordeaux and Burgundy mixtures are efficient for the purpose, but where good lime is not readily obtainable, Burgundy mixture should be used. The mixtures for spraying, say, one-third acre (50 rods) plot are made up as follows:—

Burgundy Mixture.—4 lbs. sulphate of copper are dissolved in 5 gallons of water, then diluted up to 35 gallons. In another vessel, 5 lbs. of washing soda are dissolved in 5 gallons of water and the two solutions mixed together.

Bordeaux Mixture.—4 lbs. copper sulphate, 2 lbs. quick lime from freshly burnt lumps, and 40 gallons of water. The copper sulphate should be dissolved in 35 gallons of water, and the lime placed in a separate vessel and slaked slowly, making up to another 5 gallons; it should then be passed through a fine sieve and added to the copper sulphate solution. Iron or zinc vessels should not be used in making these preparations.

Ormskirk Potato trials, 1926

The National Institution of Agricultural Botany wishes to extend an invitation to parties of farmers, Potato growers and merchants, and agricultural advisory and administrative officers to visit the Potato Testing Station, Ormskirk, singly or in parties, on August 18th or 19th, 1926, or, if these dates are inconvenient, on any other weekday between August 9th and 21st. Visitors will be able to see the official trials of some hundreds of new varieties of Potatoes for immunity from wart disease. These are carried out at Ormskirk for the Ministry of Agriculture and Fisheries, which certifies the results. The other trials open to inspection include the Lord Derby Gold Medal Trials and Yield and Maturity Trials of the leading immune main crop Potatoes. There is also a large number of demonstration plots of the chief varieties of British and foreign Potatoes, together with those certified by the Ministry as immune in 1924 and 1925.

Secretaries of societies and others wishing to organise parties to see the trials should write to the Superintendent of Potato Trials, Potato Testing Station, Lathom, Ormskirk, Lancs., suggesting alternative dates. Individual visitors will be equally welcome, but they, too, should inform the Superintendent of the date of their visit not less than a week in advance. Ormskirk is conveniently reached by a frequent service of local trains from either Liverpool or Preston, and lunch may be obtained in the town.

Certificates for seed Potatoes

Most Potato growers realise the importance of planting only true stocks of Potatoes in order to avoid the disappointment and loss which often result from the growing of impure seed. The demand for seed Potatoes from true stocks is consequently steadily increasing, and in order to assist farmers in England and Wales who grow Potatoes for seed purposes, the Ministry of Agriculture is making arrangements for the inspection this year of growing crops with a view to the issue of certificates that the crops are true to type and reasonably free from rogues.

Definite identification of Potato varieties is only possible by means of a careful examination of the plants during a certain period of growth, and cannot be undertaken after the crop has died down. Growers who apply for inspection late in the season, therefore, run the risk that their crops will be past the stage when identification is possible before inspection can be carried out. Application for inspection should be sent to the Ministry as soon as possible, and in no case should it be sent later than the beginning of August. Inspections are made of any varieties of Potatoes, and the fee charged is at the rate of 2s. 6d. per acre.

Cucumbers in frames

To be successful in growing Cucumbers in frames the necessary details that arise from day to day must be strictly attended to or failure, wholly or in part, must be the inevitable result. Assuming that a hotbed of warm manure is ready on which to plant, procure loamy soil of a light or sandy nature, and place about a barrowload in the centre of each light. This will be sufficient for planting in; more can be added later on when the roots have spread over the surface of the bed. If the loam is of a suitable nature nothing need be added to it, but if the soil is poor, mix with it a little decayed manure—say a sixth part. Give water according to the state of the weather and when the soil needs it, which, if sunny, would be almost every day. When necessary give sufficient to soak the soil through. If dryness is permitted mildew may intervene or the plants become attacked with red-spider. Cucumbers can be grown when properly tended without any shade, but in the case of the inexperienced a slight shade is advisable, but only sufficient to break the sun's rays without making it dense. The shade would make the leaves thin and weak, and fruit production could not then reasonably be expected to be satisfactory. When in full growth and in bearing a weak stimulant is good for them, soot-water or a little guano soaked in water answering the purpose. Ventilation must be given when there is sunshine, opening the frame early and before the sun gains much power. This will depend on the position of the frame. If it faces south give air about 9 a.m., if it is towards the east it would catch the sun earlier, and the lights would need to be opened before that time. Increase the air by degrees, not throwing the frame open wide at once. Close about 4 o'clock in the afternoon, damping the frame, plants, and soil with the syringe or a fine-rosed pot. The syringe is best, because the leaves can be wetted on the undersides, which is necessary to keep down insects. Always use chilled water for this and the soil when watering, because cold water is highly injurious.

STOPPING of the shoots is a very important item in Cucumber growing. If this is neglected the crop of fruit will be scant and leaves plentiful. Assuming the plants to be some 9 inches high when planted, the points should be pinched out. This will cause several shoots to issue from the leaf-joints below, and as these extend to about three or four leaves pinch them again, and continue this all through the season. Should the frame become too crowded with leaves, thin out some of the growths, carefully cutting out those which have no fruit on them. Do not allow the Cucumbers to become very large, as this taxes the plants unduly and causes them for a time to cease bearing. The lights are best covered at night. In cold and sunless weather keep the lights closed.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

GREENHOUSE

Mealy-bug on Plumbago

(A Reader).—This, several specimens of which we found on the growths of Plumbago you send, is a terrible pest. It will be scarcely possible to clear it off altogether at one dressing, but you may syringe the plants forcibly with a mixture of soft-soap and a quarter of a pint of paraffin to 3 gallons of water, applied warm. Take care that you keep the paraffin well mixed, putting every alternate syringeful back into the can. Perseverance will be necessary, more especially if other plants growing close by are also attacked by the same troublesome insect.

Unhealthy leaves on greenhouse plants

(Inquirer).—The cause of the spotted and unhealthy appearance of the leaves of the soft-wooded greenhouse plants you have sent is evidently to be traced to careless watering, inattention to ventilation, and a bad attack of green-fly combined. The leaves of Pelargoniums, especially, will become spotted if the plants are allowed to sometimes become dust-dry at the root and then at others flooded with water. Keep the soil in the pots of all your plants fairly moist, and in ventilating avoid cold draughts of air striking the plants; this latter evil will turn the foliage of many kinds of greenhouse plants a bad colour in a short time. Fumigate with XL All frequently to destroy green-fly, and on fine days wash your plants freely with clean water, applied somewhat forcibly with a syringe.

FLOWER GARDEN

Fungus on Antirrhinums

(A. L. Crosslé).—Your Antirrhinums have been attacked by the fungus Septoria Antirrhini. This disease spreads very rapidly when once it attacks the plants. It is advisable to remove and burn all the plants that are seen to be affected and to spray any that are clear of the fungus with Bordeaux Mixture or sulphide of potassium (liver of sulphur) at the rate of 1 oz. to a gallon of water.

Pansies dying off

(W. M.).—We can find no trace of any insect at the roots. Have you grown your Pansies in the same place for several seasons in succession? If so, we fear your soil has become what is known as "Pansy sick," the plants dying off one after the other without there being the faintest trace of any insect. Those who grow Tufted Pansies on a large scale invariably change the position of the plants every year.

Lupins failing

(E.).—Lupins take a great deal out of the soil, and, like all leguminous plants, are very dependent on nitrates for their well being. Can it be that the soil is exhausted, and that it is dry where the roots are, although it looks moist on the surface? We should advise you to try what a heavy mulch of rotten manure will do, and, if the weather is dry, to give frequent soakings of water to wash the goodness of the manure down to the roots.

TREES AND SHRUBS

Ceanothus pruning

(C. C. B.).—As all the varieties flower on the shoots of the current year's growth from one to three eyes of the preceding year's wood should be left, reserving, or, at most, only cutting back any shoots that are required for filling up vacant spaces on the wall. To obtain properly-ripened wood, and thus ensure plenty of bloom, Ceanothuses must have a warm, sunny position. A good time to prune is during April. The Cupressus may be pruned at the same time. It is best to do this with a knife, as if shears are used the hedge has a very stiff appearance.

Lilac dying back

(B. H. Robus).—Judging from your note and the small piece enclosed the Lilac is grafted upon the common species (Syringa vulgaris), and the suckers springing from the base are those of the latter kind. Remove these suckers and prune the shrub hard back without delay. Even this may fail to save your bush. It is, however, your only course. Hundreds of Lilacs have been lost in past years owing to the practice of grafting them upon the common Lilac and Privet, but of late years nurserymen have devoted more attention to the more reliable method of increasing these valuable shrubs by layers, cuttings, &c. In future insist upon plants growing on their own roots when purchasing.

Brown scale on Ivy leaves

(M. F.).—The filthy condition of the leaves is due to the brown scale and mealy bug, which you will find on the leaves. Your only remedy is to strip off every one of the old leaves and burn them, then syringe freely with paraffin emulsion or Quassia Extract and soft-soap. The old stems and shoots should be examined and any insects found scraped off. Then, in the course of a few days, spray again to make sure of destroying any that escaped the first application. Continued battling with such pests is the only way to clear them off.

FRUIT

Peach leaves blistered

(F. F.).—The Peach-leaves are suffering from what is known as blister, which is due to cold, cutting winds. We never find this trouble on trees under glass. The only remedy is to pull off the bad leaves or that portion of them which is affected before the leaves get too big. In the course of a few weeks the trees, given more genial weather, will cease to produce such leaves, and the subsequent growth will be healthy, though in some seasons the damage done is sufficient to ruin the crop. The only remedy is to grow the trees on a wall that has the least exposure to such cold winds. Peaches are usually grown on the warmest wall garden, with the result that they sta into growth. Then we get from warm days changes to frost, cold winds, which injure the leaves, an them to blister as in the case of th mens sent.

Gooseberry caterpillars

(Hortus).—The Gooseberry-caterp the larva of the saw-fly (Nematus The fly appears early in the spring posits its eggs on the under surfac leaves, which are speedily hatched, caterpillars soon destroy the leav petioles only being left. When full they descend into the earth, spin a and go through the usual transfo and another brood of flies emerges earth to deposit the eggs, which again produce larvæ. The object cultivator is to prevent these flies f pearing in early spring. If this can the Gooseberry bushes will be fr caterpillars. We know of but two r The pupæ remain in the ground thro winter not deeper than 3 inches; t remove the 3 inches of soil under th and bury in the bottom of an trench, taking the soil from the t replace the 3 inches removed. A 2 inches or 3 inches deep of spent t from the tan pits will also prevent from emerging.

VEGETABLES

Carrot fly

(M. E. M.).—The cause of the t the larvæ of the Carrot fly. Th attacks the Carrot crop in May an when the seedlings are well above and if the attack is not promptly d the crop is soon ruined. The best r to sprinkle something of a deterrer between the rows as soon as the plan to flag, such as sawdust and sand n with paraffin, 1 pint to ½ bushel c The smell of the mineral oil deters th insects from alighting, and a furthe of eggs is prevented. Unless your c decimated as to be of no further advise you to apply the recommende at once. There is still time to raise Carrots if seed is sown at once varieties as St. Valery, Champion Horn, or any stump-rooted variety.

Onions diseased

(Irish Reader).—We think the t due to a disease named Onion Sc The remedy is to spray as soon as th is detected on the green tops in sp presence being denoted by yellowish and markings on the leaves. Spra solution of sulphide of potassium, 3 gallons of water. If one applica not arrest the disease spray again in or 10 days time. Before digging where the Onions have been gr another crop give it a good dressing and avoid cropping it with Onions next three seasons. Burn all infect you have by you.

MISCELLANEOUS

Beetles for name

(E. C.).—The beetles are those of inquisitor, Fabr. All the species genus feed in the larval stage on t in old trees. The grubs, as a rule, neath the bark, and, as far as we k not injure the wood. The beetles y on the flowers of Spiræa were no de ing. The specimens you sent in w and female, which accounts for the d in size. We should not consider thi destructive insect pest.

FERNS

Viviparous Ferns

G the various means by which life is reproduced, none is more kable than the manner in which is produce bulbils or young plants face of their fronds. This mode of on is most common among the s, some of which are very prolific, rs only produce a single plant at f each frond. A. biforme is one of prolific; in this species the young , under favourable conditions, pro- al fronds and throw out roots ming into contact with the soil. Ferns clustering over the surface nt plants add considerably to their d should not be removed except ired for growing on. A. fœnicu- also very prolific, but the little p off after they have made one l. These will soon take root in le soil, provided the atmospheric are favourable. In A. viviparum onds are broad, and form a con- finely-cut ones of the parent. In pumilum, one of the best of the bulbils are not so abundant, but, with compound fronds, they are ver the surface. A. erectum, A. ium, and others with simple pin- , produce only one bulbil on each this at the extreme point. A. n is a curious little species with ds, broad at the base, and taper- narrow point. This is called the ern, on account of the young luced at the extremities of the ng root, and if left to themselves in time be found some distance original parent. While all the which produce these bulbils may opagated by taking them off and m as young seedlings, they do not llings from spores very readily.

olystichums the viviparous sorts bulbils towards the base of the the rachis. P. angulare proli- y prolific, and young plants may ablished by pegging the fronds ome suitable soil. Woodwardia one of the most remarkable, pro- iny little bulbils all over the sur- ronds. In W. radicans only one ned on each frond, and this close s towards the point of the frond, falling off it clings tightly, and removed without damaging the nogramma schizophylla gloriosa rious example, and the only one inted with in the genus. This ung plants at the extremity of and occasionally at the points of næ. Apart from this distinction species it is certainly one of the Ferns we have, being, however, ate, and requiring stove treat- young plants should be rooted in efore they are severed from the

dolabriforme is another interest- of this mode of reproduction; o three others of the same genus iliatum, A. caudatum, and A. A. lunulatum is by some con- nymous with A. caudatum, but quite distinct, one being ever- other deciduous. All the above arrow pinnate fronds, and pro- plants at their extremities. In a sphere the young plants will ey have fronds large enough to ulbils while still attached to the and without coming into con- y material to root into. To ob- tain young stock a plant may be plunged in Cocoanut-fibre refuse, where the bulbils will soon take root, and may be taken off and potted singly. Doryopteris palmata also produces bulbils, but as this can be got freely from spores they are seldom used. In most instances the viviparous Ferns cannot be raised from spores, although apparently good spores are often abundant. F.

The hardy fernery

There is, in my opinion, nothing that adds so much to the interest and beauty of any garden as a hardy fernery, and in most places, even of circumscribed limits, there is room for an adjunct of the kind. All that is necessary to start, or rather form, one of these ferneries on a small scale is a few brick burrs, or any material of that kind just to make some rugged stages and help to hold the earth up at different levels and afford moisture to the roots of the Ferns. The larger the burrs, or whatever is used, the better, the thing being to have bold, outstanding pieces and to avoid cockney rockwork. With massive pieces jutting out from the soil and partly hidden and adorned by vegetation, a fine effect may be produced, as all plants like these boulders of stone or other material, for they form a sort of pasturage under and around in which roots delight to travel and feed. If the burrs, or whatever is used, are not of the right colour, or stone-like, they may be easily made so by splashing them over with liquid cement, which latter, if thought too light, may be toned down or darkened by adding a very little lamp-black or brown umber, mixed well in before using. Some people form their ferneries with tree stumps, but these are bad, as after a short time they decay and breed fungus at such a rate that the plants are over-run by it and thrown out of health. With the mounds or raised banks or surfaces formed in as irregular a manner as possible, the next thing to be carried out is the planting, and this, like the formation of the fernery, requires some taste in arrangement, or the plants may be placed in wrong positions and not show off to advantage. To look well and be striking, those of large, bold type should have the prominent or most elevated spots, as then they give character by their general contour and noble outline, but for those that require more shelter exception must be made and sheltered nooks found, or they may suffer from wind and exposure.

A. G.

Disposal of garden rubbish

From now onwards as garden crops begin to mature, the disposal, as it accumulates, of rubbish from Potato and Pea haulm, Cabbage leaves, and the general flotsam and jetsam about the garden, faces the grower. Different people have different methods of dealing with it. One endeavours to bury it as it appears; another collects it in a heap and lets it lie there until autumn, when it is given a dressing of quicklime to aid decay, or there is enough to make a fire when the ground is clear of most of the crops. I am not at all sure whether it is best to turn decaying vegetable matter under the soil, or to stack it in a heap, as in either case it becomes the breeding place of innumerable pests which cause an immense amount of trouble. In quite recent years the use of receptacles for getting rid of rubbish, as and when it is collected and burning it, has become more general. A brazier is a very useful adjunct in a garden, as with one a deal of undesirable rubbish with the pests contained therein can be speedily got rid of by fire. It is certain that it solves many problems connected with garden pests, when rubbish is burnt quickly, and it seems to me it is the safest method to dispose of it in this way; "a bit at a time" instead of waiting until late autumn. W. F.

INDOOR PLANTS

Perpetual Carnations

IF, as so often is the case, no room is available for freshly-potted plants, they may be stood outside, always remembering that heavy continuous rains in late summer are not good for the plants, so that some form of protection, such as frame-lights, should be available to cover them during such periods. What to do with plants which have been flowering since last autumn is somewhat of a problem. One is loth to throw them away while they are blooming freely. Provided such plants are not suffering from red-spider some of the best may be potted on, giving a shift of one size larger pot only, and the usual final compost of turfy loam, well-rotted stable manure, lime-rubble, and a potful of bone-meal to each barrow-load.

FIRM POTTING.—Some plants require firm potting. The Carnation is one of them. None of us like weak stems, yet this is the result of potting insufficiently firmly. When firm potting is neglected a quick soft growth is the result, whereas firm potting spells a firm sturdy one. In the final operation of potting there is a certain temptation to cover the ball of soil more deeply than on the previous occasion. The Carnation is a surface-rooting plant, and deep potting is conducive to stem rot.

With the approach of July the annual crusade to ward off attacks of red-spider should be taken in hand. Red-spider cannot stand cold water, a systematic washing down of dry corners of the house and benches, a regular spraying with force under the leaves in hot weather will keep it at bay, but should it appear, 2 ozs. of common salt to the gallon can be sprayed under the leaves, but not into the roots, once a week for a month will usually master a mild outbreak. Green-fly has been persistent during the last month or two. Professor F. V. Theobald, the eminent authority on aphis, states that the pest commonly known as green-fly, after the first brood from eggs quickly matures and commences to deposit live young at the rate of about seven or eight a day for 20 days in succession in favourable weather, these likewise quickly maturing and multiplying again. Carnations under glass do not so readily receive the attention of birds which devour green-fly, or of the larvæ of the lady-bird and hover fly, which do likewise, and so it is necessary to fumigate the plants or use an insecticide spray immediately.

It is doubtful which of the many pleasant operations in growing Carnations gives the greatest pleasure, but cutting the flowers cannot be the least of them. There are a few points worth remembering in connection with cutting flowers. To make them last in a cut state the plant should not be dry at the time of cutting them. Early morning or evening should be selected as the time to do it, and the flowers should be stood in water before being carried or packed. Young flowers which are only just open, naturally stand better.

To avoid leggy plants cut stems long. A flower cut high up on the plant results in that plant becoming leggy. In hot weather flowering plants should be shaded; a cool, moist house in hot, dry weather is better both for plants and flowers. It will be noted that some varieties stand heat better than others, as instanced in the one-time popular variety British Triumph, which so quickly curls in heat and for which reason I should place it

on the retired list, for both Topsy and Sir Philip Sassoon are superior in every way.

Lovers of the Perpetual Carnation are now in the position of being able to choose several varieties with a perfume as rich as in the Old Clove famous for its scent. It is in the summer flowers of the Perpetual Carnation that one secures the sweetest scents, which, alas, some of them lose when the sunless days arrive, yet there are some which retain their fragrance at all seasons, and to this I will refer on another occasion.

Enfield. LAURENCE J. COOK.

Calceolarias for the greenhouse

The Calceolaria is not everyone's flower, possibly because it needs a little attention in the way of keeping down insect pests, particularly green-fly; but when it is well cared for and kept healthy the results repay the grower tenfold. Only those who have seen a well-grown plant in bloom can have any idea of the beauty of the flowers. The rich colours, together with the quaint markings, cannot fail to arrest attention. I have grown greenhouse Calceolarias for many years with satisfying results. No one who has a frame, and a greenhouse or conservatory capable of keeping out frost, need deny himself the pleasure of owning a batch of plants.

Seeds may be sown up to the end of July. A suitable compost for the seeds is made from a mixture of two parts good loam, one part fine leaf-mould, and one part sand. Use pots or seed pans as receptacles and drain these well. As the seeds are very small it will be found best to press the soil firmly, making a level surface on which to sow the seeds. These could be pressed in with a flat board, but do not need a covering of soil. Moisten the soil before sowing, and if any further water is required do not use a can but plunge the pots up to their rims in a tank of water until it is seen that the whole of the soil is permeated. After sowing is completed place the pots in a shady frame and cover with a sheet of glass. The glass should be wiped each day to remove moisture. As soon as two leaves are produced transplant the seedlings 2 inches or 3 inches apart to boxes, and later on pot them up singly. Towards September repot into 6-inch pots and add a little old manure to the compost. Throughout the summer water moderately and keep the pots in cool frames, shading from strong sun. About the end of October, or before severe frost is expected, remove to a greenhouse with a temperature not below 45 degs. Give the plants liquid manure from April until the flowers are spent, after which discard them.

As I have already hinted the plants are subject to green-fly, which if allowed to multiply unchecked soon ruins the growth. This need not deter the grower as the insects are easily destroyed by fumigating with nicotine. One or two such fumigations in a season are usually sufficient to rid the plants of insects.

L. J. D.

LATE NOTES

Geranium pylzomianum

A tiny Chinese Cranesbill and one very suitable for those having small rock gardens is the above, which spreads freely in light sandy soils and opens its pretty pink flowers early in June. The leaves are carried but a few inches above the soil and the flowers, large for the size of the plant, are borne on slender wire-like stalks, each 5 inches long.

M. G. M.

Helichrysum bellidioides

This little New Zealand plant may be seen to advantage when used to form broad edgings to beds of other plants, especially when such beds are raised slightly above the general level. Growing close to the ground its pretty neat grey foliage is pleasing, but with the advent of May such a profusion of dainty white, Daisy-like flowers rises that the foliage is obscured, the broad masses at such times being decidedly attractive. I have tried it planted alternately with that little queen of Cranesbills, Geranium lancastriense, which bears pleasing pink flowers about the same time and is even dwarfer, and although the effect is pretty there is a tendency on the part of the former to overrun its companion and thereby obscure much of its beauty. Of these charming Everlastings there are a score or more recorded from New Zealand alone.

G. M. S.

Kalmias

These, known as Mountain and Swamp Laurels in their own country, America, are among the choicest of evergreen-flowering shrubs which come into bloom just when the Rhododendrons are over, and are thus valuable for the garden during June and July. They love warm, lime-free soils, with a liberal addition of decayed leaf and peaty matter about their roots, and produce their clusters of waxy pink flowers profusely.

E. M.

Trollius pumilus (Wargrave var.)

A very pretty little plant which has come to me this year is the above. It is suitable for moist positions on the rock garden, as growing with plants of a more robust character there would be the danger of its becoming lost. Its tiny leaves, not an inch high, sit on the soil in a close tuft, and its clear yellow, single flowers, borne on individual stems, rarely exceed 9 inches in height. SUSSEX.

SHORT REPLIES

Mrs. R.—The soil is waterlogged, and the only remedy is to have it drained. If you do this, then the plants will thrive.

Yorkshire.—Impossible to say, as very often they die off very suddenly from no apparent cause when quite young. We know of one plant of Vitis inconstans in a suburban front garden which has been planted for quite 40 years.

C. Reid.—Please send a specimen of the Tomato and we will do our best to help you.

NAMES OF PLANTS

F. B. T., Exeter.—Rose Paul Neyron.

Geilston.—Phlomis viscosa (Poir) syn. P. Russeliana (Benth), figured in Botanical Magazine 2542 as Ph. lunarifolia var. Russelliana. We noticed this plant at the last meeting of the R.H.S. shown as Ph. chrysantha. It may be obtained from Messrs. Perry's Hardy Plant Farm, Enfield.

W. Bean, Pickering.—Prunus Pissardi. It is fruiting exceptionally well this year. The fruits may be used, but they are very harsh and acid.

Alice Short.—A. Kalmia latifolia; B, Calycanthus floridus.

W. Hunter.—1, Sisyrinchium striatum; 2, Campanula glomerata; 3, Linaria purpurea.

J. E., Sittingbourne.—The Rose blooms did not arrive fresh, and this makes the naming difficult. Cannot determine 1; 2 appears to be Goldfinch; 3, Francois Joanville; 4, Coral Cluster.

E. A. M., Cheshire.—Cistus cyprius.

H. W.—Cephalaria tatarica syn. Scabiosa alpina.

Wm. Sanson.—1, Crucianella stylosa; 2, Veronica salicifolia.

E. C.—1, Cotoneaster Henryanus; 2, Cotoneaster moupinensis.

B. W. J., S. Devon.—Ornithogalum pyrenaicum, often called Bath Asparagus because it is gathered on the hills near Bath and sold in the market.

LATE REPLIES

Chrysanthemums showing flov

I would be glad if you could give son why Chrysanthemum plants are buds at first break. So many are on both large and bush plants. A are from the best basal cuttin December and January.

[From cuttings started so early there is bound to be some bud tro certain varieties. A well-known o Algernon Davis, may be named. however, no cause for worry if the growing in their flowering pots. S off the premature buds and await for a free growth. Have you many early-flowering sorts in your c These have the habit of showing fl as you describe.]

Roses failing to grow

(E. S.).—A suggestion as to the your Roses failing to make sa growth is too deep planting; this rate, is a frequent error. Roses are backward this season, and if b of the season things are not more it would be well to lift and repla late autumn. Devon would be c suitable so far as soil and climate cerned.

Hollyhocks diseased

(C. T. H.).—Your Hollyhocks h attacked by the Hollyhock disease malvacearum). You had better at off all the diseased leaves and burn t spray the plants with Bordeaux mixt at an interval of 10 days. Any of t that are healthy should, to prevent t spreading, also be sprayed.

Destroying Nettles

(Deanyers).—If you persevere in down the Nettles with a hoe during son they will eventually perish fron tion. If you want a speedy clear must root them out.

An old orchard

(A. M. M.).—For the pests you m think you cannot do better than trees with paraffin emulsion. This obtain of any dealer in garden sundr in accordance with the printed which will be sent with it. If the tall and the upper parts difficult to best thing would be to borrow modern spraying outfit by which upper portions can be easily sprave branch on which the spraying nozzl can be lengthened as required. Aft ing has been done look the trees ov any American blight has escaped brush the insects with diluted Next winter thoroughly spray the t Woburn winter wash, after having whatever may be necessary in the thinning and pruning, and take the cautions afterwards in regard to for any American blight left untouch spraying. With regard to your quer pruning and root pruning we advis to attempt either until you have firs trees inspected by a practical man tain if such drastic treatment is requ surmise that a judicious thinning a ing of the heads of the trees are really needed to remedy matters.

GARDENING APPOINTM

Mr. J. SMITH as head gardener a chydol Hall, Welshpool, Montgom

ARDENING ILLUSTRATED

I—VOL. XLVIII. JULY 17, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

... ... 430
ves blis- 430
fly, the... 420
nteum .. 421
yosotidi- 418
A MON- 420
for the 420
W. H.
... ... 421
: Their
s and
... ... 429
Carnations, layering 429
Chrysanthemums, watering 421
Cistus purpureus, seed-pods of, wanted 420
Cornus controversa ... 418
Corokia virgata 420
Coronilla iberica ... 418
CYPRIPEDIUMS, HARDY 417
Dahlia growth, training 425
Delphinium Sister Clare 420
Dianthus Cæsar's Mantle... 421
Figs diseased 430
Fruit, pot 424
Garden, making a Kitchen 427
Garden, the architect in the 419
Globularia cordifolia 421
HERBACEOUS BORDER, FLOWERS FOR THE 423
Hydrangeas, blue ... 418
Hydrangeas, the cultivation of 430
Italian Pimpernel (Anagalli Monelli) the 425
Lathyrus pubescens... 418
Lilium Parryi 418
Loganberry failing ... 430
MAGNOLIA HYPOLEUCA FLOWERING IN SCOTLAND 419
Melons 424
Myosotidium nobile, growing 430
Nerines and Lachenalias, trials of... ... 418
Orange-Flower, the Mexican 418
Pæony Fire King, single 419
Plants wanted, uncommon 419
Potato crops, inspection of Scotch 427
Potato failure, a ... 427
Primroses, Bon Accord 420
Primroses, some rare 418
Primulas in frames—the advantage of coolness 430
Rock garden, Kew ... 419
ROSE BUDDING ... 422
Roses, top-dressing Christmas 422
Royal Show at Reading, the 428
Saponaria ocymoides 421
Seed, saving 419
SHADING OF GREENHOUSES BY CHAIN LATH BLINDS, THE ... 425
Strawberry planting 424
Sweet Peas: A selection 423
Synthyris reniformis 420
Thalictrum adiantifolium 424
Vineries 424
Watsonia species ... 418
Woodlice and slugs, eradication of 419

Hardy Cypripediums

rdy species of this genus are not so much grown as they deserve, among the exotic species and more beautiful, and beyond a ection from frost during winter shade—natural shade for preferg the summer they are little grow. There are few gardens of ions where a spot could not be ade to suit them. The best plants , C. Calceolus, and C. spectabile had were grown in the lower piece of rootwork under a heavy Beech, and here it may be ret there are many of the hardy ve of Britain, such as Habenarias (Twayblade), that thrive well in ons. In preparing a station for il should be taken out to a depth or thereabout, and if the upper of fairly good fibrous loam it aside for mixing with the com- a good layer of rough stones or in the bottom and fill in with parts of rough fibrous peat, leaf-loam, the leaf-mould to be only ed. A little limestone grit, gravel, aterial may be added with adsome species delight in it, while harm to any. The roots should om 4 inches to 6 inches deep as ived, and a thorough soaking of to settle the soil. They may light mulch of rough material, no more water will be required ves are pushing up. This com- most of the species growing in ame. The time for lifting and s a little in different species, but, best time is just as the growth One of the finest species is

M ACAULE.—This is a North nt, and a capital one for naturalh positions as moist banks in parts of the shrubberies or wild m between a pair of broadly , light green leaves it pushes a bout 8 inches high, surmounted oract and single blossom. The etals are whitish, twisted, about length, the labellum large and eined with crimson.

M is a choice and beautiful little difficult to grow than the last- liking abundant moisture. The and petals are greenish-white ed-brown, the lip white in the sed with rose in front and red. It also comes from North re it grows in wet swamps and

C. CALCEOLUS is the species indigenous to this country and a pretty plant. When happy under cultivation it grows rapidly, forming large tufts and flowering freely every year. The spikes when strong produce two or three blossoms, and often grow half a yard high. The flowers are graceful in appearance, the erect, dorsal sepal and drooping petals of a deep brown tint, that sets off the yellow-pouched lip admirably.

C. GUTTATUM is a pretty plant when well grown, but not always a success under cultivation. It must have plenty of moisture and a very light, open description of compost consisting largely of peat and leaf-mould. In heavy loam the roots soon perish, and it does not care for the lime recommended above, but if planted shallow and kept moist it will usually thrive in the lighter material. The flowers are large and handsome, the sepals, petals, and lip all white in ground colour, spotted and blotched with crimson-purple.

Cypripedium Calceolus

A British species so rare that it is possibly extinct as a wilding in this country. It is rare also in cultivation

C. MACRANTHUM is a large-flowering and showy species when it blooms, which is not often unless very happily placed. It delights in a more substantial make-up of compost than any other kind, sound fibrous loam of good texture broken into lumps, with some finely-broken charcoal and crocks suiting it well. It is most important that this kind is not disturbed oftener than is absolutely necessary. The downy flower-spikes are each about 1 foot high, and each bears a single large flower of a rosy-pink streaked with red and white.

C. OCCIDENTALE is a pretty and well-known kind, one of the most plentiful and as easily grown and free-flowering as any. It throws up tall, erect stems bearing several flowers, the sepals and petals of which are a bright maroon-brown, the lip white, with streaks and spots of red.

C. PARVIFOLIUM is an old and useful American species that thrives well in a very moist, shady position, or it may be grown in pots in a frame. The sepals and petals are narrow, twisted, shining brown, lined with deep purple; the lip large, drooping, lemon-yellow, spotted with red. It is one of the best of the species and should be grown by all.

C. PUBESCENS is a tall-growing, handsome species, a native of North America. It thrives under cultivation if treated as described above and flowers freely, the spikes rising about 2 feet high. The flowers are very large and handsome, the sepals and narrower petals pale yellow, streaked and spotted with brown; the lip pale yellow.

C. SPECTABILE is perhaps the best known of all, and a very useful, easily-grown kind. It grows naturally in boggy peat and decayed vegetable matter, where it cannot be dry for long together, and this should suggest its treatment under cultivation. Not that the roots should be always saturated with water, but they must not be forgotten while at rest and allowed to dry up. It is a good subject for naturalising where suitable positions for it exist, or they may be made in most places. I have known C. spectabile throw up stems nearly a yard in height, and these are surmounted by a pair of flowers each about 3 inches across and very variable in colour. The outer segments are usually white, but the colour of the lip in many cases varies from white to deep rose. A. G.

NOTES OF THE WEEK

Trials of Nerines and Lachenalias

THE Director of the Gardens of the R.H.S. desires us to point out that the trials of Nerines and Lachenalias started there last season are being continued this. Any grower desiring to add varieties to these trials should send three bulbs of each to reach him by August 15th, 1926, addressed to the Director, R.H.S. Gardens, Wisley, Ripley, Surrey. The necessary entry forms can be obtained on application to him.

Coronilla iberica

This is an ideal trailing plant well adapted for the rock garden provided good open soil is given to it for its underground shoots to ramble in. The stems are so abundantly produced that they form a dense full tuft, each shoot bearing large erect clusters of flowers in endless succession on slender stems rising well above the deep green foliage and cropping up thickly along each running shoot. The blossoms are drooping in the bud, which adds considerably to its charm. It is seen to the best advantage in a somewhat raised position so that its free-flowering shoots may fall freely down. The plant revels in full sunshine in positions where it can get moisture during the hot season. Cuttings root freely if pressed firmly into sandy soil in a cold frame. H. STEVENS.

Lathyrus pubescens

A plant very rarely met with is this, which comes from Chile. It grows about 5 feet in height, and trained to a wall sheltered from north and east I saw it early in June flowering quite freely. The flowers, borne in considerable numbers and clustered rather closely together on 1-foot stout stalks, are of a pretty lavender-blue and arrest attention immediately they are seen. E. M.

Cornus controversa

A remarkably handsome tree during the months of June and July is this, specimens 20 feet high or more being conspicuous from afar. The stout, horizontal, table-like branches covered with flowers of a creamy-white present a beautiful aspect as they rise tier upon tier, with plenty of space between to reveal their charm. This handsome Cornel is a native of Japan, China, and the Himalaya, and is distinct from all the other Cornels except C. alternifolia in its alternate leaves. Although the unusual character of its branches would suggest a dense sort of tree, it is really of elegant form and charming for planting as an isolated specimen in pleasure grounds. C. alternifolia, from Eastern North America, is also a tree or large shrub of considerable beauty and interest, and is a little later coming into bloom.
M. S.

The Mexican Orange-Flower

This is hardy in many districts in Scotland, even without a wall, and I know many fine specimens 6 feet or more in height which have been in the open for a good number of years. It is really much finer in the open than on a wall, and I have seen it doing well under thinly-planted deciduous trees. It is very attractive with its glossy green foliage and its heads of orange-blossom-like white flowers. It is a native of Mexico, which would not inspire confidence in its hardiness, and one would not advise those who have cold, exposed gardens to attempt it. It has been in this country since 1825. To its other charms it adds that of fragrance.
S. ARNOTT.

Anchusa myosotidiflora

It is not everyone who can afford to devote large areas to the cultivation of a single class of plant, but where this is possible few subjects are more worthy than the above. At the present time about 70 large plants of it are in full bloom with me. These are used to carpet a plantation of Lilacs, the latter planted rather thinly. The sea of Forget-me-not blue of the Anchusa is one of the loveliest pictures imaginable and an object-lesson in the generous use of hardy plants when not confined to the border proper. The great value of this delightful plant is scarcely realised by the average grower whose stock is usually limited to two or three plants, but we it is a first-class and perfectly hardy liable perennial deserving of great tion. I have had individual plants when at their best, 3 feet in height same in diameter, bearing the same form as a large specimen of the Gypsophila paniculata. It may from seeds or increased by divisio roots any time after the flowers are
Sussex.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Watsonia species

IN your issue of June 26th is an interesting note on Watsonias by one signing himself "A Scottish Gardener," in which he says that "W. Ardernei may be identical with W. iridifolia and W. O'Brieni." In reference to the above may I quote from a catalogue of South African bulbous plants that I have received from a firm of nurserymen near Cape Town in which several species of Watsonia are described, viz. :—

W. IRIDIFOLIA.—A very pretty species with characteristic flowers, greenish-ivory colour on opening, changing to cream.

W. ROSEA VAR. ALBA (Arderne's Watsonia). —This is a beautiful white Watsonia introduced into cultivation by the late Mr. H. M. Arderne.

Personally, I offer no opinion on the matter as, up to the present, I have not flowered either iridifolia or rosea.

In Cornwall all the Watsonias I have tried do well and soon form large clumps. One species named coccinea is well worth growing, as it produces in June tall reddish-brown stems furnished with flowers of a striking orange-scarlet colour. The pips are set much closer together than is the case with W. Meriana or W. Ardernei, thereby adding much to its effectiveness whether grown as a specimen or in association with other plants in the herbaceous border. There is another fine species, named W. Galpini, found in the Knysna (Cape Colony) district and described as having "vivid orange-scarlet flowers borne on long graceful spikes in elegant arrangement," the colour being superior to that of the above-mentioned species.

In conclusion, I would like to express the hope that this beautiful and interesting genus will, before long, be taken in hand and thoroughly worked out, especially the nomenclature, which seems to be in a rather confused state at the present time, as the following example taken from "The Journal of the Botanical Society of South Africa," Part XI., 1925, rather bears out: "Watsonia tabularis, the vivid orange-scarlet species of Table Mountain that has been masquerading under the name of W. Meriana for so long." Perhaps some of your correspondents better acquainted with this genus than myself may be able to throw more light on the matter.
W. LEONARD S. LOAT.
Mevagissey, Cornwall.

Some rare Primroses

The article under this heading, issue July 3rd, page 385, was, to me, particularly interesting, as I have had a very good collection of the old double Primroses in two former gardens, and as I always felt very kindly to the wee harbingers of spring I have now in this garden another collection which includes four different colours of Hose-in-Hose Polyanthus, also double Polyanthus Curiosity, Tortoise-shell, Rex Theodore, and Prince Silver Wings. I hope I have th Salmon Primrose, but it has not yet with me. Cloth of Gold, Sulphur, B Pompadour, and De Moulins (m white) all do well with me; also Fren Some time I hope to find out wh quire the others, and meantime a gating a set of the single Prim Jack-in-the-Green, of which I hav seven varieties. I find division aft ing an absolute necessity, well water and in dry weather giving an soaking. Turf mould and leaf-m summer shade from midday sun aids to success. E.

—— I was interested in the rem cerning rare Primroses in your iss 3rd by "A. W.," Honiton, Devon. that many old and charming var now being lost and difficult to procu may be due to a decreasing interes mand, for nurserymen, with mercial instinct, adapt themselve public requirements, and soon allocate space to plants which a asked for. I am inclined to th neglect in increasing by division ha means of eradicating many old and varieties from our cottage gardens.

I have grown the varieties Bo elegans, Bon Accord Beauty, Bon Ac etc., as mentioned by "A. W.," retain a few, although they have what mixed up. I imagine that th ties should not be difficult to procu Aberdeen, as there was at one ti siderable stock in the nursery "A. W." refers, and I am inclined that they may have passed into the local growers.

From this same nursery, fro emanated the double Primroses re there was also introduced a very fi coloured Trollius named Aberdon acquisition, which I can only trace Dutch catalogue. ABER

Blue Hydrangeas

I have read with interest the counts of blueing Hydrangeas. tried iron filings, both in soil and so far my Hydrangeas are com The Hydrangeas one sees in the flo in London are wonderfully blue never seen them so blue in a priv garden. F.
Barmere, Whitchurch, Salop.

Lilium Parryi

This beautiful Californian spec serving of a choice spot in any gar the conditions are at all favourable easy culture, delighting in a shady the soil of which a liberal supply peat, and leaf-mould has been inc The bulbs should be completely s with coarse sand, and bottom moist bulbs to root into is essential. T

elightful perfume and are of a rich lour very lightly spotted with brown. ls are slightly reflexed at their tips, ıg of a thick glossy character, the ıst for a long time in perfect condi- ough July is given as the flowering have them in bloom in this part rld early in June.

W. LEONARD S. LOAT.
ssey, Cornwall.

ıolia hypoleuca flowering in Scotland

) you a photograph of the flowers of my Magnolia hypoleuca. It may : some of your readers in Scotland, informed by the authorities at the ɔtanic Gardens, Edinburgh, that o record there of this plant having ɔefore in Scotland. Quite possibly ave done so in the west without en reported. According to Bean, hypoleuca apparently flowered for me in England in 1905.

ıts, about 3 feet high in 1913, were Smith, Newry. The tallest now is 18 feet, many leaves 10 inches long, ɔwer measures 8 inches across. ɔne tree five buds appeared in June, ɔf them expanded to full size by

ace is in the Cowal district of : and the plants are situated about n Loch Striven. C. W. BERRY.
ɔen, Toward, Argyllshire.

ıcommon plants wanted

ry pleased to see your note, issue page 386, *re* the question as to : can obtain rare plants or new ns which are mentioned from time your excellent paper. This will reat help to readers who cherish ıteresting species. W. L. S. L.
l.

ation of woodlice and slugs

stant Reader" makes me wonder tates on page 387 that after using lerful preparation he has not had trace of one this year. "A Con- ler" must have discovered what ɜner has been waiting for for many ıave tried Slugene and practically ɔil fumigants and find many of ce the quantity and destruction ese pests, but "eradication" is a natter. We have remedies for those that appear on the surface, pests beneath the ground we have ıtrol. If "A Constant Reader" ry it would be interesting to know November, his trenches contained ace of one. W. E. W.

ɔte "Constant Reader's" article on t. Many years ago a plague of ı a Melon-house near Aberdeen head gardener some trepidation as ess of the crop. He was recom- introduce to the house a few a short time the woodlice were t, and still remain so. The frogs, now their descendants, still re- ıme habitat to which they were about 20 years ago. What may their means of sustenance I am record, but still all appear in a l thriving condition.

ABERDONIAN.

ıgle Pæony Fire King

e description Mr. G. P. Baker July 10th, page 402) of his Pæony conclusive that his plant is not Fire is it would, after his lavish dis- ɔread over so many years, have found its way into commerce long ere this, and if put before the Committee of the R.H.S. "in good condition" would have been acknowledged by something more than a postcard. If Mr. Baker will send me a stem with foliage I may not be able to say what it is, but feel sure I will be able to tell him that it is not Fire King. F. GIFFORD.
Montague Nursery, Hornchurch, Essex.

The flowering of Magnolia hypoleuca
This is claimed to be the first time that this species has flowered in Scotland

Saving seed

I was much interested in "Leahurst's" letter on page 403, July 10th issue. His ideas on the subject are sound, and except in very rare cases I, too, deprecate the home-saving of seeds. Of course, there are occasions when it is imperative for us to preserve some special favourite, and this can only be done by carefully saving our own seeds of such. For instance, I have a very beautiful blue Cineraria which seems midway between the large-flowered and stellata types and which I, of course, cannot procure from a seedsman, also a particularly vivid strain of Agrostemma which I have not noticed elsewhere. I also take considerable interest in the Regal Pelargonium, and, having a fine lot of named varieties, save a few seeds yearly and raise some very good varieties, but with these and a few other odds and ends I do not consider it, as "Leahurst" aptly puts it, either economical or profitable to waste time and labour endeavouring to do what properly-trained seedsmen can do much better for me. C. B.

The architect in the garden

Mr. P. Morley Horder is correct in his letter, "The Architect in the Garden" (issue July 10th, page 402), although I would not go quite so far as to suggest "there is no such a thing as a garden architect." True, I have seen gardens designed by ordinary architects, and a hopeless confusion they have been. But, generally, these "garden architects" are nothing more nor less than experienced horticulturists, and, in some cases, well-established nurserymen, and these, if they know their business from hard-come-by knowledge, must make a good job of the task in hand whatever it may be.

No new garden can be effective or pleasing entirely. One always anxiously awaits the full development of the shrubs and hedges and trees. I think the biggest eyesore I have ever seen consists of the cementing of crazy work. What can possess people to lay down crazy and cement all the crevices!—I suppose the total lack of artistic taste.

BRUCE HEWITT.

Kew rock garden

I have read Mr. Dillistone's letter with much interest. He and several other defenders of the Kew rock garden have mentioned the hundreds of plants which must be grown at Kew because it is primarily a botanical garden. Will Mr. Dillistone give the names of some of them? I, too, have been at Kew lately, but did not see anything very remarkable in the rock garden except, perhaps, a fine clump of Orchis foliosa and a finely-coloured cross between O. foliosa and O. maculata. On the other hand, I saw Campanula latifolia growing at the top, and it would be difficult to find a more unsuitable rock garden plant.

I do not profess to grow every Saxifrage, Sedum, and Sempervivum grown at Kew, but, after all, many of them are hybrids, as everyone knows that Saxifrages intermarry in the most indiscriminate manner.

Mr. Dillistone asks if I can make any concrete suggestion for the improvement of the Kew rock garden, and my suggestion is that it should be pulled down and reconstructed, possibly on another site if a suitable one can be found, but if sufficient ground cannot be spared, then let the best be made of the existing site and let the work be done by one or more expert rock layers, of which there are a good many as Chelsea has proved. I should like to see something picturesque on the lines of the Chelsea rock gardens, but

without the grass, which is frankly impossible, and with plenty of water both running and still. The labour could be supplied by Kew and the rocks laid by an expert. This should not cost a great deal, but if more than Kew could afford, then let an application be made to the proper authorities for the money.

The late Prof. Bayley Balfour always seemed to be able to get money for the Edinburgh Botanic Garden, and if I remember rightly was even able to build a large Rhododendron-house and a rock garden under glass during the war. Kew has lately built an expensive addition to the temperate-house for half-hardy Rhododendrons, so, presumably, money *can* be got, and I feel sure that a properly-constructed and well-planted rock garden, one in every way worthy of so great an institution as Kew, would be the most popular part of these wonderful gardens. "X."

Bon Accord Primroses

May I point out that the Bon Accord Primroses inquired for by your contributor, "A. W." (July 3rd, page 385), are offered in the catalogue of Messrs. R. Stormonth and Son, Kirkbride, Cumberland? W. R. J.
Cornwall.

Calceolarias for the greenhouse

In an otherwise excellent article on this subject on page 416, July 10th issue, "L. J. D." makes a serious slip when he advises these plants to be wintered in a greenhouse "with a temperature not *below* 45 degs." Does he not really mean *above* 45 degs? I have had a long experience of this showy subject and have always found that the cooler it could be kept, the better were the results. This, of course, does not mean that the plants are to be subjected to severe frost, but if this is just excluded that is all that is necessary. Not but what the herbaceous Calceolaria will withstand several degrees of frost without being harmed, but there is no need to inflict this on the plants. "L. J. D." advises placing the plants in 6-inch pots "towards September." I hardly think the plants from a July sowing can be fit for this size of pot so soon, and anyway, it is much better to shift from a 3-inch into the 5-inch size of pot, and, as a rule, the plants will thrive well in these until March, when a shift into the 7-inch size will be in order and will produce handsome specimens by flowering time. C. B.

Wanted seed-pods of Cistus purpureus

I have been trying to find out if anyone has ever seen mature seed-pods produced on Cistus purpureus, but so far not successfully, although I have heard of it third-hand. Would it be taking too much space to place this inquiry in your paper? Also I should like to procure fresh seed of Meconopsis quintuplinerva. I would either buy or exchange other species, of which I have several.
Boidier, Headley, Epsom. B. LEACH.

Delphinium Sister Clare

This variety, represented in last week's issue, holds the singular merit, possessed by no other Delphinium so far as I know, of being deliciously fragrant, and should thus be in the gardens of all who love sweet-scented flowers. It is often charged against this beautiful family that they have no scent. Here we have a break which, if worked upon by raisers, should evolve a race of scented Delphiniums, thus giving an additional charm to these noble flowers. This Sister Clare, raised by myself several years ago, is not only fragrant, it is also very early. The flower is refined and handsome, the spike is long and shapely. It makes many side shoots, thus prolonging the flowering time, which is a great consideration where a border display is desired. As a light-coloured Delphinium for the border it has no peer.
F. GIFFORD.

Corokia virgata

The ever-increasing multitude of species and varieties should be met with corresponding discrimination in choosing the best of any genus for decorative gardening. Only in botanical gardens may space be found for plants of inferior beauty. Wherefore, after reading Mr. Stevens's commendation of Corokia Cotoneaster (page 405), I venture to note that C. virgata is a far more
species. Its slender sprays and ere
distinguish it from the contorted t
the other, while its yellow flowers,
profusion and followed by berries
same hue, contrast agreeably with
foliage. Both species are figured
"Botanical Magazine," C. Cotonc
Tab. 8425, C. virgata in Tab. 8466.
Mr. Cheeseman does not describe C
in his excellent "Manual of the
New Zealand," but he mentions
found a form of Corokia which, not
flower, he failed to identify, but wh
is no doubt was the species in quest
Monreith. HERBERT MA

Synthyris reniformis

Some time ago a few appreciati
upon Synthyris reniformis appeared
DENING ILLUSTRATED. It may not b
place to recommend those who wish
or to divide, this very fine rock gard
to take the necessary steps in Jul
division is fairly easy. A rather dee
in the rock garden—with an eastern
if possible—suits S. reniformis perfe
A SCOTTISH GAR

Arenaria montana and other plants in a stone wall

ALPINES

Arenaria montana

WHEN, by the end of May, the
the earlier Aubrietias is goi
Arenaria montana is in full
No plant is better for the top and
dry walling. The illustration show
in this way. There are three plan
main group and a single plant on t
Just below it is the pretty Fern-like
cheilanthifolia, one of the waywar
that comes where it will, and its nea
Corydalis ochroleuca. Beyond it is
ing sheet of Othonnopsis cheirifo
plants placed at the top edge of the
coming down in their own way; th
4 feet high, and in another year
have reached the ground. Beyo
again, is a hanging group of Aubr
then Saponaria ocymoides. The se
ture shows a nearer view of the Aren

—— This capital rock plant is j
cluded by Mr. Cornhill in his able
"Showy Rock Plants," on page 3
one of the best alpines we have,
treated as suggested by your co
should be in every rock garden
penning this note mainly to advise r
make sure that they are getting th
montana. In some nurseries A. m
said to be synonymous with A. gr
and the title of "grandiflora," as a
the true plant, is exceedingly mi
causing the uninitiated to purchase
flowered plant not worthy to be spo
the same breath as the true A. mont
grandiflora must have been so n
ignorance of the existence of A. mor
have the true A. grandiflora in my g
present and there is no comparison
the small flowers of it and the la
beautiful blooms of A. montana. Th
also, is very different, being smaller a
Moss-like. S. A

The Alpine Catchfly

Not many of the Lychnises or C
are suitable for the small rock
Among them L. Lagascæ is, perh
best, and is, admittedly, a troubleso
in most gardens, and the one unde
L. alpina, may well be selected as
tute. It presents no difficulty in

especially in a poor dry soil, which it It is a remarkably neat little sub- full height when in flower being inches. It blooms in May and June. vers in heads are small and of a shade of rose, a good-sized plant in er being very pleasing indeed. There a white variety which is not at all L. alpina can be raised from seeds also be propagated by division. The y be sown from April to July under Division may be effected when the out of bloom and, preferably, in sum- s already stated, a poor dry soil is the its welfare, and it may have a sunny though the writer has found it do artial shade. It looks well in masses vel in the rock garden, in chinks of nd between the crevices of paved

S. ARNOTT.

ampanula W. H. Paine

eat and pretty plant forms spreading is densely covered with blue flowers hite rim at the base of the tube in d July. The stems, which are are much-branched and clothed all bright shining leaves. It is a ant for the lower ledges of rocks in position, as in such a place the shoots some 9 inches or 10 inches and be- sses of bloom. It is quite free in gritty soil in the fissures or chinks where the roots can obtain plenty ire. Being of a slender and wiry is well to work in a top-dressing of estone chippings, loam, and sand plants in early spring. This, be- iding the plants with nourishment, to protect the young growth from hich show a decided liking for las.

H. F. S.

anthus Cæsar's Mantle

ant quickly forms neat tufts from ring numerous flower-stems bear- uantity of deeply-fringed crimson ach 1 inch in diameter. A sunny uits it best. When planted on the hinks or so as to form cushions it ising effect at all times. A lover of it likes a position slightly elevated can be kept fairly dry. A top-dress- t should be given once a year. It rown on an old wall and should be packed into a deep chink with soil s. Here it will do well and even- r masses of bloom.

H. STEVENS.

Alyssum argenteum

suitable for dry parts of the rock riving best in poor gritty soil in endicular chink on the face of a which it can root deeply. The plant height of 1 foot and is covered with ads of bloom. The foliage is grey asts favourably with the flowers. forms neat plants and is well r covering rocky ground of any de- In spite of its free-seeding quali- plant does not transplant nicely, the roots striking deep into the It is advisable therefore to sow seed s intended to flower.

H. STEVENS.

Foam Flower (Tiarella cordifolia)

an admirable plant for shady parts k garden. When a broad patch is ith a multitude of white star-like early summer few things are more It will thrive with a modicum of ven that need only be of the poorest For this reason it is admirably r planting in some low, shady posi-

Arenaria montana: A nearer view of the same group

tion where a plant of spreading habit is required. It is also at home at the base of an old wall or by the margins of borders.

H. STEVENS.

Globularia cordifolia

This is a charming plant for the rock garden, evergreen, and of spreading habit, producing a quantity of blue-coloured heads on stiff stems rising well above the dense foliage. It is valuable for covering large stones, and in favourable positions creeps all over the surface, covering it with the richest verdure. When planted on the level so as to form masses the plants produce a charming and most pleasing effect. Those who wish to grow this plant should give it a sunny position at the top of a rock where the plant can grow in a free way and be assured of perfect drainage. The plant revels in a mixture of gritty loam and small limestone chippings. Being of a wiry nature it is well to work a little top-dressing of small limestone chippings, loam, and sand in and about the plants in autumn. Shoots taken off during the wet season can be planted where intended to flower.

H. STEVENS.

Saponaria ocymoides

For density of growth and profusion of bloom few plants can vie with this, while it has the advantages of being suitable for planting sideways in sunny chinks and thriving in any soil. It delights in an open position on the rock garden with plenty of room to spread. It will grow almost anywhere, but prefers open sandy soil of a good depth on arid declivities with a sunny aspect. It is an excellent plant for the dry wall. The plant is of trailing habit and is a charming plant for growing over rocks. The shoots, falling over the face of a rock, become masses of entrancing bloom. It is easily propagated by cuttings or seed.

H. STEVENS.

CHRYSANTHEMUMS

Watering Chrysanthemums

REGULAR attention to watering is of the utmost importance, and in a dry season, where the collection is large, the work is somewhat laborious. It is necessary to look through the plants three times a day at least, and at each time give water to any that may be dry. The thoughtless way of giving water to every plant will not do even in the case of so gross-growing a subject as the Chrysanthemum. There are two things to avoid—namely, excessive dryness at the roots, and the reverse, for both extremes certainly check a plant, if not throw it entirely out of health. If, therefore, the watering be done in a haphazard way the roots will surely suffer one way or the other. The greatest difficulty in the matter of watering has to be faced by Chrysanthemum lovers who must, through business engagements, leave their plants from morning until evening, and are thus absent at the most critical time.

It is at the mid-day turn when so many are found dry. The scorching sun has done its work on the plants passed as all right in the morning, and if not looked to they will by evening be a mass of drooping leaves. Some partially plunge the pots in Cocoanut-fibre or the like, and this, to some extent, prevents quick evaporation. By far the better plan, however, is to leave some member of the household in temporary charge during hot weather. It is good practice to allow each plant to get on the side of dryness at the roots occasionally. This sweetens the soil, and thus assists healthy development. When possible, I allow the plants to pass the night in the above state.

There are several well-known indications of a plant requiring water—the dry appearance of the soil and flagging leaves, for instance. A sharp rap of the pot will tell by its sending forth a ringing, hollow sound that moisture is needed, and if there be a doubt at any time just lift the pot up. In its comparatively light weight there is a sign that water should be given. Apply enough water at each time to thoroughly moisten the whole ball of earth. How often each plant should be watered cannot be told in writing, as there are so many things to be considered—the state of the weather each day, position of the garden, size of pots, and so on; but those sorts of a strong growth will take up more moisture than varieties of weakly constitution.

It is well to let the water stand some hours in an open vessel to get warmed and softened before use. With a large number of plants to supply it is not always possible to do this, but such practices as watering straight from the mains should be avoided. Yellow leaves will follow chilled roots. Soda, previously dissolved in hot water at the rate of 1 lb. to 100 gallons, is a well-known means of softening hard water. This, too, will be good as a mild stimulant. In all cases Chrysanthemum plants should be filling with roots their large-sized pots, and watering with other than clear water will become a necessity if the best results are to be obtained. One cannot put all the food required to last the plant throughout the season into a small pot, and to keep the same in a good, healthy, vigorous state manures must be added. These are best applied in a liquid state, because we can then have better control over their strength. It is easy to over-feed plants.

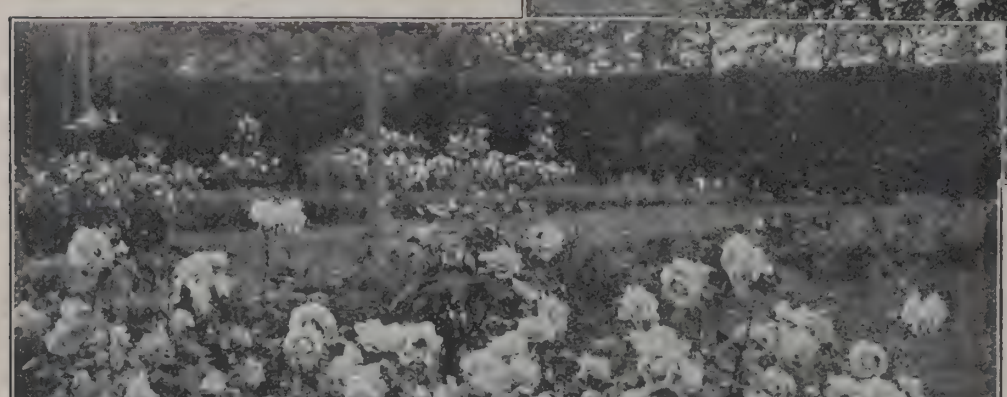
Rose Budding

AT the exhibitions just now the specimens of flowers arranged by the nurserymen are admired, but probably one fact is hardly realised. These handsome examples are cut from what are termed maiden plants. The production of such is carried on each year by budding prepared roots or stocks, the new stems go straight up to flower, then in autumn and winter the plants are sold. Any amateur grower, therefore, may produce the maiden plant provided thought has been previously given to collecting the wild Briar from the hedgerows to make standards, or, indeed, to root cuttings of the same thing for the making of suitable foster-parents for the Rose. In the case of the former the "bud" should be secured to growths or side stems of the current season. In the latter this may be placed near or under the surface of the ground in the main stem.

The months of July and August form a good period for the operation, because the bark or rind is sufficiently developed that it will "run" well; that is to say, will part freely from the wood. This little matter is of the utmost importance, and, fortunately, this season it is assisted by ample moisture in the soil. Trouble comes sometimes in very dry periods.

Apart from the wild Briar, budding may be done in the case of a Rose, say, that does not please, or a better Rose may be budded on it. But it is well to note that the variety used for the purpose should be vigorous; it would be useless to operate on one in itself weakly.

The budder, then, should be provided with a proper knife. A budding-knife has the handle so made that the end is flat. This last is used for raising the bark after the cuts have been made. The bud is the raised lump on the Rose growth at the base of a leaf, and this usually comes in good condition on a branch that has produced a bloom or blooms. Be prepared with such by cutting the branch and then the leaves, or, rather, all except the portion of sprig near the "eye" or bud. Rub away the prickles that may be at the base of the branch to be budded and then make a cut lengthwise an inch or so long at top of the shoot or branch; make this cut lightly so that the bark only has been touched, then make a cross-cut at the end of the first operation. Turn round the knife and with the handle gently turn the rind—just raise it and all is ready for the Rose-bud. The bud is prepared by scooping it from the branch about half-an-inch at back and the same in front of it, the cut being made clean with a sharp blade. With the thumb-nail press out the woody or inner portion of the bud, leaving the bark only, and this work must be done without damage to the latter. Press or slide this under the rind of the wild branch that has been cut and then bind the whole with ordinary raffia or worsted, leaving the bud-eye uncovered. For some weeks there will be nothing to do; afterwards just loosen the tying material; do not remove it, but let it decay as winter comes on. Meantime, perhaps, other wild branches have sprung; these should be cut away as well as a part of the branch that has been budded. The Rose part may start into growth quickly, or, indeed, may remain dormant througho ter, but all is well if this keeps g colour.



Rose Caroline Testout, a well kn variety with silvery pink flowe

As a town and suburban Rose Caroline is unequalled

Top-dressing Christmas R

A surface-dressing of some kin mould is probably the best material- doubtedly beneficial to Christmas Ro more harm than good will be done crowns are covered with it. I have border planted with all the kinds in tion, as I wished to form a correct op their respective merits. Two years ag a surface-dressing put on, and the m did the work covered the crowns thickly. I did not notice at the time work was done, but later on I found my cost. The top-dressing was put in spring before the plants began t and for a time they did very well, summer was very wet, a lot of rain f July and at the beginning of August, there was something wrong. Many leaves drooped when the sun came o Cabbage when it has clubbed, and found that the base of the leaf-stalk cayed. This in some instances sprea heart of the plant, which ultimate pletely rotted away. The greatest as, owing to the fleshy nature of foo might be expected, was maximus, caucasicus sustained no injury—a proo exceptionally enduring character Christmas Rose. This species, for a I hold it to be, keeps its foliage throu winter better than any other membe family. In the case of light soils, to ings are decidedly helpful in aiding th to bear periods of hot weather, and an surfacing of leaf-soil is good for land naturally tenacious and wanting in matter. New roots are every year p from the crowns in autumn, and these ling for a time near the surface are p and nourished by the top-dressing.

T.

vers for the herbaceous border

urprising how many of the old-ed garden flowers have become non to-day. Gardens are apt to be-laden with large numbers of re-oduced Perennial Asters, Phloxes, others without a thought of many n flowers that would be more in ith the present old-world gardens. he many that are seldom met with lowing, all of which are still worth nd of easy culture :—

s (Bear's Breech).—There are rieties, but the most notable is mollis. Although the blooms, white, are not very conspicuous, foliage and bold growth well repay planted in the woodland or at the e border, where the soil is not too l liable to become waterlogged nter. It is easily raised from seed r glass during spring, and may be y division.

us (the Burning Bush).—This old s certainly more often met with old garden plants, possibly on ac-e flowers giving off in the form of ubstance that resembles a flash of rt from this interesting feature the Bush is a handsome border plant. sh flowers are sweetly scented, and riety alba they are white. The w to a height of 2½ feet, are of t, and bloom during June and July, in beauty for several weeks.

s JALAPA (Marvel of Peru).—This quaint old garden plant, bushy in d bearing flowers that vary in n white to deep crimson. Seed sown during spring under glass. seedlings out at the latter part of soil that is heavy it is wise to lift the roots in the same manner as Dahlias.

NTIA VIRGINICA (Virginian Spider-is is a very showy plant for the e border, and will thrive in any soil. It is at home whether in nd or on a dry bank where many ld not survive.

(Loosestrife). — Most of this more suitable for the bog garden of streams, but the following will oil is not too light or sandy. They owy when their willow-like stems with rosy blossoms. L. Salicaria se-pink) and L. superbum will long spikes of deep rose-coloured t will remain in beauty from June er.

AS.—These are fine border plants for many months. They thrive e readily in any soil, but do well best when the soil is not too rich.

s (the Rosin plant).—These are ing plants for the back of the the wild garden. There are eties, all of which are yellow, re-ingle perennial Sunflowers, and m 6 feet to 8 feet in height. They best when planted in groups.

RIA CANADENSIS (Blood-root) is a rf plant bearing in spring large flowers with golden centre.

UM (Jacob's Ladder). — This ore largely grown in gardens that me too wet and soil that is not of ature. There are usually ample round the plants to keep up a nts. P. Richardsoni is the earliest the blooms of a lovely sky-blue golden anthers, height 18 inches.

M BOHEMICUM (Scarlet Comfrey) is old garden plant, bearing from June to August abundance of scarlet flowers on stems 2½ feet high.

LIATRIS PYCNOSTACHYA (Kansas Feather).—This has long spikes of crimson flowers, and blooms during August and September.

EUPHORBIA PILOSA has large heads of yellow, tinted bronzy-red flowers during autumn.

STACHYS LANATA (Lamb's-ear) is an old-fashioned silver-leaved plant with purple flowers in summer. W. E. WRIGHT.

Looking through the door into the garden at Low Hall, Middleton, Ilkley, Yorks

This is a beautiful old hall with a lovely garden. A magnificent view of the famous Ilkley Moors forms the background to this old-world garden

Sweet Peas: A selection

Looking through the rows as they are in nice bloom one cannot find any appreciable number of the novelties on trial that are outstanding either in distinctness of shading or in size. Possibly Leslie Rundle is a gain in the cream shades; anyway, it is about the largest. And I am pleased with 2 LO. This is a fine bit of scarlet colouring. Some of the new ones are scarcely worth a distinct name so little do they differ from those sorts which they are said to surpass. I grow Sweet Peas in about a dozen-and-a-half of what I consider the best. It is the fact that some shades of colour attract more at an exhibition than anywhere else, and thus one is often tempted to add sorts in the hope of ousting the general favourites, so to speak.

The selection includes Charity in crimson and Charming in deep rose. I stick to Constance Hinton as a white and Elegance in light silvery-pink. Liking the bright pinks, I have room for both Hawlmark Pink and Pink Perfection. Hebe, again, is striking in rosy-pink, Mammoth in orange-scarlet, Mascott's Ingman as a good form of an old carmine sort. Mrs. A. Hitchcock and

Picture are two in cream and pink. Mrs. Tom Jones is still on top in the blue shade, as Powerscourt is in lavender, although one has room for that old variety R. F. Felton. The Sultan is about the darkest of all, and Royal Purple is most telling among other colours. Were it not that I do not exhibit, and therefore cannot spare the time for shading from the sun, Tangerine Improved and one or two others of the orange colours would be included. S.

Thalictrum adiantifolium

The Meadow Rues ought to find a place in the garden of every amateur. Some are sought after for the beauty of their blossoms as well as leaves, like T. aquilegiæfolium and T. dipterocarpum, but the one under notice is of particular value for its delicate leaves, and comes in for a deal of admiration. On more than one occasion I have heard people unacquainted with it say on seeing the foliage interspersed in vases of flowers, "What a pity to rob Maidenhairs in that way." All the members of this family are very hardy, and seldom is it that frost kills them. I find that T. adiantifolium does best when it can be given a position partly shaded, as then the fronds last much longer. If in strong sunlight the foliage loses its beautiful green colour soon. Varieties like T. adiantifolium, which is only about 3 feet in height, associate well with a bed of Ferns and Funkias, and in early summer are very pretty. Thalictrums are not over-particular as to soil, but one into which leaf-mould or other vegetable matter has been worked suits them. Those who use a deal of foliage in connection with table decoration, and are sometimes at a loss to know where to turn for the next supply, should grow half-a-dozen plants of T. adiantifolium, and they will seldom be short of graceful foliage in summer. Thalictrums can be increased by root division, which I find is best done in spring. The plants can also be raised from seed. W. F.

FRUIT GARDEN

Pot fruit

THERE is a fascination about growing fruit trees in pots which is claiming the attention of all garden lovers in large numbers every season. Results have been regarded as very satisfactory from the point of view of securing supplies early, and this is not the most important aspect by any means, for when we review the unreliable climate to which this country is, especially of recent years, subjected, it will readily be seen that to bring along fruit under glass must of necessity become even more popular as time goes on.

For the purpose of growing pot fruit a well-constructed house is, of course, indispensable, and its management must be in accordance with the principles outlined further on in this article.

The class of tree must be very carefully chosen, and it may assist readers of GARDENING ILLUSTRATED to give a few which are particularly adaptable to culture under glass.

APPLES.—Allington Pippin, Cox's Orange, James Grieve, and Rival.

PEARS.—Conference, Doyenne du Comice, Louis Bonne of Jersey, and Williams' Bon Chretien.

PLUMS.—Coe's Golden Drop and Transparent Gage.

APRICOTS.—Hemskirk, Moorpark, Royal, and Shipley's.

PEACHES.—Duke of Cornwall, Duke of York, Royal George, and Waterloo.

NECTARINES.—Early Rivers, Lord Napier, and Pine Apple.

CHERRIES.—Black Eagle, Black Heart, Bigarreau, Elton, Early Rivers, and May Duke.

GRAPES.—Black Hamburgh.

FIGS.—Osborn's Prolific and St. John.

There are, of course, others which succeed very well, but the foregoing will provide a fair selection. All with the exception of the Vine should be pyramids.

As a rule, pot fruit is delivered in 8-inch or 10-inch pots, and the question arises, ought these trees to be repotted? Certainly, in nine cases out of ten the trees have the appearance of being much too large for their pots, but for the first season, unless their roots are bursting or likely to burst their pots, they should not be repotted; neither is it desirable to prune to any extent. Once they are used to their surroundings both may be done as required. General treatment of the trees includes very careful watering, dressing, ample ventilation at all times, and (if any at all) gentle forcing at the start. The importance of keeping the trees perfectly clean is paramount, and it is preferable to give them a house to themselves.

POLLINATION is a most important matter and must be carefully considered. To enhance results it will be necessary to have at least two of each of the trees listed, for they are mostly self-sterile, that is to say, as in the case of Cox's Orange Pippin, one tree must be fertilised from another. It is more than probable that, at the period of blossoming, bees will not be plentiful, and hence the usual method of pollination has to be resorted to, and in many cases such a process must be carried out between two trees of the same kind.

Once the fruit has formed, treatment at regular intervals with liquid-manure should be resorted to, and it will be found beneficial, and may be continued until growth has finished. Caution should be exercised, however, for it is important not to overdo the daily dose. It is well known that the heavy manuring of fruit trees, especially weak specimens, only hastens their end.

For pot fruit culture patent manures of a forcing nature cannot be recommended, for it must be remembered that the ground or soil space is exceedingly limited. Thinning the fruit is a matter which one sees repeatedly overdone. Unless the desire is to secure specimen fruits there can be no point in reducing the crop abnormally. Bunches must obviously be reduced, and where two fruits touch, one must be removed, but reckless stripping is to be avoided. BRUCE HEWITT.

Strawberry planting

The earlier Strawberries can be planted in August the better the prospect of a good crop of fruit the following year. The latter can be achieved if runners, well established in pots, are employed, and provided, of course, there is no delay in planting, a very good crop of handsome fruits is the reward. Early planting and the employment of strong, well-rooted plants also have other advantages, inasmuch as they mean the gain of a season, so far as a crop is concerned, while the plants, as a result of their having got a firm grip of the soil, will be liable to pass through a severe winter with impunity.

When runners are layered later, or if such as become rooted to the ground between the rows are used for planting, it is then useless to look for a crop the next year as they have neither the amount of roots nor the time in which to become established before winter sets in. If the requisite area of ground is at liberty, and can be spared, planting under such conditions may take place, but as the plants will not bear in the succee the ground should lie idle, or it can b for raising other crops. On the oth when space is restricted it is better planting until spring, and to plan requisite number of runners in nur on a border. The plants will, treat way, lift with good balls of soil in and commence rooting at once wh in their new quarters. There is un circumstances ample time in which borders or breaks, as the case may pared for their reception, but for i planting this must be undertaken at

As the crop occupies the same s least three, and in many cases fo the soil should be manured and beforehand. It is far easier to a digging in of well-rotted farmyard manure than it is to obtain it at th day; nevertheless, it is necessary material be used, the poorer the greater the quantity, within reaso rich and render it capable of prod best results.

As firmness of soil is essential to being of the Strawberry, the surfa days after having been dug should b with a wooden rake and trodden the lighter the nature of the soil th the amount of treading should it be to. If the soil is dry it is better to where each plant will be set out tha for rain and lose valuable time. T themselves should be well soaked w an hour or so before planting, and the surface is mulched directly af they will not feel the effects of dry nearly so much as when this extra a attention is denied them.

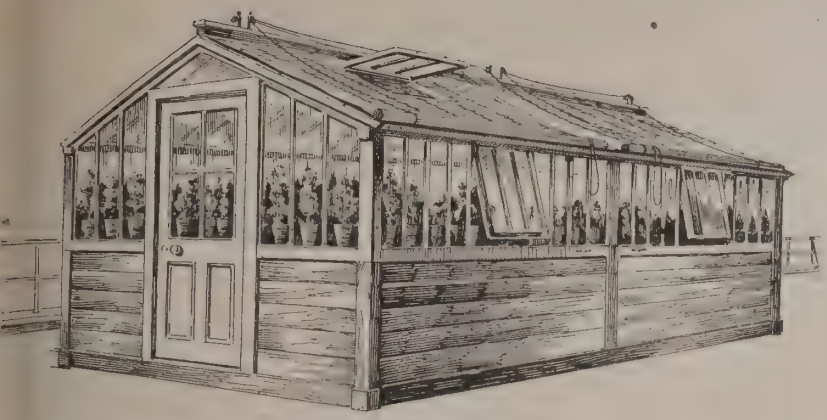
If plants in small pots are used the is best carried out with a trowel. holes are made sufficiently large in to allow of some fine soil being p round the balls, and at such a depth top of the balls can be just covered The soil around the balls can hardly too firm, and as the planting proce plant should receive a liberal supply The rows should stand 2 feet asunde plants 18 inches apart in the rows the ground can be spared another 6 space may be allowed in either insta after-treatment until winter sets in press runners as fast as they are to occasionally hoe the surface in of a mulch being omitted, and to ke under in any case. Watering, if dry sets in, must necessarily have prom tion, but labour in this direction course, be somewhat lessened if th to well mulch the surface is acted u

Vineries

Those who have a good knowled Vines under their care cannot go wrong in the matter of sublateral At times, when the berries are tak final swelling, it may be wise to lea more growth on certain varieties others. Among these is Madresfiel which at times shows a tendency cracking of the berries. Very close of sublaterals may possibly be at lea tributory cause, so that as the bun proach the ripening stage a greater of foliage may be left. Hamburghs do quite well without pipe heat.

Melons

The first crop is practically over further sowing of seeds now w tinue the supply of fruit well on autumn. These late plants will no the quantity of soil as used for the f neither must the plants be allowed more than two fruits apiece.



The greenhouse on the roof of our new offices at Bouverie House, Fleet Street, London, E.C.

the roof of our new offices at Bouverie House we have an original feature in the ı of this well constructed greenhouse. It is stocked with Carnations, Heliotropes, rgoniums, Fuchsias, Cannas, Begonias, pot Roses, and other flowering and foliage nhouse plants. The greenhouse, which is now very gay with flowers, is the source lmiration and surprise to all who have paid a visit to the new home of GARDENING STRATED and of the numerous other publishing activities of Benn Brothers Ltd.

Shading of Greenhouses by Chain Lath Blinds

lmost all horticultural work the chain lath blind has superseded other kind of blind. The design coming from France is now so olished in the British Isles as to need no recommendation and very little description. It is in every way an economical production, being inexpensive in the first place, and, for practical purposes, everlasting wear, repainting being all that is likely to be required for many years. They have proved themselves to be efficient and well suited for all the various classes of horticulture, from rate and highest class Orchid- the humble cold frame.

off the sun is the main feature of but although, in October, cloth le or out must be taken away, it with chain lath blinds. They are -round friends, and are almost as he winter as the summer. Whilst mer it is desired to keep off the n the winter it is necessary to conie heat one can. These blinds, let a cold night, will assist in this a way that will surprise everyone ot had the experience; whilst for ames, pits, and such structures, nvaluable, and will save many a oss of plants when the early sharp r.

nomic advantage of chain lath hat no box or protection is rethe wet does not harm them.

here are only small ventilating n be arranged to cut out a loose he chain lath blind to cover the which will roll up and work with blind, and, by means of a simple , allow the ventilator to open isturbing the main blind. The when it is open, raises the loose the main portion of the blind rest on the roof.

is an item that is very important. The two features that have been difficulties with these blinds in the past are, firstly, the blinds have not been sufficiently rigid, and, secondly, the liability of the links with which the chains are fastened together breaking. This has been overcome by a patented link made from stamping out of solid metal; they thus become unbreakable, and are improved in shape to make the blinds quite rigid.

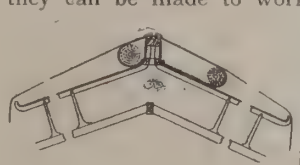
They should be well painted with best white lead and oil, green being the usual colour. There is an occasional demand for these blinds treated with brown preservative, but it must always be kept in mind that the water coming from laths to which wood-preservative has been applied cannot be used for garden purposes.

The question arises as to how wide individual blinds of this type should be. There is much to be said in favour of the system of a number of narrow blinds for each roof, divided according to the number of main rafters. It is necessary to remember that wherever two blinds adjoin and roll up against one another a small dividing board of about 2½ inches by ½ inch thick should be screwed to the main rafter to prevent the two blinds coming in contact with one another when working, or they will get out of order. It is only very rarely that blinds of this type should be made more than about 14 feet to 15 feet wide, but it is usually better to submit a rough set-out of each roof to be covered, showing where the main rafters come, and leave it to the manufacturer to suggest the number of blinds.

Occasionally Orchid growers require these blinds to roll horizontally along the roofs, using no lines or pulleys, and rolled in the simplest way on a stick by hand.

Where additional light is required for some of the more difficult Orchid-houses, such as Cattleya and Lælia houses, a special size ring may be required. This can be supplied, and has been found to be a success.

Another advantage of these blinds is that they can be made to work above the roof, leaving about 9 inches of space, thus giving the desirable air space between the glass and the blind which is often required for successful gardening. When this is wanted, the method adopted is to form a framework of T-iron to run parallel with the roof rafters, being attached to and resting above the rafters by iron supports or standards, thus forming a framework on which the blinds can roll up and down so that perfect freedom is given for the ventilating lights to open.



Training Dahlia growth

I prefer a young plant to start with, and, when planted out, this should give two or more leaders. I should remove the superfluous. The one stem progresses with so much the more vigour. The plant, being naturally branching, there is no trouble on the score of side shoots. The training of single Dahlias, Collarettes, Liliputians, and also such as the Star and small Pæony groups is simplicity itself. The grower has to secure the main stem and side branches to sticks and allow everything to go on in a natural way.

A strong central stake, then later on four others less stout, so that string may be wound round to catch the side branches, should be sufficient. The height of the plant cannot be given with certainty, because in a quite open spot, say, the growth will be so much shorter than that in a shaded or sheltered place. This being so it is not easy to be correct as to length of sticks. In my case I rarely use them more than 5 feet out of the ground; generally a foot lower. Cactus Dahlias as well as the bigger-flowering sorts in the decorative section require a less natural training than the rest. The growth of these should be thinned. In the case of these it is well to start with one stem or leader, and as the season goes on allow the side stems to come at will, and then, when the latter are big enough to handle, remove all but four or five—still leaving the central one to proceed upwards.

At the official tests of new varieties which take place annually at the Wisley Gardens of the Royal Horticultural Society such thinning as indicated is not allowed, and, consequently, the two styles of Dahlias named suffer on account of an inclination to make too much leafage. It may not be of great importance to thin the shoots in early stages as suggested, but it is desirable to do so later to obtain these bigger flowers to perfection. The time is the blossoming period. It will be noticed then that a wealth of new leafy growths springs from just under the bloom buds as they form.

Remove such leafy growths and all is well. Allow them to remain and then we get a plant with superfluous foliage, with what flowers can in any way open too much hidden. Soft tip growths come at a time when it is impossible, or, at least, these rarely have time, to develop blooms before autumn frosts appear; and in a word a pair of the classes which provide the more handsome flowers become in disrepute through neglect of a very simple item. S. W.

The Italian Pimpernel (Anagallis Monelli)

This possesses all the pleasing characteristics of the race, throwing out graceful shoots which bear numbers of striking blue flowers. It is seen to the best advantage in a somewhat raised position so that its flowering shoots can hang freely down. It may be used on the level, in the rock garden, or as a window-box plant of trailing habit. Few plants are better for adorning some dry part of the rock garden. It is a perennial, and I think it will prove hardy in sunny chinks. H. STEVENS.

REMINDERS FOR THE WEEK

Southern and Midland

Garden Peas

It is impossible to guarantee a crop of Peas from a sowing made after this date, as so much depends on the weather during the autumn. Where vacant ground is in good condition a few rows of Little Marvel or some other dwarf early variety may be sown with a chance of securing a late dish or two. The seed should be soaked and the trenches watered before sowing.

Jerusalem Artichokes

On land that has been liberally manured and deeply dug these plants are apt to grow to an unusual height, and to prevent them being blown over and damaged by the wind there is no harm done in reducing the height to 4 feet or 5 feet. After practising this method for some years I am of opinion that the check to the growth leads to an earlier and better crop of roots.

Autumn-sown Onions

Where the plants were put out during early spring and have been grown well they should now be changing colour, which indicates ripening. If the plants are thick in the necks I find it a good plan to partly lift them out of the ground with the fork and leave for a week or two. This hastens ripening as well as reduces thick necks. All those that have bolted should be used straight away.

Transplanting Irises

Although success is sometimes obtained when the early-flowering Flag Irises are transplanted during autumn, there is no better time for taking this work in hand than immediately flowering is over. The plants will then become well established before winter. The Irises enjoy a deep soil that contains a fair supply of leaf-mould and decayed manure, taking care not to bury the rhizomes when planting.

Pinks

Now is the season to increase the various Pinks from pipings. These should be taken from the best and strongest plants, and should be about 3 inches in length. Remove the lower pair of leaves and insert in a firm bed of sandy soil under a handlight or in a cold frame, which should be kept close for several weeks until the formation of roots has occurred, when ventilation may be given freely.

Clematises

It is not generally known how easily these plants may be increased by means of layering done now. A good strong shoot should be brought down to the ground, and, after removing 6 inches of the old soil and replacing this with a sandy compost, the shoot should be slightly slit through a joint and pegged firmly into the compost and kept moist.

Malmaison Carnations

These old favourites seem to be falling out of date, but where plants are still grown, now is the time to layer them. There are various methods, but I find the best is to make up a bed of sandy compost 4 inches deep in a cold frame, lay the pots on their sides, and layer the young shoots in exactly the same way as Border Carnations.

Streptocarpus

These beautiful Cape Cowslips flower so freely that they should be in every amateur's greenhouse. For the benefit of those who have not the necessary heat in early spring to raise the plants I advise them to sow a packet of seed now. The seed germinates readily and the young plants may be kept growing throughout the winter in an ordinary heated greenhouse, when they will bloom freely the following summer.

Canterbury Bells

To obtain good strong plants for setting out in autumn the sowing of seed should not be delayed. This may be done either in boxes, cold frames, or in the open border. In either case sow thinly in fine sandy soil and cover the seed lightly, pricking off the seedlings when large enough to handle. There are no more useful and charming varieties than the Cup-and-Saucer, which can be obtained in various colours.

Bedding out

This should be completed without delay, and where any sweetly-scented plants, such as Lemon-scented Verbena, Oak-leaved Geraniums, and others, are growing in pots, they may be set out near the house for the summer.

Bulbs for Christmas flowering

These should be ordered without delay, as so much depends on early potting to create a good display of blooms for Christmas. The best for this season are Roman Hyacinths, Paper-white Narcissus, Duc Van Thol Tulips, and the glorious little Cynthella Hyacinths. The best results are obtained from bulbs that are stated as "Prepared." These force much more readily than ordinary bulbs.

Tomatoes

Now that the plants are fruiting freely liberal feeding is the main point. This must not, however, be over-done. As the roots appear on the surface soil another light top-dressing should be given. Supplies of liquid-manure may be given twice a week, and are always best applied when the soil is moist. Where a winter crop is anticipated, now is a good time to sow a few seeds, growing the plants in cold frames until September. Sutton's Winter Beauty and Carter's Sunrise are both reliable for a winter crop where the necessary heat is to hand.

W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Kitchen garden

The vegetable crops, which may, through stress of other work at this busy time, have been left to themselves, ought now to be taken in hand. The weeding of Asparagus-beds must be attended to, and if a tank of liquid manure is not available the beds should be dressed with a good chemical fertiliser which must be well watered home. Parsley must now be sown for winter and spring use, although if a line of the current spring sowing be cut over it may yield good pickings in autumn and winter. Nevertheless, it is preferable to make a present sowing, for Parsley is always in request. Horn Carrots, too, if sown now, will give useful roots—not too large—late in the season. A few lines of any good Pea which matures early can still be sown. A further line of Scarlet Runner Beans may give pods at a useful period; and any further sowings of French Beans ought to be of early rather than late varieties. See that the Beet has been sufficiently thinned. Occasionally, after a first thinning, seeds which have lain dormant begin to germinate and the lines are overcrowded. Draw a little soil round the stems of Beans, Peas, and all the Brassicas. If the Celery be planted it ought not to be longer Sow and transplant plenty of Lett sow Radishes according to possible ments. Endive may now be sown. for symptoms of mildew upon Onio may have been planted on very rich take the needful preventive steps delay.

Vegetable Marrows

These, as a rule, being put out manured mounds, will now be maki progress. The growths should be pe in order to prevent accidents fr winds, and a good mulch of some m other, even spent potting soil, will to assist the production of fruits hardly possible to overcrop th healthy Marrows, but the fruits shou and used in quite a young state. Cucumbers, where these succeed, treated on similar lines.

Pinks

Pinks, of whatever kind, are alwa ful asset in the flower garden, and necessary to increase the stock this is at which to do so. Cuttings taken root readily under handlights in the at the base of a wall, or they ma thickly into a cold frame, using lig soil which has been well firmed.

Hardy annuals

If these have not already been thi work ought not to be longer delaye crowding means spindly plants, an plants mean poor flowers. Mar annuals can be transplanted at t among them being Candytuft, Lavateras, Collinsias, Nigella, an If the soil be dry when transplantin a good watering for a night or two put the seedlings on their feet.

Cyclamens

The keynote of success in the case mens is coolness at all times, and t should now be in cold frames. I these frames ought to be rather facing the north. It is advisable at to sprinkle the plants lightly twic Shading the sashes is, perhaps, better but if the foliage shows signs o during sunny weather shading must The pots, of course, should be stan cool bed of ashes or of sand.

Seedling Begonias

Seedling plants of tuberous Bego be handled in different ways. T either be potted off into 4-inch pot dened and run out into a nursery li doors. The latter is perhaps the m factory way when a large number is They take less attention, and it is easy to select the best of the seedl a line outside as it is from pots unc

Ripening fruit

When fruit of any kind begins to supply of water artificially given diminished. At the same time ought not to be permitted to become or the danger of bad flavour will be as if they are deluged with water. Peaches, and in a less degree Gr liable to suffer in flavour if they watered when the ripening period ap Flavour is also likely to be inferio tilation is bad or deficient. On the proach of ripening leave a chink o stantly on the apex of the house, should gradually be increased as reach maturity.

W. McG

Mabie Gardens, Kirkcudbrightshi

Making a Kitchen Garden

swer to a recent inquiry as to the tion of a kitchen garden from grass I will give my experience, having to carry out at different times. In ation of a garden of this kind mis- often made, and if care is not taken may remain comparatively sterile for hree years. It appears a very easy form a good kitchen garden out of ite as a grass field, all that appears being to trench it over, placing the at the bottom of the trench and the t the top. Now this is where the is made, for unless the ground naturally good to a fair depth, this f the soil upside down to the depth hes or 2 feet may end in failure. wanted is a fair depth of fertile soil. turf, as all gardeners know, is a e of food for growing crops, in this respect it is not always a blessing, for often it is the home of g insects, particularly wireworm, often to be found in new gardens rom grass land. This may not be with the grass land that your corre- intends to make his kitchen gar- as wireworm is seldom present in ntities on clay soils.

first place, it must be seen whether requires draining, as it is better that ld be done before the soil is dis- Drainage plays an important part in doing of crops. Land that is ill- rill never produce satisfactory crops, s keeping the soil in a cold state its water-logged condition, it pre- t aëration so necessary for the well- the different subjects that it will be on to produce. It is astonishing ward the crops are on these cold, l soils when compared with those on ed ground. It therefore behoves o may have the formation of a arden to first see to the drainage. ing out of such work need not be o in this article, as the formation of nd decides such work. Drainage, must be well done, so that the water a free course. The work should e now, so that the turf can decay opping takes place in the spring. general cropping is the best for the n at any rate. A crop of Potatoes t the first year, this getting the soil l order for the following season's At any rate, early Potatoes might l, and these could be got off in time f the planting of winter vegetables. things have to be taken into con- , as very often people with limited are under the impression that the e quickly got into condition for the of quite small seeds. Whether r other correctives should be added e of trenching will, of course, de- n circumstances. It is plain that which would tend to improve the f the soil, and also its fertility, will ue effect upon the crops which will f the soil be clay, anything which added to ensure its free working inly be of great benefit, as very h soils are often incapable of pro- e crops they should on account of heavy. As we all know, a free use e is of great advantage; so also are charred soil, garden refuse, and not least, road scrapings. This last al corrective where good material d, as besides containing a fair per- f horse-droppings, it is also com- a fair percentage of gritty matter, ds to keep the soil open. How it should be used will, of course, depend upon the quantity at disposal. When there is plenty of any of the materials mentioned, one and all may be worked into the soil as the work proceeds, leaving a fair dressing of the best, such as decayed manure and refuse for forking into the surface in the spring. If by chance there should be very little, and manure in particular, it had much better be reserved for working into the surface in the spring, so as to add to the surface fertility for the immediate benefit of the crops which may follow. By commencing the work now the decay of the turf will commence, and the surface be opened up to the action of the winter frosts and snow, so that all will be in readiness for spring cropping. What has to be considered at the present time is the keeping of the most fertile soil at the top and the burying of the turf sufficiently deep to cause decay, but yet not too far from the surface, although deep enough to keep it from growing through. What is known by gardeners as bastard trenching is the best to adopt, although it will differ slightly on account of the growing turf. In the ordinary course of bastard trenching the top soil in its entirety is kept on the surface, the bottom being forked over, at the same time adding manure. Any attempt at deep trenching, such as the old system of three spits, turning it upside down, would only result in failure, and very likely, as previously hinted, would make the surface soil sterile for some time to come.

In commencing the work take out a trench 3 feet wide, as there is nothing like having ample room for working, cramped trenches preventing the work from being carried out expeditiously. The turf should be taken off first to the depth of 2 inches, not more, and, of course, it will be the same with each succeeding trench. Now take out a good spit of the top soil, and take this and also the turf from the first trench to where the work will finish. The bottom soil should now be forked over, adding the correctives and also the top turf of the next trench, and on to this place the next spit of soil, which from being immediately under the turf will be in a fertile state. The work should be carried out in this way until the whole is finished. By the following spring this top soil will be well broken down, and into this should be lightly forked the manure and burned refuse. If it could be so managed to crop it with Potatoes it would be all the better for the succeeding crops. Potatoes clean the soil, and the planting, hoeing, moulding up, and so forth get the soil into good working order. If the whole could be turned over again in 12 months time there would be a good depth of pulverised soil. If any constituents, such as lime, should be lacking, these could also be added. A.

A Potato failure

The Potato outlook in this district (Aylesbury) at the present time (June 28th) is not very promising, and unless there is considerable improvement, and that speedily, I fear the crop will be much below average. I have seldom seen such variation in the different quarters. In one, growth may appear healthy and vigorous, and in others very weak and spindly, the sort of growth that gives little promise of good sound tubers below. This pronounced difference in the appearance of the crops is not traceable to any particular kind of seed, but is apparent alike in home-saved and that obtained from Scotland or Ireland; indeed, one of the worst bits in a 6-acre piece of allotment is the outcome of 30s. worth of seed that came from Scotland. In this particular case the vendor suggested that slugs were responsible, but an inspection of tubers shows no sign, and two breadths on either side of this particular lot are healthy and vigorous. I quite admit the advisability of an occasional change of seed and the acquisition of a new variety that might be superior to anything one has in hand, but annual changing is not always satisfactory and seed acquired from a distance not up to the mark of carefully-selected tubers from home-saved stock. Back in the '90's, when growing a fair amount of Potatoes, some 4 tons or 5 tons annually, I saved by far the greater part of my own seed with good results. There were, of course, occasional failures, weak and spindly growth and a very poor crop, but whether this came from home-saved or bought-in tubers I never could quite fathom the real cause, and do not know if it has ever been satisfactorily explained. I have had such failures from seed obtained from a firm whose reputation for first-class seed was of the highest, and they certainly would not have saved from a stock that had the appearance of being affected in any way. This poor indifferent growth and consequent much below average crop mean a serious loss to the cottager and allotment holder. Possibly some GARDENING ILLUSTRATED reader might throw a little light on the cause. I have thought it might be owing to badly-ripened seed, but the tubers taken up in connection with the failure mentioned earlier were quite firm, and to all appearance perfectly sound. E. BURRELL.

Hardwick.

Inspection of Scotch Potato crops

The Board of Agriculture for Scotland is prepared to undertake the inspection of Potato crops during the growing season with a view of the issue of certificates or reports for the assistance of growers and merchants in complying with the requirements of (*a*) the Wart Disease of Potatoes Order, 1923, of the Ministry of Agriculture and Fisheries, which governs the importation of Potatoes into England and Wales; and (*b*) the Seeds Act, 1920, and the regulations issued thereunder.

As a general rule, application should not be made for the inspection of any crop unless it extends to a quarter-acre or more, but special consideration will be given to growers who have small stocks of new or scarce varieties.

No application will be accepted unless accompanied by a remittance for the full amount of the fee payable according to the following scale: (1) When the total area of the crops does not exceed two acres, an inclusive free of 5s.; (2) when the total area of the crops exceeds two acres, at the rate of 2s. per acre or part of an acre.

Certificates will be granted in respect of growing crops of immune varieties which attain a standard of purity of not less than 99.5 per cent. These certificates will be numbered in a series, and the numbers will be prefixed by the letters "T. S." (denoting true stock).

Reports will be issued in respect of other growing crops stating the percentage of purity within the following grades:—Grade "B": Less than 99.5 per cent., but not less than 97 per cent. "Mixed Grade": Less than 97 per cent.

Reports will be issued in respect of growing crops stating that the percentage of purity of non-immune varieties within the following grades:—Grade "A": Not less than 99.5 per cent. Grade "B": Less than 99.5 per cent., but not less than 97 per cent. "Mixed Grade": Less than 97 per cent.

Arrangements have also been made for the inspection for freedom from wart disease of crops growing on farms which are situated within a district that has been scheduled as an "infected area," for the purpose of the

Order governing the importation of Potatoes into England and Wales.

Forms of application for the inspection of crops may be obtained from the Secretary of the Board, York Buildings, Queen Street, Edinburgh. Applications made after June 19 will not be accepted unless accompanied by a double fee, but no guarantee can be given that the inspection will be undertaken in such cases.

The Royal Show at Reading

AT one time the horticultural section of the Royal Show was considered an unimportant part of it, but to-day it is one of the most popular. Among

ROSES, Messrs. Laxton's Bedford Crimson is one which, although not an exhibition variety, will be a favourite because of its colour and sweet perfume. Raisers of Roses cannot be accused of neglecting perfume when such as Messrs. B. R. Cant's Mrs. Beatty (a Maréchal Niel-like yellow H.T.) can be produced. Ruth, Mr. J. H. Pemberton's variety, is among the long-lasting Roses. Dame Edith Helen, of Messrs. Alex. Dickson, is a rose-pink which combines the exhibition and garden Rose qualities. Clarice Goodacre is a sweet and dainty biscuit-white. Angele Pernet is a wonderful shade. Mabel Morse is an improved Golden Emblem; Shot Silk is correctly named. Such old favourites as Margaret Dickson Hamil (straw-yellow), Queen Alexandra, etc., were in the groups of Messrs. Waterer, Sons, and Crisp, Elisha Hicks, and Thos. Robinson, Nottingham.

CARNATIONS.—It is an honour seldom falling to the luck of a nurseryman to have the Queen's permission to name a Carnation after her. Stopping in front of the group of Messrs. Stuart Low and Co., Bush Hill Park, Her Majesty admired a new colour of purple-violet and named it Queen Mary. The border variety Elaine is a very dainty pure white, and was shown by both Mr. Horace Lakeman, Thornton Heath, and Mr. John Crowhurst, of Burgess Hill, Sussex. The Perpetual Shot Silk, unlike the Rose of the same name, is of a darker shade, while Laddie is a giant pink of exhibition size shown by Messrs. C. Engelmann and Allwood Bros.

HERBACEOUS PLANTS. — The Kniphofia Orange Man is a grand variety of the "Red Hot Poker" family, and was included in a host of good things shown by Mr. Maurice Prichard, Christchurch. Some wonderful hybrid Eremuri were sent by Messrs. Artindale and Son from Sheffield.

The bright rose Antirrhinum Beacon of Messrs. R. H. Bath, Wisbech, and the Delphiniums of Messrs. Bakers were gorgeous. Mr. T. Carlile, of Twyford, received an Award of Merit for his Delphinium Lady of Loddon. White flowers in the garden are useful to make contrasts in light and shade; of much use and very beautiful for this purpose is the Campanula Fleur de Niege, shown by Mr. G. Gibson, of Leeming Bar, Yorks.

In a separate cool tent all to themselves Messrs. R. W. Wallace and Co. brought from Tunbridge Wells a collection of hardy flowers and shrubs. That pretty hardy shrub Ceanothus Gloire de Versailles was prominent, and running through the centre of the tent was a stream containing various coloured Water Lilies. Rare shrubs from Messrs. Hillier, and magnificent rock and water gardens from Messrs. Wilson and Agar, Reading, Messrs. Maxwell and Beale, Broadstone, and Messrs. Waterer, Sons, and Crisp, Twyford, included Water Lilies, which looked cool, Iris, and suitable rock plants. Liliums, hardy and greenhouse flowers in bright array, were staged by Messrs. Webb and Co., Stourbridge, and Toogood, Southampton.

Gorgeous, too, were the Delphiniums from Messrs. Blackmore and Langdon, Bath, who received an Award of Merit for Countess Cowley, which has immense compact spikes of double mauve with outer petals of blue. A fine variety of blue Scabious was exhibited by Messrs. I. House and Son. This is a delightful garden plant when protected from slugs by rings of soot.

SWEET PEAS.—Probably the finest exhibit of Sweet Peas ever seen was a magnificent display by Messrs. Sutton which filled the whole width of the 80 feet wide tent and was some 40 feet deep. They also had a wonderful exhibit of flowers and vegetables in the open. What Joy is a happily chosen name for a lemon-tinted novelty shown by Mr. Robert Bolton, who received Awards of Merit for this as well as Colorado (a bright reddish-salmon), and Royal Purple (a deep mauve or light purple). Messrs. J. Stevenson, Wimborne, E. W. King, Coggeshall, A. R. Bide and Sons, Farnham, as well as Messrs. Dobbie and Co., Edinburgh, all had grand lots of Sweet Peas.

FRUIT.—From Studley College, Warwickshire, came some fine quality fruit. The earliest Peach, Duke of York, was finely coloured, as well as Hale's Early and Peregrine varieties which follow on. Swanley Horticultural College was also well represented. Strawberries from Messrs. Laxton, Bedford, were The Duke, Tit Bit, Givon's Late Prolific, fine quality varieties which follow in succession.

The cultivation of fruit trees in pots is both a profitable and interesting hobby, delightful in blossom, good to look at during development, as well as a generous reward when gathered, they are less trouble than many flowers grown by the amateur, for the trees may be stood outside, or, better still, the pots plunged in the soil after the fruit has been gathered. Fine examples of these were well shown by the King's Acre Nurseries, Ltd., from Hereford, and Messrs. Waterer, Sons, and Crisp, from Twyford. Such Apples as Langley Pippin, Devonshire Quarrenden, Lady Sudeley, and Red Coat Grieve looked tempting. Pears, such as William's Bon Chrètien, Margaret Marrilat, and Louise Bonne of Jersey, Peaches, and Nectarines, as well as luscious Figs, were there with many others.

Outside, in the open, the Duke of Wellington had an exhibit of forestry. Included were shrubs useful to plant under trees. These comprised Thujopsis, Common Beech, Abies, Common Silver Fir, Laurel, Box, etc. For hedges there were Cotoneaster Simmonsii, Cratægus Oxyacantha, Lonicera nitida (a very useful subject which lends itself to close clipping), Yews, Common Holly, Sweet Briars, and Hybrid Sweet Briars.

Flowers which can be grown from seed were a feature of Messrs. Jas. Carter and Co. These in great variety were Sweet Peas, Gloxinias, and that effective Statice Candelabram. Campanula persicifolia and Pelargoniums in a dozen sorts were brought by Mr. Godfrey from Exmouth.

Stove plants arranged with the skill of the expert were grouped as no other flowers can be exhibited by Messrs. Cypher and Son, from Cheltenham, and Mr. W. A. Holmes, of Chesterfield. Tall, coloured Dracænas and Crotons, standing above a ground work of Caladiums and dwarfer subjects, with plants in flower of the graceful Bridal Wreath, Anthuriums, Orchids, etc., were fascinating. Nepenthes and other stove plants came from Mr. L. R. Russell. Caladiums, a fine strain of Streptocarpus, Crotons, and blue Hydrangeas were arranged in a fine gro Messrs. John Peed and Son. These shows always afford those interested of Begonias from Messrs. Blackm Langdon, Bath. Among these not cels the salmon Mrs. J. S. Brunton, hanging-basket varieties are a subject greenhouse which are more useful as yet the cultivation of them is i fancy. They are no more difficult than the others.

Messrs. R. A. Lister and Co., hibited their usual comprehensive all-British agricultural and industria (ranging from 2½ to 18 h.p.), crean tors, and electric lighting plants. mention must be made of the recen duced 16 h.p. paraffin engine, the feature of which is the thoroughly method of lubrication that has been It is effected by means of a patented A constant level of oil is maintained box by means of a pump and overfl manner similar to the fuel feed to car From each bearing a pipe is connec separate cup formed in the oil box; t of an eccentric and ratchet a trip bar ted which has adjustable splashers These splashers throw a small quant in the above-mentioned cups, the ar which can be varied as a whole or ally. The exhibit included the new C "County" double-furrow plough, in to Cockshutt self-lift and singl ploughs.

Messrs. Ed. Webb and Sons (Stou Ltd., were awarded the Royal Agr Society's gold medal for an exhibit of The varieties shown included Swe (about 50 varieties), Iris in various Nigella, Gaillardia, Gladioli in Scabious, Pyrethrums, Liliums, Mignonette, Chrysanthemums, Ca Verbena, and Begonias.

New and choice Pelargoniu

One of the most interesting exh Brighton was shown by Mr. W. A. R. of Willingdon, Sussex, who put up a ful collection of Zonal Pelargonium most striking of the new hybrids is Aurore. The flowers are large and orange colour with a sharply define eye. It is very free flowering and fine, bold trusses. Mrs. F. G. Seas lovely variety with flowers of a cool, li shade bordering on mauve. Wi Beauty is another single-flowered h Mr. Clifton's raising. It produces trusses and is a continuous flowering with blossoms of a rosy-salmon tint. of Wales is a single with large flow rich carmine colour flushed with deep L. E. Wharton is a single variety w warm, pink blossoms which mi described as pale salmon. Mr. D. L rich rosy-cerise blossoms. Rev. Dr is a single with magenta flowers. Lambton is a white suffused with pink. Amongst the doubles, Snowd blossoms of the purest white. Ze (enormous salmon trusses), Roscob cerise), Mrs. Rees Mogg (rich deep m bordering on a warm purple), La orange and a continuous bloomer).

Amongst the Ivy-leaved varieties lowing should be noted:—Achievemen deep pink), Sir P. Blakeney (a grand Vicar of Shirley (carmine). Mr. W Clifton was also showing the curious flowered varieties. Of these we not cination (pure scarlet), and Mrs. Salte (a lovely Hydrangea pink). In the la hibit the wonderful orange flow Nouvelle Aurore stood out distinctly f the rest. H. H

Brighton.

e Heaths: Their Propagation and Culture

E in my possession a catalogue was issued by the Messrs. Jackson, gston-on-Thames, about 50 years ontains the names of more than 100 d varieties of Cape Heaths, all of g in cultivation at that time. Some re still grown to a limited extent in ardens. About half-a-dozen are own by market growers, and may good condition in Covent Garden winter and early spring, but the rity is unknown to plant growers and some, I imagine, are extinct have taken refuge in botanic gar- ere shall we find such kinds as obilis, ferruginea major, oblata rmentieriana, Marnocki, Victoria, s? They would not be found in private gardens, and one might a dozen trade establishments and e of them. Some 40 years ago -wooded Heaths were considered a f the plant-grower's art, and the could produce specimen Heaths in 12-inch pots and maintain them in tion could justly lay claim to be a lant-grower. In those days it was ans rare to see specimens of i, the ventricosa forms, Spencer- iana, and others from 4 feet to , broad in proportion, and loaded . Naturally, such big specimens much care in watering, for if one wrong nothing could be done with ursery above mentioned was re- r its fine examples. It was my ering time to wait on the man who . Sometimes, when I had pre- he work, he would, after looking m, order me to come back in one . It was this strict attention to at maintained these big specimens lition that enabled them to carry prizes at the big shows. Some est plants of E. depressa were at rs old. This species has a tree- nd a stronger constitution than the the family, but I doubt if any big of this Heath now exist. It re- vendishii in colour of bloom, and a -flowered specimen is very orna-

the hard-wooded kinds, such as Vebbiana, the tricolor varieties, , etc., are very beautiful and effec- cimen and half-specimen size in 12-inch pots, clothed to the rims of th rich green foliage, and would tion to the majority of present- growers. Specimens of this de- e some time to form, but they are me and labour bestowed on them, ape Heaths are totally distinct er flowering plants grown under that they need during the winter be sheltered from frost; in fact, t affected by several degrees of remember that on one occasion of a house, including the big nens, were frozen, but although s so hard it was impossible to ointed stick into it, the plants signs of injury, some of them prizes the following season. As se Cape Heaths do not give so le and do not cost so much to d condition as ordinary bedding g the winter, for they need very and there are no losses from Mildew is the only thing to be l that is easily warded off by ty of air. I have never known oded kinds to be attacked by this ometimes the soft-wooded kinds, e open air in the growing time, are liable to injury unless dusted with sulphur as soon as it is perceived. E. hyemalis, Willmoreana, and propendens are very liable to be attacked, but caffra nana, gracilis, and persoluta are apparently immune.

About a century ago a nurseryman named Fairbairn was well known to English plant-growers. His nursery was a home for hard-wooded greenhouse plants, especially Cape Heaths. How the various species were introduced I do not know, but they were cultivated at that nursery for some years before they attracted general attention. The hard-wooded propagator at the Messrs. Jackson's nursery was, in his earlier days, plant-grower to the Messrs. Fairbairn, and was the first to attempt the propagation of Cape Heaths from cuttings. It was amusing to hear him describe his early experience. It appeared that his employer was by no means optimistic, and said that he was reminded of "an old hen with one chick," but when the cuttings became lusty young plants he gave the man a free hand. That was how the propagation of Cape Heaths began in this country. When in the course of time Fairbairn Nursery broke up, the culture of these Cape Heaths was taken up seriously by the Messrs. Rollisson, of Tooting, and the Messrs. Jackson, of Kingston-on-Thames. In the Tooting nursery some fine hybrids were raised, but in the matter of culture the Kingston nursery was foremost. There can never have been a finer lot of Cape Heaths than those which were exhibited during the time I was employed there. There could not have been a more skilful propagator than the man above mentioned. It was not only Cape Heaths, but hard-wooded greenhouse plants generally, such as the Hederomas, Acrophyllums, Aphelexis, etc., that he increased apparently with as much facility as if they were ordinary greenhouse plants. It was no vain boast when he said, "Give me the cuttings and I will get you the plants." Although I was not with him I was so placed that I saw his work, and as it happened, and fortunately for me, he was one of those men that had a pleasure in imparting knowledge. For the cuttings 6-inch pots were used. They were filled to two-thirds of their depth with crocks, on which rough material was placed to keep the drainage open. They were then filled with peat to within about 3 inches of the rim, then being topped with an inch of very fine, well-sanded peat, finishing off with silver sand quite up to the rim, this being used quite dry and shaken down so that there could not possibly be any shrinkage. Each pot was then dipped up to the rim in the tank until the water rose through the sand. The pots, being ready, the preparation of the cuttings was taken in hand, each one having the lower portion trimmed with very small scissors was dropped through the hole of an inverted flower-pot placed on a damp cloth. A bell-glass being placed so as to mark a rim on the sand, the cuttings were inserted with mathematical regularity. It was a very neat bit of work and, when completed, had a nice appearance. During the cold months the pots were plunged in a tan bed, infinite care being taken in watering, and every morning each glass was carefully wiped. It was work demanding patience, but the results were uniformly good, and it was very interesting to see these cutting-pots become miniature plantations of tiny thrifty plants. There would not be a dozen failures in as many pots. Naturally, the propagator potted off and cared for these young plants the first season; they were then passed on to the Heath grower and were wintered in a house in which the winter temperature was maintained only just above freezing in very cold weather. Early in March preparations were made for repotting, the very best peat, which in those days was called Wimbledon peat, being used. This was never chopped, but was broken by hand, about an eighth part of Reigate silver sand being added to it. Potting was firmly done, and the young plants were placed in cold frames until June, when they were stood in an open spot for the summer season. In autumn they were nice, compact plants, the pots full of roots and in fine condition for putting into 4½-inch and 6-inch pots, in which the majority of them would be sold. Unremitting attention in the matter of watering is imperative. The greater portion of the soft-wooded kinds, such as hyemalis, propendens, Willmoreana, and persoluta, were flowered in 4½ pots, and those that were not sold were shifted into 6-inch pots. They were cut over just below the flower-spikes, and, as soon as they started into growth, were repotted, placed in cold-frames, kept rather close until they were in full growth, and were then placed in the open air for the remainder of the season. The big specimens were, when needed, repotted after flowering. In a general way they would remain in the same pots two or more years. Repotting these big specimens was a big job. It takes some time and a lot of patience to do one in a way that will ensure perpetual health and vigour. The repotting of a specimen is attended with some danger, for the Heath makes fine hair-like roots which are easily injured, and it was often found necessary to break the pot rather than incur a risk with a plant the value of which might be at least £10. Thomas Baines was a familiar figure in the exhibition tent some 40 years ago and won many prizes. He never took away any of the old drainage when shifting his specimen plants; the removal of a single crock meant a check, and the specimens of hard-wooded greenhouse plants that he exhibited have never been surpassed. The specimen Heaths were repotted, after flowering, as soon as young growths formed, and every particle of the compost had to be rammed so that it was as firm as the old ball.

J. CORNHILL.

Layering Carnations

The method of propagation refers more particularly to the outdoor varieties. This is better done each season. Plants can be grown on another year or two without being layered, but they become leggy and out of hand as well as lose vigour. The first thing to do is to clear all the leaves off a stem to within about 3 inches of its point, and this clearing should be done carefully; that is to say, if rushed the operator is apt to snap off the stem itself. It is well, indeed, for a novice in the work to use small scissors. We then clear the surface of the soil about the main plant of weeds and level. Finely-sifted soil made by mixing loam, leaf-mould, and sand or grit is prepared by taking the whole from where the material has been kept dry. Place a layer of this immediately around the plant which is to be layered. Have to hand a supply of pins, which may be purchased, or indeed made from wire about the size of hair-pins. These may be made, again, from the twiggy bits of a worn-out Birch-broom, or, once more, from the branches of the common Bracken. The next thing is to make a cut with a sharp knife lengthwise about an inch in length half-way through the growth just away from where the remaining leaves start. Give a very slight twist so that the wound opens, and peg to the soil. Place one more layer of the sifted soil over the top and the work is finished. The points of the growths will in a day or two be drawn up straight by the light, and then all one can do for a time is to see to it that there is no suffering from want of moisture. In showery weather all is

satisfactory. Failing such, however, we must provide a daily sprinkle, not to moisten the roots, but to keep the earth about the layer from getting dry. If done in July roots should form and the young plants be ready to sever from the old by September. All should be ready not later than end of October, then planted in their permanent quarters for next year's flowering, or, as an alternative, placed singly in pots and kept through the winter under glass. Against successful Carnation growing is over-moist soil in winter. The latter plan, therefore, would be the wiser in such instances. H. S.

The cultivation of Hydrangeas

By H. J. Jones, V.M.H.

Hydrangeas, owing to their great beauty, ease of culture, and wonderful lasting qualities, should be grown by all. I am frequently asked if Hydrangeas are difficult to grow. No! they are not, and if instructions given below are followed, successful results will easily be obtained. As its name denotes, it is a water-loving plant, and when in full growth this should be remembered and the plants have copious supplies. The plants will do splendidly out-of-doors in full sunlight, but grown under glass they must be shaded from very bright sunlight or the flowers will burn and not last so long as they should do.

One of the chief points in growing Hydrangeas is to give them the right sort of soil; this should consist of two parts of light peat, two parts leaf-soil, one part of loam, and a good sprinkling of sand. They should be potted only moderately firm and have plenty of drainage. They should also be watered carefully when first potted, but as soon as they are well established they must be watered freely. Until the flower-buds appear water will be sufficient, but as soon as the buds present themselves the plants should have liberal treatment. The plants should not be fed when dry, but about an hour after they have been watered. As soon as the flowers begin to show colour, feeding should be gradually decreased, until it ceases altogether.

When the plants have finished flowering cut them back slightly, decrease the water until they are nicely breaking into new growth, then re-pot in soil as before. When growing freely stand out-of-doors until autumn, then return to cold house that is kept free from frost.

Hydrangeas are quite hardy, and when not wanted to grow on for greenhouse decoration they can be planted in the open ground and treated exactly the same as above note, with regard to cutting back, but it is essential that a fair amount of peat and leaf-mould should be incorporated into the soil where they are planted. In very severe weather it is well to wrap a sack or mat round the plants so that the young wood is not frozen hard, in which case the flower-buds are liable to be spoilt.

Blue Hydrangeas.—No Hydrangeas are blue naturally, but by treatment. Those who wish to turn their flowers blue should treat them as follows:—Add to each bushel of soil 1½ lbs. of blueing powder, mix well and pot as before directed. To intensify the blue, as soon as the plants are well rooted and growing freely, water once a week with ¾ oz. of the blueing powder to each gallon of water. The powder should be dissolved in hot water. The plants that are being blued should only be fed with manure once a week, and not at the same time as when being watered for blueing.

All varieties that have been treated for blue should, the first and third week in August, have a small teaspoonful of the blueing powder sprinkled round each plant and well watered in, this intensifies the blue colour when they flower the next season.

I would point out that watering the plants with blueing powder just as they are coming into flower will have little or no effect unless the plants have been previously treated as in above notes.

Abutilons

It must be something like 30 years since I saw a batch of Abutilons in bloom in a greenhouse in winter. As winter-flowering plants Abutilons are seldom grown to-day to any extent, and even as summer tenants of the greenhouse they are not met with very often. This seems a pity. They are really charming and just as easily grown as a Pelargonium or Fuchsia, yet for some reason difficult to understand they are not popular. Those who are in the habit of attending local flower shows will bear me out when I say that it is the exception to meet with Abutilons. They can be raised from seed sown in spring or from cuttings of partly-ripened wood in early autumn. Plants raised from seed will, however, make nice flowering specimens suitable for window decoration in a year's time. There is no di having Abutilons in bloom in a wa house in winter. By warm I do one in which very much heat is k wherever Primulas, Cyclamens, similar subjects are grown, there will thrive. Obviously flower-bud removed in summer and wood-ri couraged by the plants being st doors in the sun, much in the sa one prepares Azaleas and Chrysa

Primulas in frames—the ac of coolness

The term "cold frame" is oft nomer during July and August, as ture becomes very hot. It is not matter, however, so to arrange frame that for a few hours every be where the sun's heat is not felt, be the means of bringing plants on and obviate much watering an Now, whilst Primulas are in fra should be taken that they are crowded. Mu

Answers to Queries

Questions—*Queries and answers are inserted in* Gardening Illustrated *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* Editor of Gardening Illustrated, *Bouverie House Fleet Street, London, E.C. 4. Letters on business should be sent to the* Publisher. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* Gardening Illustrated *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish thei be named should send fair examples o stem, leaf, flower, or fruit. (Snippet and points of shoots are useless.) Not four plants should be sent in any one same correspondent. Where more tha is sent they should be numbered. Of cones should always be sent.*

Naming fruit—*Several specimens stages of colour and size of the same k assist in its determination. We ha from several correspondents single s fruits for naming, these in many cas ripe and otherwise poor. We underta not more than four varieties at a tim*

GREENHOUSE

Growing Myosotidium nobile

Would someone kindly give particulars of culture of above-mentioned plant in Aberdeenshire for benefit of one who has failed with it. Fife.

[This plant is easily grown into huge specimens, but the following method is essential:—Sow seed when ripe; grow on until the plants are large enough for 10-inch pots, which means they must be 18 months or two years old for pots as big as 10-inch or even 12-inch. The best soil is very fibrous loam three parts, leaf-soil one part from leaves not older than two years or three years, and one part rotten horse manure. To one barrow-load of compost add a 5-inch pot full of coarse silver sand. Plants should be kept clean of green-fly and always shaded from the rays of the sun, say from 11.30 to 5.30 new time from May to August, and syringed with pure water once or twice a day, never allowing them to be dry. Plants must be protected from frost in winter. A gentle heat of 40 degs. to 45 degs. through cold weather helps one-year-old plants to develop by the spring into such plants as will make specimens ready for 10-inch pots in February to flower in April.—J. D., *Surrey*.]

FRUIT

Figs diseased

(H. L. W.).—The Figs you send us are affected with a fungoid disease known as the Fig grey mould (Botrytis cinerea). We regret being unable to tell you the cause, although we have been acquainted with the disease for many years past, and invariably found it to attack fruits to a greater extent on trellis-trained trees, particularly those on than those grown in pots. Our tr when the disease was detected, suspend syringing and to mainta atmosphere in the house. This effect of mitigating the attack an the loss. Strange to say, the s was never attacked. To prevent from spreading, all infected fruits removed and burnt. After t pruning dress the trees with Gish pound. Next season regulate an no more young growths than are quired, so that light and air ca freely amongst the leaves and Should the fungus unfortunately and if the fruits have not begun to the outer surface of the skin is you may try the effect of sprayi solution of liver of sulphur, ½ oz. t of water. If the skins are soft an there is, we fear, no remedy, an thing is to adopt the treatment above.

Loganberry failing

(Anon).—The Loganberry has failed to set fruit from the sa as has rendered the Raspberry cr instances an almost total failur succession of cold winds alterne drenching rain during the floweri Near where this is being written tity of Raspberries which are almo of fruit from this cause alone.

Almond leaves blistered

(Geavin).—Your Almond trees h a prey to blister, the cause of wh generally-accepted one of cold ch

s more prevalent in some seasons ers, and the more ungenial and cold g the worse is the attack. Trees pro- ith blinds never seem to suffer so those which are left unprotected. ld strongly advise you to efficiently our trees during the spring if the is cold and wet.

litting in Peaches

sham).—We think the cause of the stones is due to improper fertilisa- e fruits would in these circum- swell until the crucial stage was or, in other words, the stoning hen the substance which encloses l, and called the "stone," becomes l of full size if all conditions are ut if the kernel is not quite perfect gement of the stone is arrested when t half or three parts formed, it splits l the fruit then drops. If you did ise the blooms by hand when they y open this would account for the The setting of Peach flowers under uld never be left to chance, but be onveying the pollen from one flower r by the aid of either a camel-hair a rabbit's tail. If there are large l flowered varieties growing in the se fertilise the flowers on the last- st, as these are more productive of n those of the former description, re certain set of fruit is thus en- ther causes of stone-splitting are an cy or total absence of lime in the ich the border consists. Lime is so for all stone fruits that it always should do, one of the constituents mpost when a new border is being d, and is usually supplied in the ld plaster or mortar rubbish. We ave been applying lime, which to a tent will help to make good the *i.e.*, if the addition of calcareous s neglected at the time the border d—but it will not be so effective as a fair proportion of the materials mentioned when mixed intimately soil. If your border has been con- ithout either old plaster or mortar e advise you to lift the tree care- before the time it will naturally hed its leaves, and lay it in by the he garden. Then have the border ted. If the lifting and replanting rly done, and the adding of the amed to the border is done with ition, the tree will hardly feel the the lifting. Over-luxuriance will e the stones of Peaches to split. he borders to become dry and then a heavy soaking of water will also ne-splitting, but we think the first- the cause of trouble in your case, e suspect that your border is de- ime.

VEGETABLES

t on Tomatoes

—Your Tomatoes have been at- a fungoid pest known as "black sed by moisture settling and hang- undersides of the fruit. Like all germinates very fast in moisture, washed to the base of the fruits re and soon increase. The house our Tomatoes are growing should entilated during the night. Water given sparingly and plenty of air luring the day. Pick off and at oy all affected fruits. The best is is made of 10 ozs. of sulphide of or liver of sulphur dissolved in 2 oiling water, adding 2 gallons of syringing the plants with this.

Fungus on Celery-leaves

(W. H. E.).—Your Celery-leaves are attacked by a fungus—the Celery-leaf-spot (Septoria petroselini var. apii). Pick off and burn the affected leaves, and spray the others with Bordeaux mixture or an ammoniacal solution of carbonate of copper. Dissolve 1 oz. of carbonate of copper and 5 ozs. of ammonia in a quart of hot water, then add 16 gallons of water. If next year you find any traces of the fungus spray twice lightly with Bordeaux mixture. If all the leaves are like those you send us we should advise you to dig up all the plants and put them on the fire. Dress the ground where the Celery has been grown with lime and make your Celery-bed next year in a different part of the garden.

SHORT REPLY

L. Allegro.—We will endeavour to reply to your letter and soil sample next week.

NAMES OF PLANTS

Mr. H. Davies.—Spiræa Douglasi.

L. S., Dublin.—1, We regret being unable to name the Pansies; 2, one of the several varieties of Veronica speciosa.

E. C.—1, Cotoneaster moupinensis; 2, C. Henryana; 3, Neillia sinensis.

A. M. S.—1, Sidalcea, probably variety Listeri if soft blush-pink in flower, if pure white Sidalcea candida; it is impossible to be certain from your specimen, which arrived much withered; 2, Œnothera riparia, a very pretty Evening Primrose.

Terry Lee.—1, Epilobium Hectori; 2, grown respectively in sun and shade or in dry and in moist positions; 3, Echium vulgare; 4, Armeria latifolia, syns. A. plantaginea, A. cephalotes, A. formosa, and also A. pseudo-armeria; 5, a garden form, possibly Armeria Bee's Ruby.

F. H. C.—1, Rose Prince Camille de Rohan; 2, Aconitum officinale (Monkshood).

F. Bean, Durham.—Your plant is Tolmia Menziesii, a plant allied to Saxifraga and Heuchera and standing about midway between the two botanically. The flowers are brownish and unattractive, but the plant is interesting through its curious habit of growing young plants from the leaf-blade and from the nodes of the flower-stems, which root when weighed down to touch the ground and so increase the plant. Your specimen is produced from a flower-stem, but probably something injured the tip so that no flowers were produced this time.

H. W.—Cephalaria tatarica (syn. Scabiosa alpina).

F. Mackintosh.—Roses: 1, Wedding Bells; 2, Edgar Andrieux; 3, Diabolo; 4, Coronation. When sending Roses for name it is always advisable to send good specimens packed in Moss.

L. C. Halstead.—Rose Paul Transon.

Miss Roche.—Venidium calendulaceum.

T. L.—1, Berberis sp.; 2, Spiræa dubia; 3, Masterwort (Astrantia major); 4, Potentilla of no value.

National Carnation and Picotee Society

An exhibition of Border Carnations and Picotees will be held at the Carpenters' Hall, Throgmorton Avenue, London Wall, E.C. 2 (by kind permission of the Worshipful Company of Carpenters), on Wednesday, July 21st, from 12 noon till 6 p.m. The Lady Mayoress has kindly consented to open the exhibition. Tickets of admission, 1s. each, may be obtained from the Secretary, Mr. E. G. Lowe, 65, Exeter Road, Cricklewood, N.W. 2, or at the Hall on the day of the show. On Tuesday, July 13th, 1926, an exhibition was staged by the Society in conjunction with the R.H.S. meeting at Vincent Square, S.W.

National Pæony Show, Boskoop, Holland

The Dutch Society of Pæony Growers and Exporters took the initiative for holding this show on June 15th-19th last. In the month of June there are not many plants flowering, and we hardly know at that time of the year any plant in bloom which decorates our gardens in large masses. That many old varieties of the Pæony have been superseded by new and also really better varieties was shown by the many exhibits. The people of Boskoop have the knack of arranging shows; but to arrange a show of cut flowers only is quite another thing. It was a good idea of Mr. P. den Ouden, Chairman of the Committee, to call in three of the leading florists from Holland, and also the well-known firm of Brouwer for their large Dutch garden ornaments and vases. These huge vases were filled with hundreds of enormous flowers of the best varieties as Reine hortense, Mons. Jules Elie, and Festiva maxima. The show was further decorated with large baskets with beautiful flowers. Many novelties were also shown and were very promising for the future.

For 10 of the best varieties of English origin the prize was awarded to the firm of H. den Ouden and Son, Boskoop, for the following sorts:—Alsace (rosy-carmine), Alice Balfour (flesh light pink), Baroness Schroeder (flesh with shading to milk-white), Boy Kelway (dark rose), Duchess of Albany (deep pink, scented), James Kelway (rose-white), Kelway's Circe (lovely peach-rose), Kelway's Glorious (cream-white), Kelway's Peace (rich cream-white), and Kelway's Rosemary (delicate pink).

The following are the best at present as regards flowering, form, growth, and colour:—

EARLY.—*White:* Duchess de Nemours, Festiva maxima, James Kelway, Mme. de Verneville. *Light Pink:* Eugenie Verdier, Mme. Calot, Noemie Demay. *Dark Pink:* Duc de Cazes, Edulis superba, Mons. Jules Elie. *Red:* Adolphe Rousseau, Mons. Martin Cahuzac.

MID-SEASON.—*White:* Albatre, Baroness Schroeder, Boule de Neige, Mme. Emile Lemoine, Mme. Jules Dessert. *Light Pink:* Asa Gray, Germaine Bigot, Jeanne d'Arc, La Perle, Mlle. Leonie Calot, President Taft, Reine hortense. *Dark Pink:* Czarine, Marie Crousse, Pompanette, Triomphe de l'Exposition de Lille. *Red:* Atrosanguineum, Edouard Andre, Felix Crousse, Karl Rosenfield, l'Eclantine, Rubra triumphans.

LATE.—*White:* Duchess of Wellington, Couronne d'Or, l'Indispensable, Marie Lemoine. *Light Pink:* Albert Crousse, Canari, Mme. de Galhan, Mme. Lemoine, Marguerite Gerard, Souv. de l'Exp. de Universale. *Dark Pink:* Auguste Villaume, Claire Dubois, Livingstone, Sarah Bernhardt (Lemoine), Solange. *Red:* Berlioz, Louis van Houtte, Mons. Krelage.

What a pity that the magnificent single-flowering Pæonies are unknown on the Continent. We noted as the best varieties:—Camille (clear purple-red), Cornelie (white), Dai-jo-Kuham (rose-magenta), Eva (deep rose), Fusyama (soft flesh to white), Gertrude (lively rose), Mistral (bright carmine-pink), Queen of May (clear violet-rose), and The Moor (purple-garnet).

The show was a real success; all classes of early, mid-season, and late-flowering Pæonies were shown. This was possible through the early flowering having been retarded by placing the flowers before they open in a cellar at a temperature of about 40 degs. Some days before the buds are cut each bud is placed in a small paper bag and the mouth of this bag is closed with a rubber band.

A Successful Show at Brighton

THE Brighton, Hove, and Sussex Horticultural Society continues to make great progress, and the summer show held in the Dome and Corn Exchange on July 7th and 8th was the most successful in its history.

Roses

The Roses were exceptionally good, and we have never known Mr. George Prince, of Oxford, to show finer blooms. He was first in Class 1 for a large group of Roses, in which he had magnificent pillars of the good Roses Mrs. H. Stevens, Johanna Bridge, and Mme. Butterfly, but we thought that the pillar of American Pillar too heavy for this group; moreover, the colour of this popular Rose is harsh and does not harmonise with other Roses.

Mr. Prince was first in Classes 3, 4, and 5 for show blooms in boxes, and among his best blooms were Mr. G. Marriot, Mabel Morse, Col. Fitzgerald, Rev. Page Roberts, John Russell, and A. H. Gray.

Mr. Ernest Hicks, Wallingford, Berks, was first for a table of Roses and a good second in many other classes, and his box of Lady Inchiquin, all of even colour and good form, was the centre of admiration.

A very fine group of Roses was staged by Messrs. D. Prior and Sons, Colchester, and the pick of the varieties were Betty Uprichard, Lady Inchiquin, Golden Emblem, Mrs. Henry Morse, Snow Queen, Lord Charlemont, Ophelia, and Shot Silk.

Sweet Peas

There was a grand array of Sweet Peas in competition, and Mrs. E. R. Workman, Gothic Lodge, Hayling Island (gardener, Mr. W. B. Hodges), gained the "Sussex Daily News" Challenge Cup for the third time in succession.

Mr. A. O. Cosham, gardener to Grand Hotel Co., Eastbourne, won the class for 12 vases of Sweet Peas, his best being Britannia, Rosy Morn, Blue Bird, and Advance. The first prize for six vases of Sweet Peas was won by Mr. L. M. Wilby, gardener to the Beach Hotel, Littlehampton. His vases of Royal Scot and Elegance were worthy of special mention.

One of the most successful exhibitors of Sweet Peas was Mr. J. Dubber, Uckfield, who carried off many prizes in the amateur classes. His best vases were Tom Sykes, Constance Hinton, Mr. T. Jones, Sultan, W. J. Unwin, Wembley, and Grenadier.

Dahlias, Carnations, etc.

Messrs. J. Cheal and Sons, Ltd., Crawley, were well represented by a group of early Dahlias, also by an extensive rock garden in the Dome and by collections of herbaceous plants and hardy shrubs for which this firm has a wide reputation.

Messrs. Allwood Bros. were showing Carnations in grand form, and we were much attracted by two new fancy varieties, Cottage Maid and Butterfly, but the most outstanding feature of this group was unquestionably the grand display of the 1926 novelty Shot Silk, flaked in brick-red and with good perfume. This variety, which has gained many honours, including the Award of Merit from the Royal Horticultural Society, is illustrated on this page.

The new Carnation Shot Silk, which was seen in quantity at the Brighton Show

Special praise is due to Messrs. Balchin and Son, of Brighton, for their representation of an old English garden—a very pleasing Box-edged formal garden with fountain and sundial, and a stone path leading to the arched doorway of an old house.

On page 428 appears a special note on the collection of Zonal Pelargoniums shown by Mr. W. A. Clifton, of Willingdon, Sussex.

Other features of this show were Gladioli shown by Messrs. Toogood and Sons, Hydrangeas and Silver Ferns shown by A. Pratt, Brighton, St. Brigid Anemones from Messrs. Reamsbottom and Co., Orchids from Messrs. Sutton Bros., Hassocks, Sussex, and Delphiniums and Gladioli from Messrs. Lowe and Gibson, Crawley Down. H. C.

Reading and District Gard Mutual

DELPHINIUMS.—This race of plants sidered to be the finest for the deco herbaceous borders during the mo June and July, and this was fully b by the opinion of about 70 member Association, including the leading g of the district, who visited Mr. Carlile's Loddon Nurseries, Twyf Wednesday evening, June 29th, for to be seen a magnificent array of ov plants in 300 varieties. Delphini Mr. Carlile's speciality and are grow the best conditions if the size of the a criterion. Among the varieties w ceived special attention were Evel Mrs. Thomas Carlile, Blue Boy, Smith, Betty, Jean Taylor, Star of L and Elsa. Another family of plant received attention was the Geums; a lovely tangerine-scarlet, and Mr. shaw, a double bright orange, bei acquisitions. Lupins are also grow large scale, the collection consisting plants, but, unfortunately for the visi flowers were nearly over. In a Sw competition held on the same eveni splendid blooms were staged, and th awards were as follows:—

Class 1 (open), three vases, three varieties.—First, Mr. A. W. Gow Gardens, Calcot Grange; second, M Dow, The Gardens, Calcot Park; t W. Turnham, The Gardens, Gre Henley-on-Thames.

Class 2 (open), one vase, mixed c First, Mr. H. J. Goodchild, The Queen Anne's School, Caversham.

Class 3 (single-handed gardene vase, mixed colours.—First, Mr. A. bury, The Gardens, Rust Hall, second, Mr. F. Haines, The Garden Hanger.

Class 4 (amateurs), one vase colours.—First, Mr. H. J. Riche hurst; second, Mr. R. G. Taylor, third, Mr. R. Buller, Reading.

Mr. A. E. Beaumont, The Garder House, Earley, showed a basket of fruits of Lloyd George Raspberry. close of the ramble the visito hospitably entertained by Mr. C whom a most hearty and sincere thanks was tendered.

Windsor Rose Show

This was held on Saturday, July the slopes of Windsor Castle by p of the King. There was a wond play of Roses and Sweet Peas, interest being centred in the compe the handsome cup presented by the which was won for the third consecu by Messrs. F. Cant and Co., of the I Nurseries, Colchester. The import Colchester as a Rose-growing ce well maintained, seeing that the bu prizes went to growers in this distr Turnbull won the Windsor Challe In the Sweet Pea classes the Challenge Cup for Sweet Peas, which has gone to Sir R. Baker on f sions, but who this year did not was won by Dr. Leggett, of H The silver medal for the best vase Peas in the show was won by Miss Sunninghill. Much interest wa coming in the table decorations, th for the fourth time being Mrs. F. of Yiewsley, who became possess Lady Dyson Challenge Cup. For Rose in the show the N.R. Society was awarded to Messrs. F. Cant an a perfect bloom, both in colour and George Dickson.

GARDENING ILLUSTRATED

72—Vol. XLVIII. JULY 24, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

us on ... 446
illa festa-
eed, rais-
nmon ... 446
COOL
OUSE ... 437
s for the
... ... 434
salignus 435
nd Pinks 446
mer ... 436
Chrysanthemum leaves attacked ... 446
Erioganum umbellatum 435
Flowers, the effect of drought on autumn 434
Fruit trees for north wall 446
Fuchsia, more about the 435
Galanthus Ikariae ... 434
Garden, woodland, full summer in a 433
Hydrangeas, Blue ... 435
IRISES, A FEW ... 439
IRISES, BEARDED 441
Irises, planting 443
Irises, Bearded, some of the best 442
IRIS GARDEN, PLANTING AN ... 438
Lilies from seed 446
Madame Kooi Strawberry 434
Nepeta Mussini, increasing 446
Pæonia tenuifolia ... 434
Peaches, early 436
Peaches in pots 436
Pimpernel, the Italian (Anagallis Monelli) 434
Pinks, about 446
Plants for shady border 446
Potato failure, a ... 434
Primroses, double, the Bon Accord 435
Rose Homere, Tea ... 445
Rose leaves, black-spot on 446
Rose season, the Scottish 445
Roses in a Scottish garden 445
Stephanotis floribunda 443
Syringa, pink Spiræa, and Snowberry, pruning 446
Tomatoes in winter ... 436
Tomato notes 436
Tricuspidaria lanceolata 434
Watsonia species ... 435
Woodlice and slugs, the eradication of ... 435

Full Summer in a Woodland Garden

t is one shrub in particular that marks with unfailing accuracy ssing of the solstice, and that is ried Elder whose tightly-packed scarlet fruits flame with such a ch of autumn even before the end One welcomes rather than resents n of this early harvester while yet as scarce attained his noon," for n to be accompanied by the large uits of Cotoneaster præcox, the ds hiding among the maze of orokea Cotoneaster, the sapphire uits of Gaultheria tricophylla, ly concealed beneath the heathy brilliant scarlet clubs of our wild ch are by no means the least f the woodland's summer fruit ever to be overlooked—especially ckbirds—the luscious, grape-blue Berberis Darwinii.

se have already fulfilled their sea- there are subjects not a few nly now coming into their best.

Oranges one always ith full summer, and if ce of some of them, Philadelphus coronarius, o heavy when the tem- 75 degs. in the shade, species and varieties of genus undoubtedly im- pression of coolness by flowers and foliage of een. Especially does this h excellent kinds as P. Virginal, and P. Voie of the best. Another e blossoms always seem se of refreshment to the e dog days is Plagian- Here the downy-leaved olia, of this beautiful er occupies an open spot of the stream, and the s, with their translucent, hanging in clusters in the pale-green, heart- s, remind one of the ms of April.

Langleyensis is an ad- ct for a sunny spot in garden. It is among ring shrubs what Ber- vlla is among those of has all the vigour of great arching, slender h rise 8 ft. or more to ith the utmost elegance, wreathed from base to mes of blossom in a rmine. E. Langleyensis is, moreover, a good deal hardier than most of the better kinds. Last winter, which killed-off some specimens of E. macrantha, left this fine hybrid untouched. E. exoniensis is another hybrid of this genus which has merit enough to justify its claim to a fuller recognition than it usually enjoys. It is very hardy, the deep glossy-green and ample foliage is attractive at all seasons, and affords a telling background for the pretty sprays of pink and white blossoms which are yielded in generous profusion from June to November.

Though most of the blooms are over, the late-flowering forms of Cytisus scoparius bring to July that splendour of gold and wealth of perfume with which the earlier members of the species enriched the gardens in May. Abundantly prolific in blossom, robust in constitution, and with a peculiar grace of their own, these late Brooms must be numbered among the most precious shrubs of their season. Of the good old Spartium junceum no less can be said, for it is willing enough to flourish under trees and never fails to yield sheaves of its long-stalked yellow flowers which distil the sweetest of all the scents of our English summer, the scent of a Bean field. Genista virgata is a species that also ranks high among the best of its race. While in symmetry it has no rival, the pale gold of its countless little flowers set in the sheen of silver which invests the delicate foliage, so soft and billowy, is irresistibly charming. G. virgata, which is quite hardy, is, in point of fact, one of the few Brooms which on account of its delightful foliage is a shrub to admire at any season.

Down along the waterside, where tall Osmundas are already getting rusty at their tips, and Lysimachia clethroides is piercing the shades of the Alders with its milk-white spears, the Snakeroots (Cimicifuga) have raised aloft their snowy wands. Very lovely in the dappled sunlight are these Spiræa-like plants, especially perhaps the rose-tinted, 4-foot C. cordifolia, the dwarfer C. simplex, with its unbranched spires of white, and C. racemosa, a 5-foot to 6-foot giant whose crystal plumes will presently flash a challenge to the barbaric splendour of Astilbe Davidi. Here also is the red-stemmed Gillenia trifoliata, with its three-lobed, deep green leaves and showers of rose-tinted stars, a waterside dweller whose subtle charms must not be overwhelmed by the stalwart ranks of the foregoing and those of S. Aruncus and its kindred of like stature. One of the best of the dwarfer, late-flowering shrubs along partly-shaded places by the water is our familiar friend, Spiræa japonica Bumalda, var. Anthony Waterer, and it can hardly have a better companion than the dwarfer S. j. alba (S. callosa alba), whose pure white inflorescences make a sharp contrast with the ruby-crimson of the former. S. Anthony Waterer may not flower so profusely in part shade, but there is abundant compensation for this in the fact that under such conditions its blooms do not become bleached into the washed-out condition to which a few hours of hot sun will reduce them. That excellent shrub, Leptospermum scoparium var. Nicholli, which often remains in flower until August, has blossoms of almost exactly the same brilliant colour as the above Spiræa, and these are, unfortunately, equally sensitive to direct sunlight. Not being in broad, flat, terminal corymbs like those of the Meadow-sweet, the blossoms of this magnifi-

Sisyrinchium striatum
The Satin Flower in June on the sunny side of a garden path

cent Leptospermum which crowd the older branches are afforded a certain amount of screening from the shrub's own foliage, but, even so, a wonderful effect is often sadly marred.

If most of the woodland Roses are over a few still remain. One of the most striking of them is a large bush of R. multiflora, so bountiful in its immense white trusses and so incomparably fragrant. The good old R. alba, including its lovely variety, Celestial, whose emerald foliage alone is sufficient to claim for this old-timer a place anywhere, is one of the stand-bys of the later summer in its genus. R. lucida is always admirable with its large soft pink blooms, and here at the foot of the Heath slope is R. spinosissima Mrs. Colville, still bearing its rich crimson blooms. R. Wichuraiana tosses its white bouquets out of the gorgeous billows of Erica cinerea rosea, and the hybrid, R. W. rosea, is enlivening a bank of E. mediterranea, now so dull and rusty, with clusters of crimson-scarlet. Some of the dear old Damasks are also here, promising to carry the sweetness of early June into the days of harvest. Against the deep green of Lawson Cypresses is a group of some double varieties of R. moschata, which for freedom of flowering, fragrance, and cheerful willingness to take care of themselves have few rivals. Jersey Beauty has ascended an Austrian Pine, flinging cascades of creamy-white out of its sombre recesses, whilst over the stump of a decapitated Oak, Shower of Gold, another good Wichuraiana, has woven a canopy of W. A. Richardson's orange and yellow which, for three months, will maintain a continuous yield of colour. A. T. JOHNSON.

NOTES OF THE WEEK

Tricuspidaria lanceolata

Growing at the foot of a 10 feet high wall and on the north side of it, and sheltered from cold winds by large evergreen trees, was the position in which I saw a few remarkable specimens of this wonderful shrub on June 9th. The soil was open and free, and the glorious specimens which had risen several feet above the wall were quite 15 feet high and laden with rich fleshy crimson flowers. Whether due to the light at the time or other reason the brilliant colour and amazing number of blooms presented a striking effect such as I have never witnessed before. I have met with several handsome bushes from time to time in East Sussex. The specimens in question were almost trees, and in most luxuriant health, with masses of Primulas carpeting the soil about them. The cut branches and small plants exhibited by our enterprising nurserymen at the London shows do not, and cannot, by reason of their surroundings illustrate the beauty and value of this shrub as compared with a noble specimen growing in a garden amidst natural surroundings. Others like myself have failed to retain this shrub for many years, mainly through exposing it to biting winds, and to those I would suggest a position similar to the one above described, working plenty of matured leaf-mould into the soil in which it is planted. E. MARKHAM.

Madame Kooi Strawberry

Three years ago I laid down a bed of this Strawberry, and have come to the conclusion it is not worth the ground it is planted on. The fruits are of bad shape, coarse, and watery, and possess very little flavour. True, it is a strong grower and enormous cropper, but what is required in all fruits is quality and flavour. The soil here is a stiff, heavy loam F. H.

Galanthus Ikariae

This grand Snowdrop was the first of a number of rare kinds to reach its best this year. A little colony of it flowered well at the foot of a low wall, and although not more than a few years ago six bulbs only were planted, there were no less than 50 handsome snowy-white blooms. This valuable plant has broad glossy green leaves and stout but most graceful flower-stalks, and the effect of even a small number is quite unusual. The island home of this distinct flower is off the coast of Smyrna, or about 30 miles south of Chios, in the Ægean Sea. As trade with Smyrna is again beginning to move, we may reasonably expect to secure additi plies of this fine Snowdrop in futur E. MA

Pæonia tenuifolia

One of the chief attractions of t beautiful foliage, which is elegantl quite feathery-looking. The tw most commonly procurable from are P. tenuifolia rosea and P. rubra. The former has lovely sing of medium size, and the second is part, except in colour, which is a son. Some people prefer that wi blooms, which has good double flowers. S.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

A Potato failure

MR. E. BURRELL sends a most interesting note under the above heading in the issue of GARDENING ILLUSTRATED, July 17th, page 427. In most cases where large quantities of Potatoes are grown they are lifted and either stored in barns or buried in soil pits in heaps to remain until the following spring, when in many cases the Potatoes have produced sprouts which have to be removed before they are put on the market. This taxes the energy of the Potato, and the crop is never as good as anticipated. My idea is that all seed Potatoes should be selected when the crop is lifted and placed in shallow boxes or trays each holding 14 lbs. to 20 lbs. and having sides admitting air freely with narrow strips let into the end to form handles. These can be stored away in any frost-proof out-building or loft, and when winter sets in and the tubers have become greened the trays may be stood one on the other, and if any danger of frost may be covered with mats. When thus treated the eyes of the tubers remain dormant longer than if kept in heaps or in the dark. When they break in spring the shoots are short, stout, and green, and may be easily preserved for planting. When seed tubers are planted in spring in this manner not only are the crops more abundant, but they also maintain a robust, healthy stock. It is well to point out that any tuber that appears blind or has weak shoots should be discarded. Previous to planting it is an excellent practice to cut off a small portion of the small end of the set.

If Mr. Burrell will send to Mr. Johnson, 18, Hovingham Terrace, Harehills, Leeds, a complete specimen of a Potato plant he will try and find out the cause of the failure, including, if possible, a little soil over the root. Owing to the sudden and drastic change in climatic conditions the Potato crop is none too promising in this district, although early crops have proved satisfactory. Great Scot and Kerr's Pink look more promising than King Edward, which is a universal Potato in this part of the country. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Calceolarias for the greenhouse

I am obliged to "C. B." for pointing out a couple of errors which appeared in my notes on herbaceous Calceolarias, p. 416, July 10th issue. The advice as to wintering the plants in a temperature not falling below 45 degs. was a genuine slip. What I really intended to say was not below 35 degs., *i.e.*, a temperature sufficiently high to protect the plants from severe frosts. At the same time, even taking the 45 degs. as written, I cannot regard it as a really serious mist and others of my acquaintance h grown Calceolarias throughout t along with other plants in a te ranging from 45 degs. to 65 deg any detrimental effects. The cl back, in my opinion, to keeping C in a rather warm atmosphere is pests are bred with greater free Calceolarias, as explained in my particularly bothered by green-fly ing repotting the seedlings into about September, "C. B." does w my attention to this mistake. W in mind was to repot into larger p roots filled the existing ones until size was reached, which is usu enough for the flowering size.

The effect of drought on A flowers

Dry weather has an effect on pl a normal season may be expected in September, but in absence o pushed nearer their blooming obviously they do not grow so t forms of Michaelmas Daisies, ericoides, commence to flower in A even those which in the usual w show their flowers for fully a m are sometimes well advanced in bu anthemums, Dahlias, and Monte also affected considerably by dr and the blossoms come earlier it One may help border plants in a drought by bringing into use an will afford a surface mulch, an roots cool and conserve moisture manure, vegetable refuse, grass old potting soil, or fibre may be us MI

The Italian Pimpernel (Arg Monelli)

If this is the same as A. linifoli it is said to be, but which Willkom (see Prod. Fl. Hisp., ii., p. 648), is a beautiful species. It used to r Gibraltar in hot dry sand, but w pect water had stood in the win there would have been moisture It is clearly a perennial, with a v a few inches high. A very good i it may be had by sowing seed of var. Phillipsii, which can be obt Thompson and Morgan, of Ipswi variety is sold as an annual, and platyphylla, of Bando. It is d half-hardy, but I grow it as a hal by sowing in late April. Its each more than 1 inch in diamet beautiful deep gentian blue. A. H. WOL

Blue Hydrangeas

. E. Wright evidently feels aggrieved I differ from him concerning the Hydrangeas which are doctored m in order that they may produce vers. He asks me to name some eas which do so naturally; further, s to my brief note as being "very g and leading to great disappoint- Very well. Here are the names of ue Hydrangeas, taken from the the issue of June 19th, 1926, and ppeared over the signature of Wright, Stockton House Gardens, shire." It may be remembered itle of the article was "Hydrangeas Greenhouse." In the course of his he says: "Good varieties. there are many newer kinds the are the best I have grown." Here those which the writer specifically as "blue": "La Marne (soft E. J. Hill (blue), Maréchal Foch d Vicomte de Vibray (blue)." As ht gives other varieties with their e.g., Radiant (carmine), Rubis ., surely the inference is that the eties which he names are also blue. It is not I, but Mr. Wright isleading, for, naturally, after see- sorts specifically described, among lours, as "blue," prospective would not at all understand that ieties require doctoring. Further in this connection would, obviously, ious.

ier point. Mr. Wright says that I dently little or no experience in the of Hydrangeas." The usual ertion, and concerning which he ssibly be cognisant. However, I ware that the cultivation of the calls for vast experience. Many nan can grow in a cottage window broken teapot a Hydrangea fit to wn with the best that ever came greenhouse, although, naturally, it bloom so early. Therefore Mr. jibe anent my lack of experience leaves me unmoved. I shall not rther on your space in connection is, after all, a very trivial and it matter.

A Scottish Gardener.

an article on the cultivation of s in the issue of July 17th Mr. s states that "no Hydrangeas are ally, but by treatment." Many of s must have seen blue Hydrangeas eive no treatment except the l in which they grow, which, possi- ontain iron. Mr. Jones mentions owder," whatever that may be. various chemicals have been tried, e form, permanganate of potash, hyl violet. The use of one or ese agents accounts for the many ich a confiding garden enthusiast Hydrangea and complains that it k the following year. I have ple equally taken in by blue and of the Valley from Florence. cal colouring of flowers is much cated, and as regards Hydrangeas lue forms which appear constant y treatment. A lady in this dis- vards Heath) bought a very fine lsea Show about 1913. It is now mp on a lawn and retains its h no treatment whatsoever. I od bushes raised from cuttings of They have been in three different h no treatment of any kind except ow manure, and the flowers are alt-blue which no chemical could

Theilor Bridgman.

Eriogonum umbellatum

This interesting and fascinating plant is well worth its place in the rock garden. It is a dwarf shrub with small oblong leaves which have a silvery reverse. The flowers are of a creamy-white, which change to a beautiful pink with age. These are borne in flat-topped clusters on stems from 6 inches to 9 inches high. This Eriogonum loves a well-drained sunny position with plenty of small stones about the roots. Its home is in the Rocky Mountains, where it covers barren rocky slopes at an altitude of 6,000 feet and upwards. E. ovalifolium and E. androsaceum are also very beautiful, the latter a dwarf form only 3 inches high. They are of the Buckwheat family. R. Moore.

Thorpe Hall.

Watsonia species

Owing to the time which has elapsed since I left South Africa, and to the fact that my herbarium collected on Table Mountain has been distributed to Kew and to the British Museum, I am not in a position to throw much light on this question, but can only say that if the nomenclature of Watsonia is anything like so complicated or the synonymy so incorrectly cited as in the case of Gladiolus, Romulea, and some other genera of Iridaceæ, it is not surprising that confusion has arisen.

According to the Flora Capensis, W. iridifolia Ker, of Bot. Mag., t. 600, is a leading variety of W. Meriana Mill., differing in "leaves broader than in the type, flowers closer and more numerous, white or pinkish," those of Meriana being "usually bright rose-red, rarely scarlet or white." But Baker also cites Ker's figure in Bot. Mag., t. 600, as representing W. iridifolia var. fulgens, which Baker makes a synonym of W. angusta Ker, an allied species, which is also Gladiolus Meriana var. of Jacq. Ic., t. 231, but not of t. 230.

Baker separates W. angusta from W. Meriana by the following key characters:—Perianth segments $\frac{1}{4}$-$\frac{1}{3}$ the length of the tube, angusta; perianth segments $\frac{3}{4}$-1 inch long, Meriana; yet if the full descriptions are consulted it will be seen that angusta has a tube 18-21 lines long and perianth segments 8-9 lines, while Meriana has them 18-24 lines by 9 lines, so the leading difference is not apparent.

My recollection of the colour of the flower of W. Meriana is a pleasing reddish-pink, not "vivid orange-scarlet." I thought there was no doubt that W. Ardernei was an albino W. rosea. A. H. Wolley-Dod.

Callistemon Salignus

The other day, when referring to this plant by the name given at the beginning of the note, I was called to order by a friend who named it as Metrosideros floribunda. I believe we were both right, although there may, possibly, be an element of doubt. Formerly I, too, was accustomed to refer to the plant as a Metrosideros, but after seeing it flowering at Kew under the name of Callistemon Salignus I was convinced that the latter is the correct name. By either, however, it is a good example of the old hard-wooded plants now, unfortunately, banished from the majority of greenhouses. The curious inflorescence is very beautiful, and the plant will flower freely in quite a small pot. There are numerous varieties, and there is (or was before the war) a very representative collection at Wisley. It is just in such places as Kew and Wisley that such plants are now seen, for very few nurserymen handle them. By the way, the Callistemon is the "Bottle-brush plant," and in my early days it was usually associated with Boronia megastigma, both being in bloom at the same time. W. McG.

The Bon Accord double Primroses

I am glad to learn that at least some of the Bon Accord Primroses raised by the late Messrs. Cocker at Aberdeen are in commerce. They were raised by adopting the methods suggested by the modern practice of the principles of plant breeding, as I know from some interesting talks about them I had with one of the brothers Cocker, whose loss was a severe one to British horticulture. Many of the old double Primroses appear to have degenerated in constitution, and the raising of seedlings with more vigour but with all the beauty of the older varieties was fraught with promise for the future. Several of these Bon Accord varieties were different in tone of colour from any of the older ones, and when shown in Edinburgh by Messrs. Cocker were much admired by those interested in the flower. During a visit to Aberdeen some time after the lamented death of the last of the brothers I was told that the plants in the nursery had all been dispersed, and I am glad to know that some of these double Primroses are now in commerce.

S. Arnott.

More about the Fuchsia

It will probably not be out of place to quote how well these were cultivated by Messrs. Veitch at their Chelsea nursery. In 1914, when this firm disposed of their nursery stock in the glass structures, there was quite a number of these in 8-inch pots trained under the rafters of a span-roof house, varying from 8 feet to 10 feet in length, one mass of flower. A gentleman within half-a-mile purchased half-a-dozen. These were carefully carted to his lean-to greenhouse and tied to the rafters, where they continued to flourish throughout the late summer and well into the autumn. The ensuing spring I superintended the transfer of these plants into 10-inch pots. They did well and were the admiration of all who were privileged to see them.

Given the usual treatment to that afforded the Grape Vine no one need hesitate about growing these charming plants. The spur growths should be about 8 inches apart. The Fuchsia also thrives when trained up pillars or the back of a greenhouse, provided the position is not too dark. The wood does not ripen so well as on those trained within a foot or so of the glass roof first mentioned. This plant is also useful for summer bedding, especially in standard form with an approved undergrowth of Verbena or Viola, choosing a rather shady nook and somewhat sheltered from south-west winds. Then they will continue to bloom until frosts check their career for the season. Further, the Fuchsia makes a useful window plant, and many a cottager excels with it in country districts especially. To keep plants free of green-fly and thrip constantly dip them in strong soapy water or Quassia extract. J. Mayne.

Eradication of woodlice and slugs

It would be interesting to know whether "Aberdonian" (see page 419 in the issue of Gardening Illustrated dated 17th inst.) has not got mixed up with frogs and toads. The former may survive in hothouses where the tanks of water are beneath the floor, but I have not seen them live long in ordinary houses, and am unaware that they feed on woodlice or creatures of that nature. Dealing with toads is a different matter, and one or more of these should be kept in every greenhouse or frame where woodlice are to be seen. They are the true gardener's friends. I have kept them in a house for three years. It is interesting to note how they hibernate during the winter, and how they appear again in early spring. These creatures can be tamed so that they will look to be fed each day. W. E. Wright.

FRUIT GARDEN

Peaches in pots

(Reply to "F. L.")

SELECT in autumn, from a good fruit-tree nursery, trees on healthy stocks, and be sure and observe that the union between stock and scion is a perfect one. Put them into pots, at first, of about 10 inches or 12 inches in diameter, and drain them well, with about 2 inches of broken potsherds at the bottom. An excellent soil to use for the purpose is a rather heavy turfy loam, with some crushed bones added, and a very little decayed stable manure. It is much better to feed the trees with liquid-manure in the after-stages of their growth than to use much stable manure at first. The compost should be used in a rather dry state when potting the trees, so that it may be rammed down very firmly. This is a very important matter; many failures in the culture of fruit trees in pots are clearly to be traced to loose potting. Another important matter is to leave sufficient space between the rim of the pot and the soil to hold a good supply of water when required. After potting the trees they should be placed on a hard bed of coal-ashes or any similar material until after Christmas, and the pots should be sheltered with litter, adding to this covering if the frosts are severe. In the month of January they may be removed to the house intended for their reception (a light span-roofed one is about the best, and having a flow and return hot-water pipe running round it), and be pruned back a little. If the growth is pretty shapely, hard pruning is not necessary. Just exclude severe frost and give abundant ventilation until the buds are fairly on the move, and then by no means hurry them on. As the shoots progress, much attention must be given to the important matter of pinching and regulating the same; if this is well looked after during the summer but little, if any, winter pruning is required. Peaches and Nectarines should not be too closely pinched—any vigorous shoots should be the ones to stop first; this will help to balance the sap. Great attention must be given to the watering, as on the proper quantity of moisture being given to the roots the measure of success achieved will largely depend. During the active stages of the trees' growth liquid-manure is essential, especially if bearing heavy crops of fruit. That made from cow manure and soot in the manner often described in the pages of Gardening Illustrated is about the best, and it should be given in a clear, weak state frequently. Syringing, too, must never be neglected, or the trees will speedily become a prey to red-spider. If green-fly puts in an appearance, which it generally will, especially during the prevalence of easterly winds, then fumigate with Tobacco lightly and often, and for mildew apply sulphur to the leaves.

When the fruit is ripening a rather drier atmosphere must be maintained, and abundant ventilation be given. After the ripe fruit is gathered the trees may be removed to the open air to ripen their growth and be prepared for another season. During their absence the structure can be used to house Chrysanthemums or other plants that want just a little protection in the early winter from frost.

Early Peaches

The fine, sunny weather of the past week has been welcomed in these times, when it is imperative to economise—particularly in regard to fuel—by all fruit growers, as not only can the structures be liberally ventilated and suitable temperatures maintained, but sufficient sun-heat can be bottled up, so to speak, in the afternoon to render the employment of fire-heat during the night superfluous. If the temperature should fall lower than is perhaps desirable, at night or early morning, such leeway can always be made good in the daytime by keeping the temperature ranging between 80 degs. and 85 degs. and closing in time to ensure a rise of 3 degs. to 5 degs. more. Accompanied by a liberal syringing, the fruits, when this method of treatment is pursued, swell rapidly and soon reach the ripening stage, indication of which is given by the skins of the fully-exposed fruits beginning to put on colour. When this becomes general a gradual modification of treatment is necessary. Overhead syringing has first to be dispensed with, the requisite amount of moisture being obtained by the damping of the paths and surface of the borders. This, in turn, must be reduced to a minimum as the maturation of the fruits progresses, and finally withheld when an aroma is given off, which indicates that the finishing stage has been reached. Warm, dry air is essential for both finish and flavour to be satisfactory, and a chink of air should be left on at the top of the house throughout the night. The approach of the colouring stage is the signal to give the last stimulative watering. After this, plain water, if a further supply is needed, is given. For home consumption the fruits should be allowed to become ripe, not dead ripe, before gathering them.

VEGETABLES

Tomato notes

I HAVE wondered how much progress in the matter of cropping or general excellence we have of late made in Tomatoes in spite of the many assumed new varieties put on the market. A few days since I was shown in a private garden a low lean-to house of Tomatoes. The plants were growing in a wooden trough, the inside measurement of which was 15 inches by 8 inches, the plants being 15 inches apart in the trough. They had been there several months, had in each case reached the top of the house, about 7 feet, and were not only in robust health, but had been for a long time, and still were, fruiting most abundantly. I had never before seen racemes of fruiting stems so thickly placed or so branching, many of them carrying from 40 to 50 fruits. It was not possible to conceive of a finer variety, more heavy cropper, handsomer fruit, better coloured or more solid. One fruit, 7 inches round its greatest breadth, weighed 8½ ozs.—pretty conclusive evidence of its massiveness. When I inquired the name of this Tomato I found it was one put into commerce many years ago under the name of Hepper's Goliath, a near relative of the old Trophy. The new varieties introduced could not have given better results. It must not be assumed, however, that the variety remains absolutely as first introduced, because Tomatoes are raised from seed yearly. No plants are so readily amenable to improvement as the Tomato, as it is but needful for the grower every year to select one or two of his handsomest fruits, saved from any plant that shows free-cropping quality, and in the course of years the original variety, though it be still the same, yet is so improved as to be quite different from and much superior to its original form. Hepper's Goliath had been grown in this garden for many years, the gardener saving his own seed, and thus keeping the stock true. Another variety very highly recommended was grown in the house early in the season, but the result was so indifferent the plants were pulled out and replaced by the old and tried variety. After all, for first ea poses especially, or indeed for fruit tion generally, no plan of cultur better than rigging up a wooden trou nature mentioned, but having an trellis bottom, covered with rough tu almost exclusively fresh, sweet, tur putting out the plants into it fairly gether, and training on a lath or wi pretty near the glass. A few house variety referred to, got on early, and so freely, as in this case, would aln money, not only because the fruit heavy, but also because so early and produced. Generally market growe to put their plants out on the floors span houses, but they are in such from the light, and the too abunda room induces far too luxuriant Plants in troughs near the glass hav atmosphere, are more easily attended flowers fertilised, and as the fruit is some artificial manure dressing give soil helps to replace what has been ab and enables the plants to continue for a long time.

Summer Carrots

I have for some time abandoned vation of the big Carrot, and inste tain a supply of small, tender roots quent small sowings. The seeds in weather germinate quickly, and soon into edible roots, and even in wi may pull these from the open gro thus preserve the sweet and delicat of the summer Carrot. For flavou for garnishing, for which the C largely drawn upon in many househo bably a small sowing of the larger t be economical, because these may and stored in a dry shed and be h daily use. It may be argued that t Horn is just as well adapted to this as the larger root. I know this possible, but there is undoubtedly a able amount of waste when large are sent to the kitchen.

Carrots are sometimes seriously in the garden slug. I have known where Carrots which had germina the lines being distinctly seen, sudd appeared. Soot scattered over thinly and frequently makes the le tasteful, and a good dusting of d sweepings is helpful in warding off if threatened. In the clearing of th of summer crops, Peas or Potatoes stance, there is ground quite ready reception of Carrots at any time u month of September. In this way that in the ordinary way would be g to Carrots could be more profitably to Potatoes, the early varieties would be cleared in time to sow suc batches. Young Carrots are so m preciated in many households that g devote much time to forcing them in get them in early. No one will d are well worth this extra labour. market young Carrots find a ready to keep up a good supply it is nece make frequent sowings. Short Horn will become coarse and lose their f allowed to get overgrown, hence th sity for frequent sowing.

Tomatoes in winter

A few Tomatoes are appreciated in These can be obtained from plants th roofs of forcing-houses. For instan do well in close succession to either or Cucumbers, no fresh soil or a preparation being needed. In any c advisable to make the start with plants in order to be certain of a go fruit before short wintry days set in

Cool Greenhouse Cacti

By A Cactus Grower.

JS growing seems all the rage g amateur gardeners this year, and who possess cool greenhouses ell try their culture. Apart from interesting hobby, one can deck his with flowers equal in beauty to found in the realm of plants and rely seen. Many are also sweetly hen, again, some of the most re- owers, which smell horribly and have the appearance of putrid flesh, are borne by Cactus plants. Size is in variety, ranging from miniature plants no larger than a Gooseberry to flowers of gigantic dimensions measuring a yard across; while some of the plants attain an enormous size, like the gigantic Cacti at Kew, 60 feet high. I have seen on the south coast of Cornwall a monster specimen of an Agave growing out of doors. It was about 20 feet high, possessing stems 8 feet in length and 2 feet in circumference. Gorgeous masses of small yellow blossoms covered the plant.

Echinocactus minusculus
It bears a series of charming scarlet flowers

For the amateur's cool greenhouse Phyllocacti are, perhaps, the most free-blooming. The blossoms are magnificent, appearing regularly year by year, and under exceptionally favourable conditions, twice a year.

The growing of these and other Cacti is comparatively easy. Soil should be composed of fibrous loam and coarse sand, mixing two parts of the former with one of the latter. A little leaf-mould and crushed brick may be added. At least one-third of the pot should be filled with broken-up pots before placing the soil in the pot, in order to secure good drainage, which is essential.

During the warmer months of the year Cacti should be watered more or less every day, all depending on the weather. During the colder months, however, very little water is necessary. Standing the pot in a shallow pan of water or else syringing upwards so that the water falls on the pot like rain is the best method of watering.

All the Cactus plants in the photographs were grown in an ordinary cool greenhouse without artificial heat of any kind. All the same, extremes of temperature should be taken note of, for in summer, if the greenhouse becomes very hot, the floor may be damped with advantage, while during a very cold snap in winter some sacking spread over the top of the greenhouse on the outside will help to retain warmth, especially at night. The placing of newspapers over the plants will add a further protection.

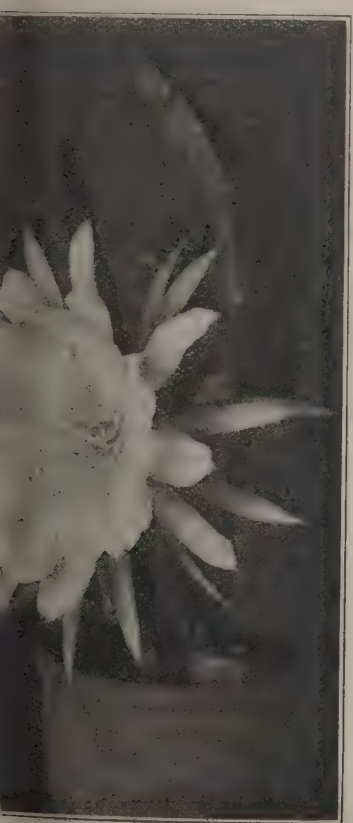
When the sun is hot the turning of pots should be done gradually, for sudden heat thrown on the stems may injure the soft tissue. Water should not be permitted to drip on the plants or the stems will rot. At any time, when inspecting your plants, should you notice brown patches appearing, cut them away with a sharp knife, after which place the pot on a dry shelf where it can get the sunshine. Moss and green slime appearing on the outside of a pot show that the drainage is defective, and this should be remedied at once or the roots will rot away. The best plan is to re-pot into fresh dry soil.

The necessary cuttings, offshoots, or seeds may be purchased from any good seedsman. Cooper, Draper, Shanklin, I.O.W. (although not a professional horticulturist), keeps 350 varieties always in stock. Catalogues are issued by him at 3d. each. Another dealer is Miss Worth, Cactus specialist, Holbeach.

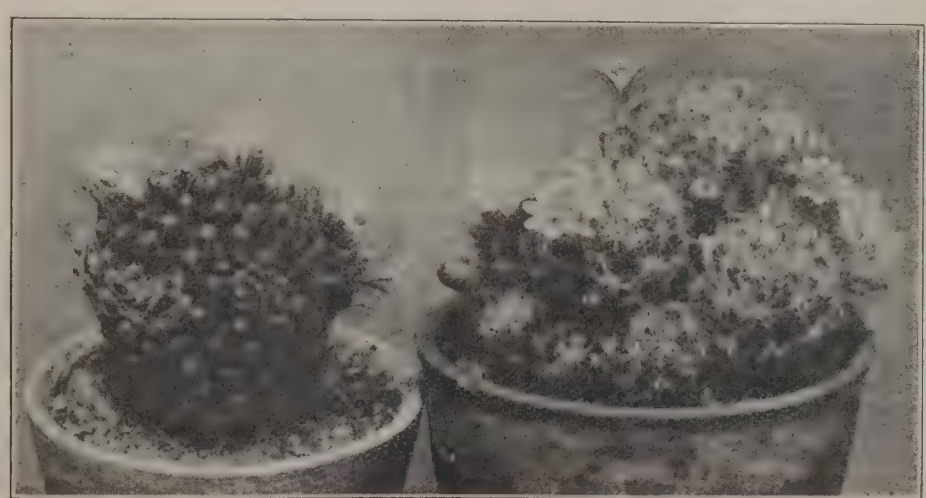
Echinocereus, of which there are about 30 species, many of which bearing large flowers of brilliant hues and many being sweetly scented, might be bought as a start. Also Phyllocactus, with its dozen or so species, which will, with ordinary attention, produce magnificent flowers regularly year after year. Moreover, this species is extremely easy to cultivate, and will grow even in rooms without any trouble.

Another very beautiful Cactus is the Epiphyllum, a drooping plant, therefore suitable for hanging-baskets. Most of this genus flower in winter, and they require a moderate amount of moisture and a temperature of 50 degs. to 55 degs.

Donald Harmston Matheson.
Court Wood, Newton Ferrers, S.O., Devon.



tus Blanc, flowering in winter
n in this country. It possesses a delicious fragrance



Left—Mamillaria Wildiana *Right*—Mamillaria pusilla
Note the fruit on the latter remaining from the previous season; they are bright scarlet in colour.

PLANTING AN IRIS GARDEN

By Geo. Dillistone, Editor of the Iris Society's Journal

THERE are so many places in the garden where Irises can be successfully cultivated that the devotion of some portion of the ground entirely to this purpose is not of frequent occurrence. Such a course has, however, many advantages. Irises belong to that class of flower which is more effectively enjoyed in the mass, a characteristic they share with Roses and Pæonies. To the specialist, who looks upon the Iris as *the* flower of the garden and who makes the genus the centre round which his garden system revolves, this localisation has many attractions. For the purpose of comparison of species and varieties it offers special opportunities. By cultivation under the same conditions the merits and demerits of each and all can be ascertained with greater facility than when they are scattered at random in all sorts of odd corners up and down the garden. Certainly from the point of view of interest, a collection is more fully appreciated when grown as a collection than as a number of interesting items.

It is, however, not imperative that because they are grown as a concentrated collection, of which each individual member possesses some special interest, the Iris garden need be just formal beds that, for a considerable portion of the year, will appear to be merely an orderly array of labels. Such arrangements are necessary in a nursery, but in the garden designed for pleasure they are exceedingly unpleasant; nor need an Iris garden be so arranged that it is without interest and beauty at any time of the year. There are many plants and shrubs that associate well with Irises, and this in such a way that both the Irises and they gain by that association. It is the judicious mingling of one with the other, whilst keeping the Iris as the main motif in the scheme, that will make the successful arrangement when looked at from the æsthetic point of view.

The real triumph in gardening is to make the best of the conditions we have, but the realisation of this fact has never prevented any of us from imagining the conditions we would like. In fact, I have never met an Iris grower who was quite content with his garden conditions for the purpose.

Let me describe the sort of Iris garden that I have dreamt of making somewhere some day. The site is a broad open space with a very emphatic slope to the south. At its base flows a stream, or better still, some greater breadth of water, as pond or lake. East, west, and north it is sheltered with shrub and woodland. It is so spacious that I can interpose between the Irises and this effective background and shelter, flowering and foliage trees and shrubs in bold groupings, that will not only provide attractions to the garden when the Irises are out of flower, but will become corporate points in my planting scheme. There is no use in overlooking the fact that to many real garden lovers with a highly-developed sense of what is beautiful the Iris is not a pretty plant when its flowering season is over. Hence my desire to provide other attractions that will rede scene from any sense of desolation, that the Iris fancier never feels, but th —with some reason—damns. My ground would have to be chosen accor the space available, but assuming t to be sufficient, it would consist of and bold groups of such shrubs as Pissardi, the dark-leaved Japanese two or three drifts of golden Elder, many of the flowering shrubs, s Cherries, Pyrus, Prunus, as I cou room for, that would light up the sc fore the Irises had attained their mass and provide colour notes at a later p the year in the way of flower and foliage. In this scheme every grou be carefully disposed with a view material assistance in the developme Iris effects.

Nor would the bolder-growing her plants be omitted entirely; indeed, t some that provide the natural colou complement to the Iris. This is par so in the case of the modern Lupin phyllus hybrids, and broad, fre occurring masses of that gardeners f Nepeta Mussini (a rampant beast wit must be kept under control), assist me in giving a sense of cohesion to th picture.

It will be necessary to create a sy paths throughout the garden, and arrangement of these several definite can be attained. In the first place, if e

Explanation of plan

A.—Groups of flowering and foliage shrubs, such as Prunus Pissardi, Japanese Maples, Sambucus, shrubby Spiræas, Flowering Cherries and Crabs. In the shade of these the few species of Irises that will succeed in such conditions can be cultivated, such as gracilipes and cristata. B.—Irises requiring high, well drained, and dry conditions. This includes some of the bulbous species and such bearded forms as the Regelia groups, Iberica, etc. C.—Bearded Irises and such as thrive in ordinary conditions of soil with full sunlight, that is, nearly all the garden varieties of bearded Irises, especially the tall June flowering. D.—Beardless Irises generally fibrous rooted, that require cool, damp conditions but not excessive moisture, such as the species aurea, ochroleuca, Monnieri, etc. E.—Moisture-loving Irises, such as spuria, sibirica, lævigata, Kæmpferi, pseudacorus, etc. Positions to be chosen to suit individual requirements.

The Japanese I. Kæmpferi var Akashinowe
Pale blue with deep blue veins and a splash of golden yellow on the falls

ewhere below the planting levels, 's with a tendency to fall towards below, drainage can be successfully Thus a series of shallow valleys ormed and will in large measure necessary drainage which can be by underground work where the nds it. The main paths should be feet to 12 feet, if possible, and he trouble of maintenance may be reater, nothing is so effective as

sidiary paths can be narrower, say, l can, if desired, be of any material such as stone, gravel, or ashes.

nd use of such paths is, of course, facile approach to all parts of the that any of the subjects can be close hand.

d, and by no means least important, n is the fact that by skilful arrange- n valley paths can be made to pro- nber of pleasing pictures.

one such valley in June, with an t rigidly straight, but broadening l green expanses of turf at points; t its length rise bold masses of the more plentiful varieties of Irises, sheets of Catmint or Lupins. these are to separate the varieties iosen to harmonise or contrast with and so all unite in forming a rich iarmony, contrast, and soft subtle of colour for which the Bearded so admirably adapted.

id there throughout the vista ap- e special modern development of its superiority rendered the more l by its association with its pre- of inferior stature, colour, or habit. ot plant such an Iris garden as I ing with *all* the latest productions, n choose the place to give them the e they deserve.

If space permitted I would like to dwell upon the many exquisite combinations for which Irises afford an opportunity offered by no other flower, but must content myself with just indicating the broad distribution of the genus in such a garden.

Of course, the higher and drier positions, and such as could be most effectively drained, would be reserved for those species and varieties that desire such conditions. As far as practicable I would concentrate these in collections of kindred species. Below these would come all bearded sections, well distributed for general effect during their respective flowering seasons, but sufficiently concentrated in their sections to be able to appreciate the value of each.

In the low-lying land and by the waterside would be planted most of the Apogon section, such as the Sibiricas, Spuria, and, indeed, all those of the beardless section that prefer such cool, moist, rooting conditions as such a position would afford.

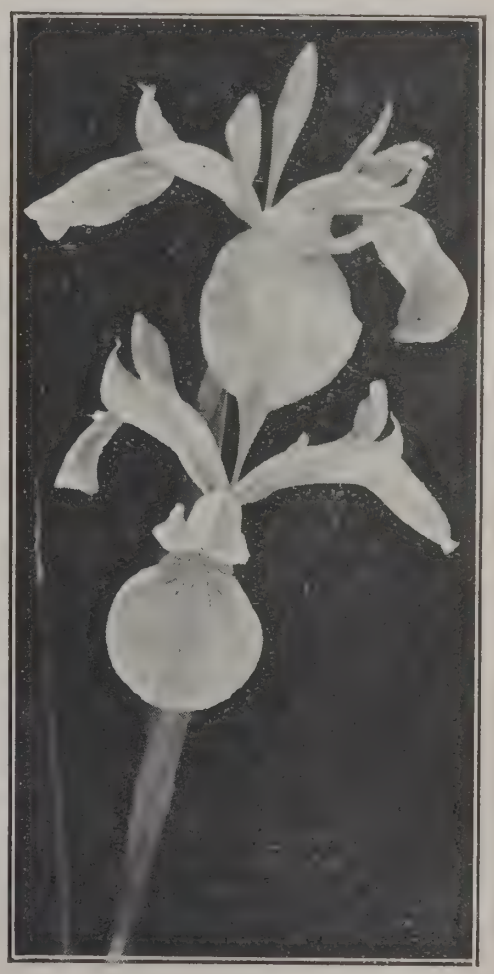
The whole genus would be thus effectually represented in their proper places, and in practice it would be found that certain species or varieties of each section would creep into that above it. As an instance, the Californian Irises would not find a home by the waterside, but would succeed higher up my sunny slope. Wherever practicable the original species should be represented in each section where hybrids abound, and I should like to plant these first parents closely in association with their immediate progeny. This might not add to the beauty of the garden; that it would infinitely increase its interest is indisputable.

Then I would choose the position for the garden Bearded Irises in particular, according to the time and conditions in which they look best. Some are best seen against a dark background, such as Prunus Pissardi, or some rich green; others are more attractive when seen against the light, and these I would plant where the valleyed paths were lowest and slopes highest; yet others are best seen from above when one looks down into the heart of the flower.

And so, in the ideal Iris garden, it would not matter whether one looked down the slope, across the shimmering masses of colour to the fringed water below, walked studiously along the paths to enjoy at closer quarters the individual attractions of each species or variety, or standing by the water's edge looked back up the slope to the cool purple depths of the enclosing woodland, each would, in its own way, provide that thrill of sensuous delight that only the Iris lover knows.

A few Irises

IT is obvious that popular names have become quite a fancy where flowering plants or flowering bulbs are being discussed, whether in a private garden, a nursery, or at a flower show. At a flower show recently I overheard an inquiry for the "poor man's Orchid." The Iris family was at once mentioned and found correct. The one responsible for such an English name was a genius, for a more accommodating title could not possibly have been conceived. To Shakespeare is accredited "Fleur de luce," the mourning flower of the Japanese, and it is recorded that the Egyptian placed a purple Iris on the brow of the sphinx as an emblem of power and eloquence, and it is also the flower of France. So brilliant and beautiful are the many species and varieties that the most inexperienced may venture their cul-



Iris juncea
A graceful Algerian species with deep golden-yellow fragrant flowers

ture, and make a selection either for the rockery, the herbaceous border, or planting by the side of the lake or stream. I inspected recently a large collection of the Bearded section to explain the cause of lack of bloom on so many plants, and, to my horror, they had been planted in a dense forest of trees and shrubs, hence long, thin, weak foliage, and a solitary sickly flower-spike here and there. It is quite a mistake to plant Bearded Irises amongst dense-growing foliaged plants or in too damp situations, as quite the opposite is needed. Cœr··lea (sky-blue), and Snowcup (pure white). Among bulbous species which are well adapted for planting in beds, borders, or the rockery, to mention only a few, are:—I. reticulata, the Violet-scented Iris, produces flowers of a brilliant violet with golden blotch on the fall during February and March. This is certainly one of the most beautiful of our spring-flowering Irises, and extremely handsome when grown in pots. I. juncea is a most graceful Algerian species and highly recommended for its delightful fragrance and its deep golden-yellow flowers 15 inches high. I. tuberosa (the S head Iris), a curious and interesting has tuberous roots and is quite hard flowers are velvety-black and bright reminiscent of some insect—revellir sandy soil and sunny position; 12 high. A beautiful Mesopotamian sp I. sindjarensis, opening its vanilla flowers middle of March in successio axils of the leaves. The plant resem caucasica in habit, but the flower charming shade of pearly-blue; he inches to 14 inches. Others worthy

Iris Aphrodite
One of the finest of the late Mr. W. R. Dyke's introductions
See page 442

Realm
A tall and stately novelty raised by Mr. G. P. Baker

Almost any fairly good soil, well drained and having the full benefit to the exposure of the sun is essential to obtain the best quality of both foliage and flower.

The Dwarf Bearded or Crimean Irises are not nearly sufficiently grown, for the rockery or edging to beds or borders they are most beautiful during March to May, growing 12 inches and under. All are free-flowering and extremely effective. There are Bridesmaid (pretty sulphur-white), Cyanea (delicate soft blue), Princess Louise (soft pearly-blue), in June and July. Plant in warm situations. I. Pavonia (the Peacock Iris) has pretty white flowers with clear sky-blue blotch on each of the three petals; a most interesting and beautiful species and if given a warm, sheltered position in a sandy, well-drained soil is very effective, growing 12 inches to 15 inches high June and July. I. bucharica, from Bokhara, is a very distinct Iris with large handsome creamy-white flowers with broad yellow tip, producing in April a succession of flowers on stems from 12 inches to ducing to the borders are:—Orchid pretty yellow-flowering Juno Iris), Da (a dwarf yellow-flowering spec February), also Histrio (porcelain-blu.

The above Irises are all well adap the rockery, border, or for pots, tre for Hyacinths or Tulips. The Bearded Irises thrive anywhere, ei rockery, as an edging to beds or bor for growing on old walls. Iris barba Bog Iris will be the subject in a futur

W. L.

Bearded Irises

nsive varieties in a reader's garden

hardly necessary, nowadays, to en-
ge the cultivation of Irises by stimu-
remarks upon the beauty of the
mber of varieties which may be
lly grown in many gardens. And,
ast, it may seem rash to closely fol-
escriptive account of the exhibits at
sea Show with a reference to the
Bearded Irises shown in the accom-
illustration, except that some men-
hem may be useful to those readers
emplate the addition of Irises to the
delights of their gardens. It is un-
, even if it were possible, to add
to the experienced advice appearing
pages from time to time as to the
s most essential to the successful
n of the Bearded Iris. Briefly put,
here the sun can shine smack on to
ll drained, well dressed with lime,
d in among the rhizomes, which
slightly above ground, and left un-
for, say, four years, when they
to be lifted and broken up. That

the case if the rhizomes have ex-
over-crowding point in occupying a
ed. The illustrations show a
bed (with two curved sides) con-
varieties mentioned below. The
nay, of course, be varied and im-
n in a "colour scheme" of con-
harmonies; that will be a matter
nd in exercising it the individual
vill find particular pleasure. All
shown in the pictures *are inex-*
et not the visitor to the Chelsea
ill a semblance of misfortune be-
nability to afford many of the
beautiful new or modern hybrids.
to complete this descriptive note,
strated contains:—

-S.* rich yellow; f.* reticulated
white, margined primrose; 1½ feet.
S.—S. primrose; f. veined and
ple; 1½ feet.
-S. lilac-pink; f. purplish old rose,
roat and yellow beard; 2½ feet.
TE.—A dwarf form of pallida;
.
KING.—S. rich golden-yellow; f.
-maroon; 1¾ feet.

S. indicates standards; f., falls.

MISS MAGGIE.—S. white, tinted lavender; f. lavender with light purple veining at the throat; 2 feet.

PALLIDA DALMATICA.—Its well-known tall stem of pale blue flowers, beautifully scented, is choice indeed; 3½ feet,

QUEEN OF MAY.—S. lilac; f. purplish-lilac; 2¾ feet.

AMOS.—S. bright blue; f. deep purple-violet; 2½ feet.

IRIS KING.—S. old gold; f. rich velvety-crimson margined with gold; 2 feet.

MONSIGNOR.—S. pale unveined violet; f. ground of the same shade richly overlaid with deep purple; 2 feet.

MA MIE.—White, frilled with blue; 2½ feet.

ELDORADO.—S. yellowish-bronze shaded with heliotrope; f. bright violet-purple, touched at the sides with the bronze-yellow; style arms clear gold.

There they stand, showing at least some 200 stems of bloom in various stages of development. At intervals of work in the garden it is refreshing—with a cigarette—to enjoy the mental feast of colour thus displayed.

A. J. H.

The Harmony, Rusthall.

Some of the Best Bearded Irises

By G. L. Pilkington, President of the Iris Society.

THE Editor, with characteristic generosity, has left me to decide upon what I shall write concerning the Bearded Irises. The subject, from an enthusiast's point of view, is such a large one that I feel that I had better confine myself to writing upon something which will be of some real use to my readers, and I shall therefore endeavour to give my views and impressions on the Irises which most pleased me this year, chiefly in my own garden and elsewhere. As an amateur with a large collection and who dabbles in hybridisation I must crave the reader's forgiveness if I "tread upon any corns" or otherwise wound his or her feelings by my remarks, and at the same time point out that, after all, they only represent one person's opinion, and not necessarily the right one. The following, therefore, are some of the Bearded Irises which impressed me as being real good Irises for the garden, irrespective of price:—

Asia (1920).—Nobody who grows Irises should be without this (Mr. Yeld's) masterpiece. Very vigorous, very free-flowering, of great stature (4 feet), and glorious colouring. S. pale lavender, suffused and reticulated yellow at the base. Falls pale reddish-purple paling towards the edges. A magnificent plant in every way.

Ambassadeur (Vilm, 1920).—This is unquestionably one of the greatest Irises in existence. Very vigorous and healthy plant and a reliable flowerer. Tall (4 feet), with flowers of great substance. S. smoky reddish-violet, F. deep velvety-brown. This Iris should be planted where the rays of the evening sun can be seen "through" it, the falls will then appear ruby-red. A most striking effect.

Note.—Two other fine Irises introduced by the same firm (Messrs. Vilm-Andrieux et Cie), namely, Ballerine (1920) and Magnifica (1920), at the same time, are not to be compared with Ambassadeur as a garden plant. Ballerine, unquestionably a lovely Iris, is an uncertain flowerer, and Magnifica is of very poor constitution, and prone to all the diseases known to Irises.

Ann Page (1919).—This is probably Sir Arthur Hort's greatest production. It is an unfailing flowerer, very vigorous in growth, and increases rapidly. Height about 3 feet. S. pale lavender-blue, F. similar, but pencilled brown at the haft. Excellent.

Aphrodite (1922).—The best of Mr. Dyke's introductions to commerce so far, and probably the best violet-pink Iris in existence. Very tall in flower-spike, not of very robust constitution as a plant, nor does it increase rapidly. It is best described as a violet-pink "self."

Alcazar (Vilm, 1910).—This old variety must still be placed in the first rank, and very few of its offspring, of which there are hundreds in existence, can come up to their mother in general appearance. A vigorous doer, with tall flower-spikes (3 feet 6 inches). S. light bluish-violet, F. deep velvety-purple, prominent yellow beard.

Afterglow (1918).—An American introduction (Miss Sturtevant) of undoubted merit. The colour is a soft grey-lavender shading to rich yellow through the centre of the standards. Height about 3 feet.

Avalon (1920).—Another of Miss Sturtevant's introductions. The flower is large and of a curious colour, viz., a dull lavender-mauve. The plant, however, does not seem particularly vigorous, and increases slowly in my experience.

Aquamarine (1923).—One of Mr. Dyke's best dwarf pallida hybrids. Fine for massing. Height about 18 inches; colour, clear pale blue self.

Amber (1924).—Those who want an improved and yellower Shekinah should certainly grow this. The price is at present rather prohibitive, but it is, without doubt, a richer-coloured and somewhat larger flower than its parent. Shekinah, of course, is an A1 garden Iris.

Abenda (1923).—This, to my mind, is one of Mr. Perry's best introductions. It is a free-flowering plant bearing stiff, erect stems 3 feet to 3½ feet in height and lasting a long time in bloom. The colour also is most unusual and telling. S. old rose overlaid bronze, F. rich madder-crimson suffused bronze.

B. Y. Morrison (Sturtevant, 1918).—This is a very pleasing American variety. S. pale lavender, F. raisin-purple with a wide lavender border. Height, 2 feet 6 inches.

Bruno (1922).—This is, to my mind, the finest of the original Bliss "Dominion" race. In texture the flowers are magnificent, the falls resembling velvet. The colour is also very rich. The standards are bronze tinted with lavender and the falls are deep rich red-purple in colour. Like "Dominion," it has the bad crossing habit of the lateral buds, but not to such a marked extent.

Chasseur (Vilm, 1923).—A very attractive Iris, particularly in mass, for which it is best fitted. Flowers of round shape. S. broad. Colour, deep yellow becoming paler in the centre of the fall. Height, 2 feet 6 inches. The brown tinge at the bases of the unopened flowers adds a particular charm to a good clump of this Iris.

Corrida (Millet, 1914).—Still one of the best sky-blue selfs in existence and one of Mons. Millet's best introductions. Height, 2½ feet to 3 feet, and very free-flowering.

Duchess Sarah (Yeld, 1924).—This is a particularly showy Iris bearing a number of very large flowers out at one time on a spike. The colour is deeper than in "Halo," on which it is a very great improvement. Height, 3 feet to 3 feet 6 inches.

Dream (1918).—Quite one of Miss Sturtevant's best productions. A pink pallida of very graceful habit and beautiful leafage, 3 feet 6 inches high, free-flowering, and a rapid increaser.

Evadne (Bliss, 1924).—This is one of the most "telling" in colour of the so-called "reds." Height, about 3 feet, and a good "doer."

Flaming Sword (G. and K., 1920).—Considered to be an improved "Iris King," and, as far as free-flowering capacity goes, I should certainly consider it so. The colour also is brighter. S. pure golden-yellow, F. crimson-maroon, margined yellow. Height, 2½ feet.

Imperator (Cayeux, 1922).—This variety quite "bowls out" Ed. Michel, and is, moreover, a more robust plant. Height, 3 feet. A reddish-violet self with large flowers of fine form. One of the best recent French introductions.

Lady Chas. Allan (Perry, 1921).—This is the best pallida Cenquiatti seedling in commerce, in my humble opinion, and never fails to attract the notice of visitors to my garden. It is vigorous and very free-flowering. Stems rigid and 3 feet tall. S. rich violet-blue; F. a shade darker with yellow beard.

Lady of June (Yeld).—This beautiful Iris is not yet in commerce, but, when it is, will certainly attract attention. In my own garden it has flowered freely during the last two years. It may be roughly described as a "blue" Lord of June without the weak, floppy standards, and not as larg dividual flower. Height, 3 feet 6 vigorous grower.

Leonata (Hort, 1922).—This is very great Iris, though not so well k Ann Page (by the same raiser). Th themselves are of immense size and stems 3 feet 6 inches high. S. heliotrope, F. very wide and of darker tone than the standards, w reticulations on a white ground robust grower.

Lent. A. Williamson (Williamso This still ranks as one of the finest introductions. The flowers are of g stance. The standards bright Lob shot fawn at the edges. F. rich purple. Height, 3 feet. This Iris mind, surpasses Prospero (Yeld) on of its much richer colouring, though so tall. Both these Irises are, somewhat "uncertain" flowerers not be called "free," particularly P

Lord Lambourne (Perry).—Thi early-flowering Iris with flowers of l and unusual colouring. S. r suffused bronze. F. rich madder- reticulated white at base. Height, 3½ feet. Those who cannot afford Lo bourne will be well advised to g Abenda, and will obtain a very simil effect.

Lovely (G. and K., 1909).—A pla has been in commerce for some tin still quite one of the best of its colo Increases rapidly and is exceedin S. bright canary-yellow, F. plum, r yellow, reticulated white. The s are often flecked with purple. He feet.

Mme. Cheri (Sturtevant, 1918).— quisite colour effect, pink at a dist wine-red shot with yellow, F. A violet washed with pink. Height, 4 strong, robust plant.

May Sadler (Perry).—A particul coloured Iris. S. violet-rose, F. dee a dark bronze beard. Height, 3 feet

Memory (Yeld).—This is one of M oldest introductions, and gives a colour effect of pale mauve a Height, 2 feet.

Menetrier (Denis, 1921).—A tal ing Iris of Riccardi parentage. S coppery-yellow, F. similar in co overlaid plum, heavily striated at and with a golden-yellow beard. 3 feet to 3½ feet.

Moonlight (Dykes, 1923).—This standing Iris, very vigorous in gr free-flowering; flowers of great pale yellow, F. smoky-sulphur with gold reticulations at haft; large lem beard. Height, 2½ feet.

Mrs. H. F. Bowles (Perry).—O Perry's best. When seen with the s through the blooms the falls app red. Stems are stiff, about 3 feet high, bearing many medium-sized S. soft brown, overlaid gold, F. g The plant is vigorous and has very foliage, the bases of the growths b purple.

Pioneer (Bliss, 1924).—This is a r Iris and is quite a distinct departure Dominion strain with which Mr. Bl is generally connected. It is real purple self of fine proportions, and is about 3 feet to 3½ feet in heig plant is vigorous.

Queen Caterina (Sturtevant, pale, smooth, lavender-violet self. very large and of beautiful smoot Height, 3½ feet. The plant appe pretty hardy and quite free-flowerin Iris will eventually supersede Mlle. I think.

; NIXE (G. and K., 1910).—This com-
ly old Iris is still quite at the top of
ir class, and should be in every Iris
however small. Height, 3 feet. S.
:. rich violet-purple.

IRE (Dykes, 1922). An early-flower-
rf variety. Height, 2 feet. It is an
is for mass effect, being very free-
g and of very showy colouring.
'-blue self with conspicuous yellow

OLE (Fair, 1920).—An American
f a particularly red tone, and on this
exceedingly valuable in any collec-
he S. and F. are reddish-violet and
d prominent and buttercup-yellow in
A good grower.

A (Bliss, 1924).—One of Mr. Bliss'
oductions of late years. The colour
ghter tone than any of the other
ns and is more distinctly red. The
re 3½ feet high and branching. S.
tinged ivory-yellow at the base, F.
red-violet with close light brown
ons at the haft.

NIR DE MME. GAUDICHAU (Millet,
This is the most brilliant violet-blue
n existence, and never fails to at-
There is nothing quite like it, and no
ing should be without it. Height,
feet to 3½ feet. Vigorous grower.

NIR DE LŒTITIA MICHAUD (Millet,
hybrid of Riccardi and Corrida,
my mind, the best French introduc-
ecent years. Very tall stems, 4 feet
in height, bearing flowers of great
good texture. S. Lobelia-blue paling
rds the edges, F. similar in colour
ed with yellow on white ground at
The growth seems to be vigorous,
plants have increased well and
freely.

ICHAEL (Yeld, 1925).—This is Mr.
test introduction and promises to be
ant. The stock, however, is as yet
t the original plants have increased
and it is a vigorous grower. The
ikes are tall and erect, and 3½ feet
he flower is chiefly remarkable for
olouring of the falls, which are rich
colour, suffused red-brown at the
d of good velvety texture. The
are lavender and stand rather too
pen. The beard is exceptionally
d of reddish-gold colouring. The
undoubtedly a striking one in
olour effect and texture.

, syn. ochracea cœrulea (Denis,
very late-flowering variety of
olouring and beautiful form. S.
F. coppery-yellow, heavily suffused
the centre of the blade and reticu-
vn at the haft, with prominent deep
eard. A good grower. Height,

E (Bliss, 1922). A Dominion seed-
eep colouring. The standards are
t-purple tinged dark maroon-purple
entre. F. rich velvety blackish-
reticulated brown at the haft.
feet, and free-flowering.

Bliss, 1921).—An immense-flowered
e Dominion race, but of a not par-
pleasing colour. Up till this year I
nsidered that Titan was a much
Iris, but the general carriage of
rs and the vigour of the plant have
veighed my objections as to colour,
fter all, is not so bad. S. light
, F. violet-purple, deeper in the
and conspicuously reticulated on
the haft. Height, 3 feet, and free-

Bliss, 1925).—This Iris, which is close to Dominion in colour, is very free-flowering, in which respect it differs markedly from Dominion. It is, furthermore, a more vigorous grower and flowers late. Height, 2 feet 6 inches.

In conclusion, it will be observed that the foregoing list contains mostly Irises of recent introduction, and therefore, in many cases, the more costly varieties. There are very many of the older-named varieties which are well worthy of a place in any collection, and many of which I have had in my garden for years past. Those concerning which I have written these notes are, however, in my humble opinion, amongst the best obtainable at the present time.

Planting Irises

What is the right time of year to move Irises? I am wanting to have some big clumps in my herbaceous border. This is sandy, light, dry soil. I should be glad of any hints. They have been in one place a long time and do not flower at all well. Would it matter replanting them now?

Near Gt. Yarmouth. V. B.

[The correct time for planting or transplanting is a much-discussed matter, but experts are generally agreed that the best time is soon after the plants have finished flowering. This, when the root action of the Bearded Iris is considered, is clearly correct, as the plant, thus treated, has time to form its fibrous roots and to become established before the winter sets in. Late autumn planting is not to be recommended, as it is bound to be attended by a certain amount of risk from early frosts, which will "heave" the plants out of the ground, owing to their not having had time to get hold. By "late" is meant after the third week in September. Spring planting (in March) is advocated by some, who prefer to sacrifice the first year's bloom in the hope of getting better results the following year.

A few remarks on actual planting may be of interest to those intending to grow Bearded Irises. (1) Do not plant deeply. The rhizome, or root stock, should be only just covered. The plant must have sun to ripen the rhizome, as upon this ripening the flower supply depends. (2) Take care to spread out the roots carefully. A little trouble in this respect is well repaid. (3) Plant firmly, particularly in light soils. (4) Plant about 12 inches apart (single rhizomes). This gives the plant a chance to develop, and, furthermore, admits sunshine and allows air to circulate, both most essential towards the health of the plants. (5) Do not trim off foliage, unless it is actually broken or brown, nor roots, unless they are damaged.

No plants pay better for good cultivation than the Bearded Irises. Besides actual cultivation, however, two main essentials are needful. (1) The *position* should be a sunny one. (2) The *drainage* must be good. For these reasons a position on a slope facing south or south-west is the most desirable. This ideal, however, cannot always be realised. If special plantings of Bearded Irises are to be made, the beds should be raised slightly, thus ensuring good drainage. The beds should not be too wide; about 4 feet 6 inches is a nice width. Very wide beds are unworkable and difficult to keep clean, and result in a certain amount of damage to the plants caused by having to "stretch over."

Broad grass walks between beds of various designs make an attractive feature, and Bearded Irises thus treated show to the best advantage. A background of some kind of evergreens is most desirable; in fact, essential for really good effect. The question of

SOIL need not be a vexing one, as almost any will suit, but the best results will be obtained by planting on deeply-worked rich soil. If it is desired to prepare a piece of ground specially for the reception of Bearded Irises early Potatoes are as good a crop as any for the purpose, as these ensure a good working of the soil in the first instance. The foliage, moreover, helps to smother weeds, and the ultimate crop is off the ground in time for planting the Irises. Lime is most beneficial, and if this is absent from the soil it can always be added and forked in before planting. Ground limestone is the best form of lime for the purpose, and is best applied in the form of small chippings of ⅛ inch to 1/16 inch diameter. Limestone dust is not so good, as it is apt to become sticky and impair the porosity of the soil.

The use of stable or farmyard manure is not to be recommended, as these only tend to encourage rank and sappy growth, and generally result in scarcity of bloom. If fertilisers are required a top-dressing of bone-dust or any of the commercial fish manures can be applied after the plants have started into growth in the spring. It is advisable, when planting, to apply a dressing of superphosphates to the soil, or else to dust the rhizomes with this substance.]

INDOOR PLANTS

Stephanotis floribunda

FOR a warm greenhouse there is no climbing plant more popular than Stephanotis floribunda. It is a free-growing climber that, according to the treatment given, may be had in bloom at different seasons. It is not at all a difficult plant to propagate from cuttings of the short-jointed shoots taken at a length of 3 inches to 4 inches in the spring and inserted in small pots containing sandy soil and plunged in a propagating-case, keeping close until rooted. When this occurs the cuttings should be potted on. If the young plants have an uninterrupted run at the roots they will grow vigorously, but seldom flower freely. Hence, if planted out, the space allotted to them should be restricted. The most suitable soil for the Stephanotis is good fibrous loam and peat in equal quantities, with the addition of coarse sand and broken charcoal to keep the compost porous and sweet. The shoots should be trained near the glass, as such a position being well exposed to the sun and light conduces greatly to the formation of flower-buds. After the season of blooming is over, the plants should be kept somewhat drier at the roots than usual for a few weeks before starting again, as they benefit by this rest. No pruning is necessary to assist the production of flowers, but when sufficiently large and the allotted space covered the weak and exhausted wood may be removed wholesale.

The chief enemy to guard against with the Stephanotis is mealy-bug, and the plants can be kept clean by an annual wash with Gishurst Compound, and if detected during the growing period a camel-hair brush dipped in methylated spirit and applied to each insect will prove sudden death. Where possible it is advisable to syringe the plants twice daily during the growing season until the blooms commence to open. Good drainage and ample supplies of water are necessary during the summer, and each autumn or early spring a few inches of the old soil should be removed from the surface of the bed and replaced with a compost as previously described.

W. E. WRIGHT.

Stockton House Gardens, near Rugby.

REMINDERS FOR THE WEEK

Southern and Midland

Early Potatoes

It is advisable where new seed has been planted this season to save a few tubers for next season's planting, especially where grown in pots and frames. I find the best results are obtained when the roots are lifted before the foliage becomes dead ripe. The tubers should be left on the bed for a few days to become dry, afterwards storing away in trays and boxes.

Globe Artichokes

Where the plants are bearing freely they should receive ample supplies of liquid manure to encourage strong growth. After stirring the soil well around the plants a heavy mulch of manure will benefit them and carry them on through the autumn.

Winter greens

Most of the plants are in their permanent quarters, and after the recent rains are growing away freely. Continuous hoeing is necessary to keep the surface soil open and the weeds in check. Autumn Cauliflowers, Broccoli, and Cabbage may have a little soil drawn up around the stems. A watch should be kept for the white Cabbage butterfly, and the plants occasionally sprayed or dusted with lime and soot.

Lettuces

Now is a good season to sow seeds of a reliable variety for transplanting later to cold frames for autumn and winter use. A sheltered border should be selected and a good working of the soil is necessary to form a fine tilth. All the Year Round is an excellent long-keeping Lettuce for the purpose.

Cucumbers

Top-dressing done regularly during the fruiting period of the plants is beneficial to the formation of new roots. A mixture of turfy loam, well rotted manure, and a sprinkling of bone meal are suitable. Syringing twice a day during hot days should be continued to keep red-spider in check, thinning the shoots when necessary.

Liliums

Where these bulbs were potted up in spring they will be rapidly progressing towards flowering, and where there are signs that the surface soil is becoming exhausted stimulants may be given in the form of weak applications of soot-water and liquid manure. Roots showing on the surface should be given a top-dressing of loamy compost, well pressing it down.

Iris tingitana

When ordering the earliest batch of bulbs for Christmas flowering it is well to mention that this Iris can be recommended. If the bulbs are potted-up during August and grown on in a cold frame until the latter part of November they will flower in a cool house at Christmas. I find this Iris is more successful when grown in soil that contains no nitrogenous manure.

Lilium candidum

This old-fashioned garden Lily resents root disturbance possibly more than any other, but in cases where the soil has become exhausted it is wise to lift, divide, and replant as soon as flowering is over. The bulbs are best set in groups, and not being stem rooted should not be planted too deeply; 4 inches is ample.

Rambler Roses

Some of the early-flowering varieties are now over, and there is no advantage in allowing the old flowering wood to remain. This should be cut clean out at the base where there are sufficient new rods to take their place. If these are backward in growth they may be encouraged by applying liquid manure.

Strawberries

Runners layered early in small pots are now sufficiently rooted and may be severed from their parent plants. It is advisable to stand the pots in a shady corner for a week or so before placing them in an open spot on a bed of coal ashes. Those required for forcing may be potted on towards the end of August. The compost for these should be mixed several days in advance. As soon as the new beds are prepared the remainder of the runners may be planted at once, making the bed firm and not burying the crown of the plants.

Peaches and Nectarines

As fast as the trees are cleared of their fruit attention should be paid to removing any old wood that is necessary to make space for the new shoots that have been retained. The trees should be thoroughly syringed with a nicotine insecticide. Air should be given night and day and great care taken that the roots do not suffer from want of water.

Late Grapes

Thinning of the berries should now be finished, and to encourage swelling of the fruit the borders should be well supplied with moisture. A good sprinkling of Thomson's Vine manure given every other week is an excellent stimulant to apply at this season. All sublaterals should be pinched at the first leaf. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Scotland

Hard-wooded plants

If, as was recommended some weeks ago, hard-wooded plants are now out of doors, plunged or placed upon a bed of ashes, they must be regularly attended to during hot weather. Azaleas, when setting their buds for next year, should be assisted by a little weak stimulant of some kind. I think nothing is better than soot-water for this purpose. Occasionally thrips may be troublesome, and, in a general way, thorough syringings with clear water applied with some force will dispose of this pest. Any obstinate cases ought to be treated more drastically, and such plants ought to be dipped once or twice in milkwarm water to which has been added the due proportion of an approved insecticide.

Lorraine Begonias

These should now be ready to go into 5-inch pots, and if it be necessary to increase the stock the tips of the young plants will readily form roots in the propagating-case. Young plants rooted at this season will form very useful pieces in 4-inch pots, a size which most people find to be a very handy one. While an unduly high temperature is not recommended, it cannot be gainsaid that, for a time yet, a brisk yet moist heat encourages the growth of the Lorraine Begonias. At times thrips may attack the foliage, but the observant eye will soon notice the fact, when the proper and prompt remedial measures should be taken. These Begonias do not like too much water.

Gloxinias

Admittedly easy to raise from seed of us have some favourite colours Gloxinias which we desire to incre such cases leaf cuttings ought no taken from the plants which it is d perpetuate and which have now ceas effective. Nearly-ripe leaves are bes nearest the base of the plant general the best. In the propagating-case th cuttings soon form roots, after which are formed which can be grown o usual manner in spring.

Roses

It is wise to set apart a day for moval of spent blooms. It is not suff pull off the withered flowers. They be cut off well down the stem, a growths will soon push from whic blooms may be expected. If insect p troublesome these ought to be dealt once. The practice of mulching R and borders with manure at this tim objectionable one. More good wil from the continual use of the hoe surface of the soil than from mulchi any material whatever. As rega climbing Roses, the stout young growths from which next season's bloom is to be taken must be ligh securely tied in to the supports.

Carnations

Many may think that it is, as yet, t to begin layering, but I am of opinion the grass is at all in good condition, t of the layering should be done in mound of gritty soil ought to be place the plants into which the layers can b pegged. Should the weather be dry a operation the layers must be water artificial supplies of moisture are no necessary. Roots will not form in d

Budding

The practice of budding Roses at h pears to be on the wane, but the oper a simple one. Those who yet follow custom are reminded that budding, case of Briers, ought to be underta soon as the bark runs freely and, if p during showery weather. Dwarf st Brier or of Manetti are easier to hand standards, because, in the former little of the soil can be removed from t and the bud inserted in the moist b vealed.

Wall trees

The summer pruning of fruit trees o is now due. The work is not of an e nature in the case of trees which hav their allotted space. While dealing w shoots see that the ties or shreds ar ciently stable to bear the enhanced during the autumn. It is desirable t nets be put on as soon after the s pruning is done as possible.

Cucumbers

Cut the fruits when they attain to a size, storing them, if the supply be than the demand, in moist sand. Sow seeds in bottom-heat for the provis plants for late autumn bearing. regular supplies of Cucumbers are de is wise to have a few young plants alw hand, either seedlings or young plants from cuttings. Tender and True and graph are reliable and good all-round ties. Plants in bearing must be top-d from time to time, and plenty of moistu heat are imperative. W. McGU

Mabie Gardens, Kirkcudbrightshire.

Roses in a Scottish Garden

AT promised to be an early Rose ason has, by reason of cold winds nd sullen skies, only managed to give g like an average earliness, and this, nied by a perfect plague of green-) way encourages one to hope for a e display. This is all the more to red, because of the fine, healthy made during early June by the of the bushes. The first variety to s season was Lord Charlemont, a bright crimson-red Rose of good growth and quite free-flowering. ul Lédé came next, but is of rather ur this year. It is, however, an

ll-round Rose here. Noblesse, a g grower and with lovely large, blooms of pale pink with a dash uffused through it, has been quite len Emblem, always good in the stage, is somewhat less free- nan usual. Colonel Oswald Fitz- ping well, as usual, opening well, not for the lack of perfume would est dark Rose. Mme. Segond nuch finer than last year, but is unately, a strong grower. Mme. Melanie Soupert, as always, is superb. Mabel Morse, if only a little more robust in growth, would quickly oust most of the other pure yellow Roses. As it is, it invariably gives finely-formed flowers of good colour. Florence Izzard, only planted at the middle of March, has given a few good blooms, but the growth is nothing to boast about. Lady Inchiquin has made much better growth this year and is showing a good crop of buds, and the same can be said of Mrs. Henry Bowles, Henrietta, Betty Uprichard, G. C. Gaunt, Frances Gaunt, and Lady Roundway, all planted at the middle of March. (I picked off the earliest buds of these to encourage the plants to make growth.) Muriel Dickson is very beautiful, but not a hardy or robust grower. Lyons Rose is opening well and giving fine colour. Lady Pirrie has made fine bushes and is covered with buds, such flowers as have opened being very richly coloured. Los Angeles is doing well, but here is not a very robust grower. General McArthur is excellent, as usual, Mrs. W. J. Grant very fine, C. V. Haworth fine in colour, but blooms lack size this year. Varieties that promise well, but not yet in flower, include Alexander, Emslie, Ophelia, Mme. Butterfly, Shot Silk, Caroline Testout, Mme. E. Herriot, Richmond, Betty, Lady Elphinstone, Covent Garden, Una Wallace, Marjorie Bulkley, W. F. Dreer, Edith Part, Mrs. F. W. Vanderbilt, Pharisaer, Lieutenant Chauré, Mme. Maurice de Luze, Hugh Dickson, Lady Ashtown, Mrs. Wemyss Quinn, Mrs. Redford, Rev. F. Page Roberts, Earl Haig, Christine, and Isobel. After several years' trial I am afraid that Etoile d'Hollande, America, Donald Macdonald, Golden Ophelia, Margaret Dickson Hamil, Archie Gray, George Dickson, Mrs. G. Marriott, Mrs. Dunlop Best, Elsie Beckwith, and Irene Thomson must all go, never having done well in this garden, and seeing there are so many really grand varieties obtainable it is foolish to take up valuable space with those experience has proved to be unsuitable. Much better duplicate the "doers," and so reap the reward of the care and expense lavished on them. C. BLAIR.

Preston House, Linlithgow.

The Scottish Rose season

Owing to the almost tropical heat and the recent rain, Roses for the most part have done very well in southern Scotland. Many of them, owing to the reasons I have just indicated, have been of very unusual size and brilliancy. This has been especially noticeable in my Lyons Namesake, a fine specimen of which was recently sent to me by Miss Robina McGaw from her garden on the picturesque outskirts of the village of Drummore. In many parts of Scotland either the soil or the situation (when too much exposed) is unsuitable for its culture, for it requires both adequate shelter and a deep clay soil like that in which it is grown by Pernet Ducher at Lyons. In Logan Gardens, about 6 miles from here, many of the famous Pernettiana Roses are exceedingly brilliant this year, as in many former years. Among the most conspicuous of these invaluable creations are Mme. Edouard de Herriot, Rayon d'Or, Souvenir de Claudius Pernet, and the distinct Lyons Rose. I learn that in several other Wigtownshire and Kirkcudbrightshire gardens climbing Roses especially are highly effective, many of them being of fine colour and fragrance. I recently observed that in the environment of Dumfries the Wichuraiana Roses are largely grown. I was also much gratified to find that several of the older climbers, such as Gloire de Dijon, Bouquet d'Or, and Wm. Allen Richardson, are still being cultivated. One of the most exquisite of the older Roses is Mme. Alfred Carrière, which I still grow, and which is at present as beautiful as of old in the garden of Kirkmaiden Manse. Hugh Dickson, among brilliant and deeply fragrant Hybrid Perpetuals, is still very conspicuous; so also is Margaret Dickson. There are other Irish and English Roses whose popularity is abiding. Among these are "the fair Ophelia," Golden Emblem, and The Queen Alexandra. DAVID R. WILLIAMSON.

Tea Rose Homere

This charming old Tea Rose does well in a cool house. I have had a couple of trees worked on standard Briers in my Rose-house for the past 16 years. They bloom not only early, but more profusely than any other variety. The variety bears the hardest of pruning, breaking again and again with renewed vigour, and so freely as to render considerable thinnings needful. No sooner is one crop of rosy-pink flowers gathered, cutting the shoots hard in so doing, than another growth is made all full of bloom. T. H.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

Asters, fungus on

(T. Lane).—Your Asters have been attacked by a fungus for which, unfortunately, there is no remedy, for the moment the fungus attacks the plant it encompasses the whole of it, permeating the stem and tissues and killing it. All you can do is to avoid late watering, particularly sprinklings of water that wet the lowest foliage. The only possible cure is to syringe with sulphur. Take a double handful of this, mix it into a paste, then add more water by degrees. This should be sufficient for three gallons of water, which should be boiling, or nearly so, for the mixing. Dissolve two large tablespoonfuls of soft-soap, mix all together, and when cool spray the plants, especially at the base, not later than 4 p.m.

Plants for shady border

(J. A. S.).—From the contents of your letter it would appear you have a capital opening for not a few of the more plentiful of the Lilies, such, for example, as tigrinum in variety, croceum, candidum speciosum in red, rose, and pure white shades, umbellatum Thunbergianum varieties, and the like. In the less deep shade, Alstrœmeria aurantiaca, English and Spanish Irises, Day-Lilies, Spiræas of sorts, Lysimachia clethroides, Sidalcea candida, S. malvæflora, Rudbeckia Newmani, R. purpurea, Ranunculus aconitifolius pl., Solomon's Seal, Lily of the Valley; here and there in patches, Canterbury Bells, various kinds of Campanulas, Lenten Roses, Christmas Roses, Senecio Doronicum, Anemone japonica, red and white kinds; Oriental and Iceland Poppies, the taller Evening Primroses, single Hollyhocks, and the like. Where opportunity offers, try Gladiolus and early-flowering Chrysanthemums, and a few Michaelmas Daisies. Farthest removed from the front you should plant Pyrethrum uliginosum, Tritoma Uvaria, and the tall perennial Sunflowers. These and others of the same class are invariably happy in the kind of soil you have. Any of the Wichuraiana Roses are suitable for planting at the top, allowing them to cover the bank behind the hardy flowers.

Lilies from seed

(W. K. J.).—There is no necessity to disturb your Lilies this year, and nothing would be gained by your doing so. Allow them to grow as long as they will, and then ripen off naturally. During the winter these should remain in the pans, which should be placed in a cool, frost-proof frame. Early in March the bulbs should be shaken out and transplanted into boxes filled with a mixture of good fibrous loam, peat, sand, and leaf-soil, planting them 3 inches apart. If, however, it is desirable to transplant them to open borders this should be done the first week in April, planting in lines 8 inches apart and 3 inches between the sets.

Raising the common Bluebell (Scilla festalis) from seed

(Bognor Reader).—Sow the seeds without delay in a cool and partially-shaded position, preferably in a frame where they are more easily attended to, for although they germinate freely in a cool, shaded wood, and in free, open soil, such a position is not always available, therefore you may either sow them in a light, sandy bed made inside the frame or in boxes of the same material. The seeds should be covered with ½ inch of fine soil, and after a thorough watering keep the frame closed and shaded until germination has taken place, when light and air should be admitted gradually, removing the sashes altogether when the seedlings have been through the soil a fortnight. They will be large enough to plant out in permanent quarters in two years. If you care to sow a portion of your seed in the open, place branches over the seed-bed until they are through the soil.

Carnations and Pinks

(Mother W.).—Judging from your note the disease known as bud-rot (Sporotrichum anthrophilum) would appear to be responsible, and this is generally brought about by excessive moisture. Make up a fresh border of good loamy soil, leaf mould, and slaked lime on higher and drier ground and in full sunshine. We would also advise you to obtain an entirely fresh stock as the trouble with your plants is one very difficult to eradicate, the only remedy known to us being the constant picking off of the buds as they appear.

Black-spot on Rose leaves

(Field Fare).—The leaves have been attacked by "black-spot," a very troublesome fungoid disease, which is very prevalent on some sorts. We should advise you to spray the plants with Woburn Bordeaux paste, both now and throughout the season at intervals. It will be most effectual, however, if you commence to spray another year as soon as pruning has been completed. Be careful to burn all prunings and all decayed foliage.

Increasing Nepeta Mussini

(H. B. D.).—The best time to divide your Nepeta is the first week in April, when you may lift and divide the plants to any extent, as even the smallest portion will grow if it is detached with a root or two and not allowed to get dry for 10 days or so. You may also take cuttings at the present time, inserting them firmly in sandy soil and in a shaded border, when a good percentage will root. Your cuttings should be torn from the plants with a little of the old wood attached, and should not be more than 6 inches long. Plant firmly, especially the base of the cuttings, and give a good watering to settle them down. A few large Rhubarb or other leaves placed over them for a few days will prove of great assistance should the weather continue hot and sunny.

Chrysanthemum leaves attacked

(M. B.).—The leaves of your Chr mums are attacked by the grubs Marguerite Daisy-fly (Phytomyza This insect also infests Cinerar Chrysanthemums. Cut off and b leaves that are so bad as to be usele plant, and hold the others up aga light, when you will be able to see w grubs are. Then pinch the leaf at t and so kill the grubs. This may be but it is very effectual.

About Pinks

(H. B., Woodside).—(1) Anne Bo Eelworm damaging roots. Before on same ground again give the soil ing of some soil disinfectant. (3) advisable to take pipings from plants in this way.

TREES AND SHRUB

Pruning Syringa, pink Spiræa, Snowberry

(H. B. D.).—The pruning may b out any time during the winter, and treatment applies to all you mentio as follows:—Remove all old, thin, branches and sufficient of what re admit of sunshine and air reaching of the shrubs, topping back to th height any unusually strong shoo would prevent the formation of a bush.

FRUIT

Fruit trees for north wall

Will you be good enough to let what fruit trees, apart from the Cherry, are best for a north wall?

[In most gardens walls having a aspect are used for the cultivatio Morello Cherry, which, we think, as in many parts of the country o trees, such, for instance, as ch dessert Plums, succeed admirably walls, to say nothing about Red a Currants and dessert Gooseberries Morellos are in demand as late as be had it is then necessary to a trees a position where they will b from the sun during the hottest p day, and such a position with the amount of shade they experien grown on a north wall. For the ea ply, Morellos may just as well be bushes as not, for they bear he grown in this form, while the f fruits are quite as large, and they h long time if netted over. If this is space they would otherwise occup walls can be utilised for the gr Plums as indicated above. Those to provide a large and varied desser the autumn months know full well of having a few trees of choice dessert Plums to fall back on wh fruits other than Grapes begin t scarce. Such kinds as Coe's Gold Jefferson's, and Ickworth Impérat hang in good condition quite as lo Cherries if covered with coarse n very thin tiffany as a protection birds, wasps, and flies while they ing.

No special culture is needed for Plums on such a position, and, a owing to their flowering later than in the open and those on wall warmer aspects, they escape th frosts and invariably set good crops Where north walls are of conside tent, and the climate suitable, w strongly recommend that a portio same be devoted to the growing o Plums for late autumn supply. Goo

a very profitable crop when grown
walls, and the fruit may be had
er than when grown on bushes. The
to grow these is as cordons with
ee to five branches, which should be
erpendicularly in the same manner
t cordon Pears or Plums. Currants
Red and White varieties bear most
grown in the same way, and come
after the fruit on the bushes out in
garden has been gathered. Where
ruiting Raspberries are grown,
Currants are doubly useful, as they
be utilised for tart-making in addi-
being useful as an adjunct to the

nt of early Peaches

two, Hale's Early and Royal
They are putting out a large
f growth. Should they be pruned
t is, some of the growth taken out?
is about the size of Walnuts. The
about eight years old. The Royal
as about 50 fruits on it; Hale's
y one. Royal George is a year or
The trees are in very good heart,
en lifted and root-pruned two years
y did well last year. P.
regard to the first part of your
number of young growths should
d so that enough and no more are
rnish the trees with bearing wood
s for another season. This should
done directly after the fruit had
n performed at this period this is
"disbudding," and consists in
in a tentative manner to start with
pointing in an outward direction
earing or flowering wood. This
art should then be made with those
n the sides of the bearing wood,
reducing the number of these in
way until but two are left at the
ne at the tips to draw the sap for
hment of the fruit, and to allow
tension of the trees. If there is
for the two basal shoots to be laid
educe them to one, giving that on
side the preference. When pro-
ated this young wood should stand
hes apart all over the trees. This
erve as a guide and enable you to
best to deal with the growths now
the tree, only instead of removing
the finger and thumb, as when
, recourse will, we surmise, have
to the use of a knife to effect their
o that neither bark nor wood is

ds the fruit, this, as soon as it has
—*i.e.*, when the seed vessels have
te hard—must be thinned down to
One fruit to every square foot
covered by the trees is the proper
leave. In carrying out this
ive as far as possible those fruits
nce which are situated on the
of the wood or branches, as they
ount of being fully exposed to the
re highly coloured and of richer
those which ripen in semi-shade.
mportant that the border does not
d the trees suffer from want of

on fruit trees

ry and Plum trees, also Currant
affected as the enclosed. Can
the cause and remedy?
ROBERT HARDISTY.
appear in countless numbers on
trees in spring, and the young
a few days are covered with
owards the end of April the
ed black-flies may be seen hover-

ing about the expanded flowers, and as they have young broods, and these again give birth to others, their number increases very freely. In the case of the black-fly prevention is better than cure, and if plants on which they live are made distasteful to them by the application of some insecticide as soon as they make their appearance their numbers will be considerably reduced from the first. The flowers are too tender to admit of anything being used in the way of spray after the buds have expanded, but such may be applied a day or two before, and unless the weather is showery during the time the trees are in bloom this will in all probability act as a deterrent till the fruit is set and it is safe to wash the trees. It is not the quantity of liquid applied, but the way the work is done, that makes it effective, and it is necessary that every particle of the foliage and wood should be wetted with the insecticide, for if any is missed the pest will survive, and in the course of a few days be as numerous as ever. Morello Cherries and those on an eastern aspect are more subject to aphis than trees on south and west walls. If when first observed a weak solution be applied, this will probably arrest their progress, but if they are allowed to increase there will be some difficulty in coping with them. It is the early spring broods that are the most persistent; if they are kept in check till the foliage is fully developed the trees will usually outgrow the later brood, the weather being more favourable to plant growth. Of the remedies recommended for the destruction of these pests the simplest is a fine spray of Quassia solution. This, however, cannot be applied to Cherry trees after the fruit has stoned, for, no matter how the fruit is washed with clean water afterwards, it is sure to taste bitter. If a fine spray be used as soon as the fruit is set this will not affect its flavour. On old walls it is a good plan to use a strong solution in winter, as there are many hiding places for these troublesome little creatures to shelter in. With Peaches, if this be done just before the trees are nailed, there need be but little fear of the flies making headway, as before they have time to increase very much it will be safe to wash the foliage.]

Part of Messrs. Sutton and Sons' exhibit at the Royal Agricultural Society's Show at Reading

VEGETABLES

Vegetables in water-logged ground

Can I grow vegetables in water-logged ground in which the permanent water-level is about 1 foot below the surface, and, if so, what sorts? The surrounding ground is so level that there is little chance of efficiently draining it. The soil appears to be about 3 feet to 5 feet deep and is good loam, not mud, and appears to have been well limed at one time. It produces Marsh Marigold, Ragged Robin, and Wood Chervil in perfection; and where it has been thrown into ridges, Michaelmas Daisies, Montbretia, Flag Irises, and Lilacs do well, but to ridge it all would be an expensive operation. I should like, if possible, to grow vegetables on the untouched parts, and should value any suggestions. A. H. WOLLEY-DOD.

[If the water cannot be drained away from the ground in question we are afraid you would not succeed in getting vegetables to grow on it. The only thing we can suggest is that if you have spare soil lying about, or if you could get a quantity of road sidings from bye roads (not main roads), would be to cart them on to the plot and incorporate the material with the staple. If you could by these means increase the depth of soil above water-level to 2 feet or 3 feet you would then succeed in growing vegetables on it of all descriptions.]

New Zealand Spinach

I would be much obliged if you would advise me as to the best way of growing New Zealand Spinach. Does it require a rich soil, and can I raise it in nursery beds and plant it out later on? At present I have very little room, but would like to have as much as possible for winter use, as we use it a good deal. R. N.

[It is somewhat late to sow, though even now, with good culture, excellent results may be secured, as this variety makes rapid growth in dry weather. This Spinach is quite distinct, having a thick, succulent, very tender leaf. The soil for this crop must be well enriched, as, owing to its quick growth, the roots require much food. For an early

supply it is best to sow in boxes or pots in frames and gradually harden off. If this plan is adopted, seed should be sown late in March or early April, planting out a month or six weeks later, according to the weather. Sow very thinly, or thin early, to get a strong plant, and, when planting, care should be taken that the ball of soil is not broken. Plant in rows 3 feet apart, and if the weather is dry, water freely. In the open, seed may be sown in May or June in rich soil, well thinning so as to allow each plant plenty of room. Give plenty of water, with occasional doses of liquid-manure, when the plants are bearing freely. This Spinach is useless for late autumn or winter supply, as the first frost destroys it. For the autumn and winter you should sow the Round-leaved or Victoria and the Prickly-leaved or Long Standing, doing this early in August in rows 15 inches to 18 inches apart, and thinning freely in the autumn.]

MISCELLANEOUS

Pyrus japonica jelly

(A. E. G.).—Peel the fruits as thinly as possible, throwing them into a basin of cold water to keep them from discolouring. Allow for each pound of fruit three pints of cold water. Put the fruits into a preserving-pan, bring them quickly to the boil, and let them boil until quite soft. Strain the water from the fruit, pressing out the juice only. Weigh the water and allow a pound of the best cane sugar to each pound of water. Put the sugar and water into a clean preserving-pan and boil quickly, stirring constantly after the sugar is melted. When a little dropped on to a plate jellies, pour at once into hot jelly-moulds or gallipots. Cover while hot with white pasted paper, and store in the usual way. A nice jam can also be made of the fruits. For this they must be cored, allowing a pint of water to each pound of fruit, the water and fruit being weighed together. Allow, as for the jelly, a pound of sugar to each pound of fruit and water, then boil as for the jelly.

Destroying ants

(John Adams).—If you can open the nest and pour in boiling water this will soon settle the business. If the nest be in a position where it cannot be reached they may be trapped wholesale by taking a garden-pot, stopping up the hole at the bottom, and turning it upside down near the entrance of the nest; then water the ground round the nest well and frequently. The ants will soon begin to remove their nest to the shelter of the pot, which, in the course of a week or two, will be found full of ants and their nest. The pot and its contents can then be thrown into boiling water. If the nest is in such a position that this plan cannot be adopted you must persevere in trapping the ants with pieces of sponge, soaked in treacle, or treacle spread on pieces of tile, slate, etc. Saucers of sugar-and-water, etc., chloride of lime, paraffin, or diluted carbolic acid, thrown about their haunts, may drive them away.

Spray fluid for slugs

Could you, please, give me directions and the proportion of aluminium sulphate and lime-water advocated last summer for killing slugs? M. McI.

[The spray fluid which was recommended by Mr. Hodson, of Seale Hayne Agricultural College, for killing slugs was made up as follows:—Take ½ lb. of good quicklime and slake it in 4 gallons of water; stir well and allow to settle. When the liquid is clear carefully pour off the liquid into another vessel, leaving the excess lime and sediment in the bottom of the first vessel. Then take 1 lb. of aluminium sulphate and dissolve it in 1 gallon of water. When dissolved add it to the clear lime-water, stir well, and strain the mixture through a fine piece of sacking. It is then ready for the spraying-machine. Success with all methods of control for slugs depends to a large extent upon whether they are hit with the substance that is being used. You should remember that in dry weather slugs only leave their resting places to feed at night. This being so, it is almost useless to spray except after sundown. The recipe then is ½ lb. of quicklime, 1 lb. of aluminium sulphate to 5 gallons of water, made up as above.]

Silver leaf

(J. P.).—Your trees are certainly affected with silver leaf. As to whether the trouble has been caused by the fungus Stereum purpureum or is due to Chlorosis we are unable to state without more evidence. If S. purpureum is the cause of the trouble, and we are inclined to think that it is, the cutting out of the affected portions is the only method of control. You state that there is no dead wood in the trees. That being the case, we should recommend you to give them another year, because if the trees are fairly vigorous they may recover. Chlorosis may be the cause of the trouble, and, if so, treatment with iron sulphate should put matters right. We should advise you to try giving the trees a thorough soaking with a solution of iron sulphate. Dissolve 12 ozs. of sulphate of iron in 30 gallons of water. This treatment is best done in spring. Some of the leaves you send have got some little brown circular patches present. These are caused by a fungus called Cercospora circumscissa, Sacc. Please see reply to "Peregrine," which deals with this disease on Peach.

Gooseberry sawfly

(W. A. B.).—In our opinion the best method of control for an attack of Gooseberry sawfly is to spray with a good nicotine wash. Failure is often recorded after spraying with nicotine because the operators do not do the job thoroughly. As soon as the spray fluid begins to wet the bush the majority of the caterpillars drop to the ground, and unless these "droppers" are well drenched with the spray fluid they crawl back up the stems again as soon as the foliage is dry. If people who are using nicotine washes would always remember that nicotine is a contact wash and not a stomach poison they would obtain a great deal more success with this class of insecticide. Spraying with nicotine should be repeated when necessary so that the different generations can be dealt with.

Starved Lawns: Sulphate of ammonia for

(Sussex).—Sulphate of ammonia is generally applied at the rate of 1 oz. per square yard. Such a dressing kills certain weeds which have flat foliage, such as Daisies and Plantains. At the same time certain grasses are encouraged to grow. Some grasses are stimulated very much by sulphate of ammonia, *e.g.*, Timothy, Sheep's Fescue, Meadow Foxtail, Cock's-foot, Sweet Vernal-grass, etc., etc. We cannot give you the actual amount of sulphate of ammonia that will be required because we do not know the extent of the lawn outside the playing area. The actual playing area of a double court is 78 feet by 36 feet, or 312 square yards. This area would require 19½ lbs. to give it a dressing at the rate of 1 oz. per square yard. To get the full amount required, measure length and breadth in yards and multiply together; this will give you the area in square yards. It is then easy to work out the an quired in lbs. Spring is the best apply sulphate of ammonia. In th a starved lawn it is a good plan t top-dressing of chalk and loam in following this with sulphate of am the spring. Mix the top-dressing m the rate of one part chalk to th loam, use loam that is free from we and apply the mixture one-quarter i over the lawn, allow the winter wash it in, and then sweep off th before applying the sulphate of am spring.

The shot hole fungus

I am sending some Peach leaves examination. They appear to be by some fungus disease, and I thankful if you could advise a getting rid of it. The trees have ca finished a good crop of fruit—pick menced on May 19th—and up to trees have been quite healthy and trouble. This disease is causing t to fall very rapidly and the trees wi bare. PER

[Your Peach leaves are affected hole fungus, which is caused by the known as Cercospora circumscissa This disease attacks Apricot, Cherry, Plum, etc. At first the forms pale circular patches on th These patches produce spores whi ripe, float off and, alighting on anc set up another centre of infection. the circular patches become brown a drop out entirely, leaving the w "shot holes." We should advis carefully rake up and burn all the le drop from the tree. Spraying th once with dilute lime sulphur wou arrest the spread of the disease. N you should again spray with lim just as the leaves are expanding, a at intervals. You must be careful strength of lime sulphur because it burn the Peach foliage. If you a in stating that the disease has onl peared we are inclined to think tha your trees outside the Peach-h affected and that the spores from t set up the trouble in your Pea Examine your Plums and Peache and see if you can find the sour trouble. Give the house an extra at the end of this season. If you off the top 2 inches of soil and rep some fresh material so much the be

Soil analysis

(L'allegro).—We do not under analysis of a soil sample, neither do that in your case it would prove of v use even if it were done. We amined the sample you have sent a that it contains no reserve of lime, it is slightly acid in character. W advise you to give a dressing of qui the rate of ½ lb. per square yard, use chalk, 1 lb. per square yard. ing of lime or chalk should be autumn and forked into the surf sample appears to us to be short c matter and worn out. It would im soil very much if it could be trenche at the same time a generous appl farmyard manure. There seemed certain amount of clinker preser sample. This does not improve fruit culture. In the absence of we are inclined to think that Currants have outlived their usefu would be better grubbed, and when improved the soil, as suggested a border could be replanted. We ca gest a reason for the Raspberrie unless it be the poor soil.

WHITELEGG'S IRISES

THERE is a corner of your garden that can be made more beautiful next Summer by the addition of these lovely modern Bearded Irises, most of which have been described and recommended in the pages of "Gardening Illustrated."

mbassadeur	5/-	Asia	5/-	Ed. Michel	2/6
awn	2/6	Eldorado	2/6	Lord of June	1/6
ent A. Williamson	7/6	Prospero	5/-	Queen Mary	5/-
oline	2/6	Seminole	7/6	Rhein Nixe	2/-
agnifica	7/6	Shekinah	7/6	Afterglow	3/6

My catalogue will interest you.

For all the favourites, the year's novelties, and the best new seedlings refer to—

GEO. G. WHITELEGG——Nurseries——CHISLEHURST, KENT

Designer and Maker of Iris, Formal, Rock, and Water Gardens

N SPRAYING

FOR EVERY SPRAYING PURPOSE use the

TREE SPRAYING

ECLIPSE

"The Sprayer of a Thousand Uses"

Keep your trees and plants clear of insect pests by regularly spraying them with insecticide—and use the ECLIPSE Sprayer for the purpose.

It is easy to handle, no pumping, no back-wash, can be used in any position and allows both hands free to control the spray. Can also be used for disinfecting, whitewashing, etc.

Get one from your local dealer, or write us direct for Illustrated Folder entitled "War on Disease."

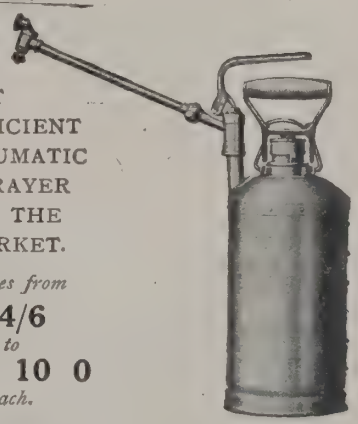
ECLIPSE SPRAYING CO., Dept. N, Bearwood, Smethwick, Birmingham

Price complete with Lance, Two Nozzles, 10ft. Rubber Hose & Strainer **30/-**

The "MARTSMITH" *SPRAYING SPECIALITIES*

THE MOST EFFICIENT PNEUMATIC SPRAYER ON THE MARKET.

Prices from **34/6** *to* **£17 10 0** *each.*



CAPACITY FROM TWO PINTS TO TEN GALLONS.

FOR HAND, WHEEL, OR KNAPSACK PATTERNS.

Write for Catalogue to

MARTINEAU & SMITH

56-62, HOLLOWAY HEAD, BIRMINGHAM

Berberis fruits edible

Are the fruits of Berberis Darwini edible?
A. E. G.

[The fruits are too acid for use in a natural state, but they make an excellent refreshing preserve for which Rouen is particularly celebrated. They are also candied, and when green are sometimes pickled in vinegar. The inner bark affords a bright yellow dye.]

LATE REPLY

Lilium candidum failing

(Lilium).—The bulbs you send have fallen a prey to the disease which has of recent years worked great harm with this beautiful Lily; so much so that in many gardens it has been totally destroyed. The disease is, as a rule, considered to be caused by a fungus, and various remedies have been tried to cure it, but none have proved successful. Perhaps your greatest chance of success will be to lift the bulbs immediately after flowering and replant them in another part of the garden, taking care, before doing so, to see that all decayed matter has been removed. Lifting the bulbs and shaking them up in a bag of sulphur have, in some cases, proved a remedy, while in others lifting and baking in the sun and replanting almost on the surface have proved efficacious.

SHORT REPLIES

C. D. Lawe.—Impossible to assign any reason. Very probably due to a check in some way.

A. Clarke.—Your best plan will be to write to the Secretary of the Royal Horticultural Society and ask him to send you the "Rules of Judging," price 2s. 9d., post free.

NAMES OF PLANTS

P. H., Devon.—1, Stachys lanata; 2, Othonnopsis cheirifolia; 3, Sedum confusum; 4, Phlox setacea var. lilacina.

B. Hunn, Hankeland 125, Bergen Merw.—1, Dianthus superbus; 2, D. squarrosus, seedling form; 3, Aster mesa-grandis (Erigeron m.-g.); 4, Centaurea atropurpurea; 5, C. dealbata.

G. H., Queenstown.—1, Mauve: Galega officinalis Hartlandi; 2, Blue: Anchusa italica; 3, White: Alyssum strictum; a worthless weed generally introduced with packing material. Annual, and seeds itself about freely and becomes a nuisance.

V. Haig.—Escallonia exoniensis.

S. D., Dublin.—1, Maiden's Wreath (Francoa appendiculata); 2, Spiræa Bumalda Anthony Waterer; 3 and 4, forms of Veronica speciosa.

Devon.—Impossible to name from such a specimen as you send us.

R. L. F.—1, Campanula muralis; 2, Hieracium aurantiacum.

Benn Brothers' Other Journals

The Cabinet Maker.—"Britain's Economic Plight," by Frank Plachy; Retail Advertising; The Supply of Craftsmen; Notes from the Home Journals.

The Chemical Age.—Congress of Chemists: Report of the Annual Meeting of the Society of Chemical Industry; Exhibits at the British Chemical Plant Exhibition.

The Electrician.—"Polyphase Commutator Apparatus," by F. Creedy; A New Phase Advancer; Electricity and Artificial Silk.

The Export World.—The Government's Scheme for Credit Insurance; "Selling Campaigns," Article II., by Eric N. Simons; War Debts and their Effect upon Europe.

The Fruit Grower.—"Problems of Production," by D. E. J. Kraus; Railway Rates Tribunal; Tables of Charges; Kent and Tamar Valley Fruit Shows.

The Gas World.—The Value of Co-Partnership in Industry; Room Heating by Gas; Some Patents.

Gardeners' Orphans

MANY excellent speeches were made at the annual festival in aid of the Royal Gardeners' Orphan Fund recently held at the Hotel Victoria, Northumberland Avenue.

Mr. G. J. Nicholls, C.C., an admirable chairman for the occasion, made a fine appeal on behalf of the fund, to which Mr. Edward Sherwood, J.P., responded. Mr. Sherwood is the Hon. Treasurer of the Fund, and he read some poignant letters expressive of the thanks of widows for assistance given in bringing up their fatherless children. Some of the children have made splendid headway in life and are ever grateful for the aid and kindly assistance of this deserving fund.

Mr. Leonard Sutton, C.B.E., J.P., proposed "The Visitors," making happy allusion to the joy of visiting gardens.

The speech of the evening was that by Lt.-Col. F. R. Durham, C.B.E., M.C., the newly-appointed Secretary to the Royal Horticultural Society. Col. Durham very fittingly responded to the toast of the visitors. It was almost his first public appearance after his appointment, and he assured the company of his desire as Secretary of the Royal Horticultural Society to work in complete amity with their fund.

Since the establishment of this fund, 39 years ago, over £45,500 have been expended in maintaining and starting in life orphan children of gardeners, managers, and foremen in public and market gardens, nurseries and seed houses, elected by the subscribers to receive its benefits.

The children are brought up in private homes by relatives or other guardians selected by the Committee, and candidates, if eligible, can be nominated from any part of Great Britain and Ireland.

The fund has only an assured income (from investments) of under £400, and a sum of about £1,100 is required to pay the children's allowances in the current year.

An opportunity of rendering financial assistance is offered to all.

The Secretary (Mr. A. C. Bartlett, to whom contributions may be sent at 19, Bedford Chambers, Covent Garden) announced that the Chairman had given shares in his business sufficient to maintain one child in perpetuity, and that the total result of the appeal was £1,083 15s. The fund is still open and contributions should be sent to the Secretary at the above address. The Secretary will also be ready to give full particulars of this charity, which we recommend to the notice of all readers.
H. C.

Leeds Flower Show

Greater interest was taken in the two days exhibition promoted by the Roundhay Horticultural Society, and now adopting the larger title of the Leeds Flower Show, through the co-operation of the National Rose Society, which occupies the same "pitch"—the sports arena—for the holding of its jubilee exhibition. The Leeds principal Rose classes were included in their display. There were some particularly fine displays of Sweet Peas, Orchids, stove and greenhouse and herbaceous plants and cut flowers. One of the large tents contained quite a profuse collection of vases of wild flowers gathered by school children. It was one of the largest classes ever seen at a flower show, and the arrangement of many of the vases was extremely effective. The Ives Challenge Cup awarded to the school attended by children gaining the highest number of points for exhibits of wild flowers was won by the Moortown Council School for the third year in succession. Sweet Peas, unlike the Rose, seemed to have benefited by the heat, as they were in fine condition and presented a rich diversity of delicate tints. The end of one of t was filled by Messrs. Sutton and Son rich non-competitive display.

The National Rose Society's gold m the best seedling Rose was seci Messrs. Bees, Ltd., of Chester, for tl bloom, The Hon. Charlotte Knollys. Frank Cant and Co., of Colchester, the award for the best Rose in the men's section. In the class for table tions arranged for effect Mrs. Courtr was once again very successful Emma Wright Rose. Messrs. Man Hatcher, of Rawdon, had an excelle tion of Orchids, which gained for the Yorkshire Evening Post" trophy for trade or specialists' display. An int fact about these Orchids is that t raised from seed within seven miles c and among them is a new hybrid w been given the name Roundhay. He border plants were a good feature.

The Lord Mayor, in opening the s marked that there was no reason wh dustrial city should not be a garden c given the necessary care and intellige a city should not rejoice in the beau flowers and other forms of vegetati praised the collection of wild flower children, and said he could conceive way of teaching the young in the sch to appreciate the beauties of wild na to discriminate between one pla another, than in the holding of su petitions.

Mr. John Lambert, Chairman of t mittee, moved a vote of thanks to t Mayor, and said that many voluntary had done much for the success of th

A vote of thanks to Sir Berkeley M was proposed by Major J. D. Bircha who said that the election of Sir Be the head of the College of Surgeon honour not only to himself but to th Leeds.

Sir Berkeley Moynihan, in reply, m that he had one very serious misfortu life, in that he did not happen to be Leeds; but he had, in various ways repair the defects of his ancestors respect.

LEEDS HORTICULTURAL SO AWARDS.

TRADE OR SPECIALISTS' DISPLAY CHARACTER. — "The Yorkshire Post" Trophy.—1, Mansell and Ltd., Rawdon, exhibit of Orchids. gold medal.—Sutton and Sons, e Sweet Peas. Silver gilt medal.—Bl Nurseries (York), Ltd. Birchall R.H.S. Banksian Medal.—H. S. Wai Leeds. Penrose Green Cup and England H.S. Medal.—H. S. Wai National Sweet Pea Society's Medal Froggatt, Crossgates. Roundhay Re —F. Cant and Co., Colchester. medal.—Maxwell and Beale, Bri table rockery. Silver-gilt medal. and Co., Ltd. GARDENING ILL Medal.—W. Thornton.

Condition of fruit crops in Fra

The Ministry of Agriculture and has received the following report on dition of the under-mentioned fruit the Loire District of France. *Gr and Plums.*—These crops, althoug what later than last year owing to cold weather and rain in the springa pected to be of excellent quality and in quantity to those of 1925. Exp likely to begin at the end of August earlier. *Cider Apples.*—This crop is to be below normal and somewhat la last year. The major portion will be kept for home use, and only incond quantities will be available for expor

GARDENING ILLUSTRATED

·73—Vol. XLVIII. JULY 31, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

(Heuchera ·) 455
alleri ... 461
ɔying... ... 452
flower at
ant 452
Economic
... ... 462
s, shrubby 453
salignus 453
Zoysii ... 453
compound 462
ureus, seed
... ... 453
Daffodil, double, Queen Anne's 453
Dianthus deltoides Brilliant 455
EVERGREEN HEDGES 456
Flowers, arranging... 459
Fruit trees, watering 458
Gaillardia maxima... 451
Geranium armenum... 451
Geranium Endressi... 452
Grapes scalded 459
Haberlea rhodopensis 455
Herbs 462
Hints, practical... ... 456
Hydrangeas, blue ... 452
IRIS, A MAY FLOWERING 453
King Cup (Caltha polypetala), the great 452
Lettuce 462
Liatris, or Kansas Gay Feather 461
Lilies, Water, a new and destructive pest of 461
Linums, blue-flowered 461
Loganberries 452
Magnolia hypoleuca 543
Morisia hypogæa ... 455
Mustard and Cress ... 462
NOTEWORTHY PLANTS 457
Peach culture, outdoor 458
Peaches and Nectarines 458
Phyteumas 453
Plants, trailing and climbing, for balconies 456
Poppies, the Ryburgh 461
Potato failure, a ... 453
Rock plants, increasing 455
Rose Caroline Testout 452
ROSE DAINTY BESS, THE NEW... 451
ROSES, A CHAT ABOUT 465
ROSES, USEFUL ROCK 454
Sedum spectabile ... 452
Spiræa lucida (the Birch-leaved Spiræa) 452
Soil, improving 456
Strawberries, layering 458
Strawberry Beds, making new 451
Strawberry culture, hints on 458
Strawberry Madame Kooi 452
Summer growth, suppression of... 459
Veronica diosmæfolia 455
Woodlice and slugs, eradication of... ... 452

Making New Strawberry Beds

ime has arrived when new beds ɔe formed. There is no advantage ver in keeping plants after the r; indeed, many look upon the op as the limit, and discard the er securing runners, inasmuch as 'ear fruit is so small as to be hardly ; trouble. We share these views d the second year as the final, pre- make up a new bed with runners from plants put out the previous ɜ reason we advocate runners from lants is that they are more vigor- likely to give better results than n second-year plants. We should ı of taking runners from a bed been in bearing for three seasons, ery well that they lacked stamina, ɔnly fit for the rubbish-heap. It is at some amateurs, after destroying l, digging it over and manuring it, ıew runners there. This is a mis- a little consideration will suggest m of selecting another piece of No one would, if he could avoid it, :er greens on the same piece of which a similar crop had been previous year. It is just as im- ıt we should to select soil shed for an and popular ruit as the . It is well t the Straw- s well on heavy soils, t of us have ɜ best of the ve, we may ation in the ɜen on light led they are nd mulched ting season one may ɔd crops.

; THE SITE.

ay be on om which otatoes or as been was well as it will if any, im- in this ɔut where- l is decided ɔould be a ich is open air. If one lect a place in the garden having a south aspect and backed by a wall it will be found that fruit may be gathered frequently a week earlier than from beds in more exposed places. There is no better time than from the middle of July to the end of August for planting runners, and the first runners from the plant will, as a rule, be found the best and strongest. We like, if possible, to get runners as soon after the fruiting season as possible. This is more satisfactory than waiting until late autumn as some do to see what ground they will have to spare. Plant 2 feet (or more if it can be allowed) apart, with a foot or so between each runner. Firm planting must be the rule. If need be, they ought to be gone over again, as they are liable to be uprooted by worms. If runners have to be purchased it is best to trade with firms who specialise in Strawberries. We have known people offer runners to their friends, who have found out only too late that some were unfruitful. It is more economical in the long run to purchase from firms who make it their business to grow only the best varieties, and who are always on the alert to satisfy their customers. Avoid, in any case, accepting runners from beds that may have been in one place for years, as it will only end in disappointment, and all the time and trouble given to the preparation of the bed will have been in vain.

The new Single Rose, Dainty Bess
Salmon pink, with golden anthers and crimson stamens

NOTES OF THE WEEK

The New Rose Dainty Bess

WHAT a delightful single Rose is Dainty Bess! When first shown at the summer show of the National Rose Society last year it gained the coveted gold medal, and everyone who saw it was enchanted by it. There was a table beautifully decorated with Dainty Bess at the summer show this year, and it has also been well shown at Vincent Square. The petals, which are inclined to be fimbriated, are of a lovely shade of clear salmon-pink, while the golden anthers and crimson stamens add to the attractiveness of this charming Rose. It is sweetly scented, though scent is not its strong feature. We congratulate the raiser, Mr. W. E. B. Archer, Ashford, Kent, on having produced the most distinct and attractive single Rose of recent years. It is recommended as a bedding and decorative variety.

Gaillardia maxima

This Gaillardia is very showy at the present time, the individual blooms of great size, while their colouring renders them conspicuous in the border. There, however, these blooms must remain, for they are too large to be used effectively as cut flowers save, perhaps, for one or two vases in which height is desired. For cutting I much prefer the smaller Gaillardias, especially the clear yellow selfs which have a disc of the same colour. All are easily grown and may be increased from seeds or by division.

A SCOTTISH GARDENER.

Geranium armenum

Flowering from May to August, this Crane's

Bill is an imposing feature when bold grouping is resorted to. It grows from 2 feet to 3 feet in height and bears handsome branching spikes of rich crimson-purple flowers, each 2 inches across, with a jet black centre. Some object to its colour, but it is really a fine plant which, if carefully placed, may be used with excellent effect in the hardy flower border. This plant is also striking when grouped in the foreground of evergreen shrubs at the foot of walls, and it is also a suitable subject for grouping in the wild garden and in partially-shaded positions. It thrives best in a fairly strong soil.

Geranium Endressi

A choice plant is this, and yet one which succeeds with the minimum of trouble, for which reason it may be used in quite a variety of positions successfully. It grows from a foot to 18 inches high, and during June and July a profusion of most beautiful soft rose-pink flowers obscures the soft green leafage. As this pretty plant spreads freely, a plant or two will soon furnish sufficient material for an extended planting, and even give a surplus for naturalising in the grass, a purpose to which it is most adaptable and for which it should be more freely used than it is at the present time. E. M.

Spiræa lucida (the Birch-leaved Spiræa)

At its best at the present time this pretty Spiræa always attracts attention. It is a small bushy shrub with red stems and fluffy heads of creamy-white flowers which are very sweet-scented. It likes a sunny and fairly moist place, and well repays good cultivation.

Thorpe Hall. R. MOORE.

The great King Cup (Caltha polypetala)

A really handsome plant is this, and an ideal one for naturalising in low, moist places, such as along the banks of sluggish streams and by the margins of ponds, where its roots never suffer from want of moisture. I grow it in such places in quantity, but this does not prevent its use in the garden proper, where it has been planted in catchpits formed to arrest the rush of water on sloping land during severe storms. It flourishes amazingly in this position and flowers with great freedom. Some of the rich golden blooms, borne on foot-long stems, measure 3 inches across this year. Its immense leaves are handsome, and this, coupled with its robust constitution, renders it a plant of uncommon interest over a large part of the season. This plant will succeed in open water where the latter does not exceed 18 inches in depth, and if a few roots of Arrowhead (Sagittaria) are planted with it this latter plant will come up through the leafage of the King Cup and continue to bloom throughout the summer.

It is a first-rate bog plant which blooms freely during April and May, and, unlike our native King Cup, this kind carries eight petals to each flower, these being of a lighter yellow than those of C. polypetala. The amount of bloom, which entirely obscures the leaves, is amazing. M.

Sedum spectabile

One of the oldest and most popular of the Sedums is spectabile. When it commences to bloom we are near the gateway of autumn. It may be grown either in pots in a cool greenhouse or portico, or in a partially-shaded place in the garden, and associates well with tenants of the hardy fernery. The blossoms of this variety are a rosy-pink, but its attractiveness does not lie altogether in its flowers, as the foliage, of a glaucous nature, is also beautiful. WOODBASTWICK.

A giant Arum in flower at Kew

Considerable interest is now taken in the giant Arum (Amorphophallus Titanum), a native of Sumatra, which is coming into flower in House No. 10 at the Royal Botanic Gardens, Kew. The developing flower is some 3 feet in height, and will probably be fully expanded in the course of the next few days. The last time a specimen of this plant flowered at Kew was in 1889. The flower then reached a height of 6 feet with a spathe some 3 feet to 4 feet in diameter. This plant has a tuber 2 feet to 3 feet in diameter and produces a leaf one year and a flower in the following year. Last year a single leaf was produced on a long stalk which reached nearly to the roof of the house.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Strawberry Madame Kooi

MY experience is similar to that of "F. H.," as recorded on page 434 of GARDENING ILLUSTRATED, July 24th. Having grown it since its inception, with but disappointing results, I have recently discarded it entirely. I find that in the north of Scotland the bulk of the crop fails to ripen. Only on one particularly warm summer do I recollect this variety giving moderate satisfaction, and this causes me to wonder if this variety is a success in the south of England or Midlands, where the climatic conditions are more favourable. I have found that this variety, being very soft, is apt to get badly bruised in transit. ABERDONIAN.

—— "F. H." gives a timely warning to readers who contemplate planting new Strawberries this season when he refers to the bad qualities of this much-boosted Strawberry in the issue of July 24th. With him I quite agree. I planted several rows of Mme. Kooi three years ago and was so disappointed with it that I destroyed it. A reliable and good Strawberry of recent introduction is The Duke. Here we have an improvement on the old and universally-grown Royal Sovereign. It is more robust in constitution. In good seasons it may be a week earlier than Royal Sovereign. The fruit is of an attractive scarlet colour and produced on long stalks and of a good shape. It is ideal for forcing, and can be recommended for any situation or soil that will grow Strawberries at all. Omega is a good variety for late crops. The fruit, though not so large as in some varieties, is of delicious flavour and abundantly borne. It will certainly take the place of Givon's Late when more widely known. W. E. WRIGHT.

Stockton House Gardens, near Rugby.

Destroying ants

There has been a good deal of inquiry recently in GARDENING ILLUSTRATED as to how to get rid of ants in the garden, and I think it may be worth putting on record a method which we used in the vineyards in South Africa some 20 years ago. Ants there were very destructive among the young Vines, eating the shoots wholesale. Our method of getting rid of them was to make a bran mash, flavoured with a little golden syrup, and to a bucketful of mash we added two or three tablespoonsful of arsenic. About half a tablespoonful was placed at the base of each young Vine. The ants ate the bran mash and were poisoned by the arsenic. Certainly this was a most effective way, and by its application we very soon got c difficulty, and the young Vines were chance. This method might be appli small scale in English gardens, th might be advisable to place the p mash in boxes in which holes hav bored. The ants could then enter their fill, and the danger of poison lying about for birds or other animals up would be avoided. CLARENCE EL

Stevenage.

Rose Caroline Testout

Although the blooms of Caroline judged by present-day standards, may sidered too large and coarse, yet strong plant is grown on a wall, and is covered with bloom, few Rose would cavil at the display. It may esting to those who admire Caroline but who do not know its pedigree that the variety is a seedling from La Other progeny of that famous R Augustine Guinoisseau, sometimes c white La France, and which in colour, is an exact counterpart of its Duchess of Albany is, I think, not a but a sport from La France. It is of pink colour, and forces more read any other Rose I know. Mrs. W. and the less known Danemark are a lings from La France. The latter good for pot work. Mrs. W. J. Gr remember rightly, was raised in At one time I grew a variety know France de '89. Probably this was given to the variety provisionally, fo never met with it, under that nam It was paler than Duchess of Albany habit typically a La France.

A SCOTTISH GAR

Loganberries

Thanks for reply to query as to berries, on page 430, but I think it if that is the cause of failure. If does one account for plentiful crop joining gardens, where plants are sheltered than in that one from w non-setters were taken? I cann thinking it is a bad strain like one of sometimes in the American Black

E. B

Blue Hydrangeas

In reply to "A Scottish Gard letter on the above subject (issue Ju I can only advise him to read the ar letter over again; he will then find misleading in my statements. I "True Blue Hydrangeas," and not of a soft blue or mauve colour, an maintain that the ones like those se shows cannot be obtained without tr Mr. H. J. Jones, in his article (is 17th), bears me out in this statemen man with his wide knowledge and ex with these plants surely can be relie admit that bushes in the open ma their colour, as Theilor Bridgman his letter, in certain kinds of soil, b I have been unable to get them withc ment. "A Scottish Gardener" none that he considers are True Blue treatment. I should be interested other readers' views, both for and this subject, with plants grown unc and not in the open. W. E. W

Stockton House Gardens, near Ru

Eradication of woodlice and

I hasten to reply to W. E. Wrig 435 in the issue of GARDENING ILLU concerning frogs and toads. As Mr seems to surmise, and from inquirie made, it transpires that it was toads have mentioned, and not frogs as al corded. I am obliged to W. E. W drawing attention to this matter.

ABERD

Phyteumas

notes concerning Phyteuma como-
nd me that there are several other
of the Rampions which are well
or the rock garden. P. comosum
k, rather slow-growing, although,
m that, it does well enough
y position. I have a fine colony
gneri which has just (July 16th)
be effective, and its blooms are
er shade of purple than those of
m. P. Sieberi is a good thing with
rs, but it appears to object to any
sun, and might do better in a cool
shady place. Although rather tall
ck garden, the native P. orbiculare
place, but it is difficult—at least in
ence—to establish. Only rarely has
ted plant settled down, and I
although I have never experi-
at seedling plants might be prefer-
visions. W. McG.

pods of Cistus purpureus

readers have been good enough to
y inquiry, issue July 17th, page 420,
sent seed-pods of Cistus purpureus,
ry case these pods were immature
ined no trace of seed, so I am
ther convinced that this hybrid
ever, produces seed. C. purpureus
nly supposed to be a hybrid of C.
s x C. villosus, but, in my opinion,
ing is too deep for villosus, and C.
the more likely parent. My desire
of C. purpureus was to try and
theory in the resulting seedlings as
ready done in the case of one or
hybrids. B. Leach.
Headley, Epsom.

Magnolia hypoleuca

ng the above plant, mentioned in
le, page 419, July 17th, I would
you there is a plant (or tree) in the
f Mrs. Fleming, Kilmory, which
lowering now for the past six years.
is now over 20 feet high, and I
y more than that round. It
rst in 1920 with two lovely flowers;
us 36 blooms. In the three years
1922, 1923, and 1924, it flowered
rofusion. In 1925 we had only 12
t this year—it is just past—we had
looms. It was a grand sight, and
ne was noted a long way off. I
ite certain, but I fancy this was
1909. I was told by an eminent
wer this plant was the second
had seen. It is strange that your
lent who writes about this plant
across the Firth of Clyde, practi-
site. H. M.
lie, North Ayrshire.

Campanula Zoysii

tinct and, to me, the most beautiful
dwarf Campanulas, is now in full
d well worthy of a place amongst
ce subjects of the rock garden. My
ough only 2 inches in diameter,
graceful spikes 2½ inches to 3 inches
bearing five or six delicate pale
lue flowers tube shaped and curi-
ckered together just below the
his character is, as far as I am
t found in any other species of this
planted on limestone scree, made
Clarence Elliott advises, it is per-
py. Slugs are very partial to it.
an occasional dusting of Sanitas
discourage their attentions, but I
my plant with a low fence of per-
nc. I should be grateful if any of
ers can tell me the habitat of this
W. Leonard S. Loat.
ssey, Cornwall.

Queen Anne's double Daffodil

In reply to the query of F. A. Hampton I regret that I am without knowledge concerning why Queen Anne's Daffodil is so called. Perhaps another reader may be able to supply the information which is desired and which I myself would be glad to obtain. The writer's mention of Flora Eystettensis, however, recalls to my mind that Narcissus Eystettensis is, by some, given as a synonym of N. Capax plenus, although the former appellation is, nowadays, obsolete.
A Scottish Gardener.

A May flowering Iris

SOME years ago I was fortunate enough to have an interesting visit from that clever horticulturist, Mr. Caparne, of Guernsey. I believe he was one of the first, if not quite the first, to produce a valuable series of Irises between the June-flowering flag kinds and the earlier dwarf species. Mr. Caparne kindly gave me some of these Irises. I have the plants, but, unfortunately, have lost the names. The one illustrated has a large, wide bloom in two shades of lavender, and is at its best in the second week of May. This Iris and a dwarfer yellow are among the most decorative plants in the latest weeks of the retired part of the garden that is given to spring flowers. G. J.

A May flowering Iris

Shrubby Calceolarias

For covering low walls in favoured districts or by the sea the shrubby Calceolaria integrifolia will be found useful. It will, under favourable conditions, attain a height of 6 feet, remaining in flower for many months. As the wood is very brittle and difficult to tie in without breaking, 2-inch mesh wire netting fixed about 4 inches from the wall to allow the young growth to grow through will be found a satisfactory means of support. A native of Chili, it requires a sheltered spot and slight protection during winter when young. As the wood becomes older it will stand a considerable amount of frost if planted on a well-drained sandy soil. Calceolaria violacea, the gem of the family, will likewise be found a delightful plant for covering a wall in favoured districts. This, when covered with its quaint helmet-shaped flowers of a rich violet colour, spotted inside, which are produced with the greatest profusion, makes a charming plant. It may be used on a warm border, but to see it to advantage it deserves a position on a wall. This also is a native of Chili, and should have protection for the first year or two until it becomes well established. Both species make good plants for the conservatory or cool greenhouse. R. Findlay.
Wisley.

A Potato failure

Am greatly obliged for Mr. Wright's note on page 434. It is the sort of helping hand one gets through the pages of Gardening Illustrated. Hardly any sign of eyes was discernible in tubers examined. I should certainly have advised the grower to avail himself of any information that could be given, but, on going down to the allotment, found that the holder had made a clearance of the lot in question and planted it with winter greens, quite despairing of getting any return from Potatoes. E. Burrell.

Callistemon Salignus

There seems to be much confusion between (1) Metrosideros, (2) Leptospermum, (3) Callistemon, and (4) Melaleuca, allied genera of Myrtaceæ, but anyone with a pocket lens can easily distinguish them. No. 1 has the individual flowers pedicelled, the other three have the flowers not pedicelled. No. 2 has the stamens distinct and not longer than the petals, whilst in No. 3 they are distinct and long-exserted. In No. 4 the stamens are united in clusters (not distinct) and are also long-exserted. The correct name of the plant often called Metrosideros floribunda is Callistemon Salignus, as mentioned by "W. McG." Species of all four genera are quite hardy in the west of England and are to be found in many gardens, but though perfectly hardy they flower most freely when planted against a warm wall. No doubt they would succeed in any warm garden in the south of England. Not long ago I saw a plant of Melaleuca hypericifolia over 10 feet high and as much through which was covered with its crimson flowers. C. M.

Useful Rock Roses

These are all sun-loving plants, a fact to be considered when planting in their permanent stations. They will also thrive on poor stony banks, where few plants will succeed; indeed they flower more freely in such a position than if afforded a rich or ordinary garden rooting medium

TAKE CUTTINGS IN AUGUST.—The less hardy Rock Roses will often pass through a more or less severe winter safely, because in poor soil the growth is short-jointed, firm, and becomes well ripened before winter sets in, while the profusion of blooms from such specimen leaves nothing to be desired. Owing to their being liable to be injured or killed outright by frosts it is always advisable to secure a few cuttings of each kind. These will readily root in a cold frame during August. Pot off when rooted, and protect from frost till the spring.

Cistus purpureus covering a wall at Mathern Palace, Chepstow, Monmouth

All the Rock Roses transplant badly unless they are dealt with when quite small, so, as a rule, it is advisable to trust to pot-grown specimens. Some of the Rock Roses have been known to resist 30 degs. of frost, and I have noticed that a few degrees of frost at night after a cold, moist day will do infinitely more damage than 20 degs., when the atmosphere is tolerably clear. It is much better to allow them to take their chance in preference to affording any protection during cold weather. The Rock Roses are quick-growing in the majority of instances, and where the plants are badly hit they usually break up from near the base in the spring. In many cases a rejuvenated plant is the result, and the frost has only done what we were afraid, perhaps, to do with the knife, although I do not advocate severe pruning. A little trimming after flowering is all that is necessary. Many of the Cistineæ could occupy positions on the rock garden, while beds of these charming flowers are most attractive. They are also desirable subjects for covering walls, and an illustration on this page depicts a specimen of C. purpureus growing at Mathern Palace, Chepstow, Mon., the noble old residence of Col. McNab.

The species of Cistus are native of the Mediterranean region, particularly of Spain, and if we remember their native habitat we shall not be despondent if a few are injured or killed by an occasional hard winter. Few subjects can equal them either for sheer beauty or the quantity of flowers a plant will produce. Individual flowers are of a fleeting character, but this is no fault; others take their place, and thus the supply is kept up for several weeks.

No attempt has been made to enumerate a complete list of Rock Roses, but a few of the best are given in the hope of bringin to the notice of readers who so far h included them in their gardens. The

CISTUS PURPUREUS, to me one of th desirable. The flowers, from 3 inch inches across, are of a rich reddish with a dark red blotch at the base petal. It is said to be of hybrid orig reputed parents being C. ladaniferus villosus. It will make a bush 3 feet favoured localities.

C. LORETI is also a hybrid of C. lada the other parent being C. monspelier I had to confine myself to one Rock would be C. Loreti. The large flow white, each petal stained with a blotch at the base. This plant ke blooms open during the afternoo majority of Rock Roses only displayin beauty during the early part of the day of the hardiest Cistus is the white

C. CORBARIENSIS, a natural hybrid b C. salvifolius and C. populifolius. I ceptionably free-blooming, the flowe about 1½ inches across.

C. CRISPUS is more dwarf than ma it produces rose-coloured flowers, wh set may be termed a form of this speci blooms of a bright rose tint.

C. LAURIFOLIUS will form a bush 6 8 feet high, and is a useful subject fo or a large group. The white flowers a from 2 inches to 3 inches across.

C. MONSPELIENSIS is a smaller pla the preceding, the white flowers a across. The bush attains a height o 2 feet.

Other desirable forms include C. (rosy-purple), C. salvifolius, and C. ferus (white, with the petals stained crimson blotch). This plant and C. (the great Gum Cistus) is character the fragrant, viscid, resinous substa their branches and leaves. This subs known as gum ladanum, or labdanum is collected in Cyprus, Crete, and surro islands. It was formerly used in m as a remedy for the plague, but no chiefly employed as a perfume. No co of Rock Roses, however small, wo

Cistus cyprius
Flowers white, with a conspicuous dark red blotch near the base of each petal

without Helianthemum algarvense ormosum. The former is somewhat in habit, with small greyish leaves w flowers with a chocolate blotch at of each petal. It grows about 18 gh. A close ally of H. algarvense is ifolium. H. formosum is a lovely a semi-prostrate habit. The large re a bright rich yellow with dark spots in the centre. This plant is ted for a wall.

indispensable Rock Rose is the

Silver Pink, a hybrid between C. nd C. crispus. Any pink shade is ition, and no doubt the form just ll become popular. One more Rock which I have heard great praise is letti, a plant 9 inches to 12 inches ers 2 inches across, which are very son in colour. This year both the Sun Roses have been exceptionally l at Castleford, Chepstow, a repre- collection has been a joy to all ers for a number of weeks.

T. W. Briscoe.

ALPINES

ncreasing rock plants

is a good date to insert cuttings of early summer varieties that are for this increasing form of garden- te a small garden frame will take zen of these plants at a distance of r so. About 4 inches of soil would nt. This should be gritty or sandy firm. The cuttings should be some n length and inserted very firmly. owerless shoots whenever possible, of Violas and Tufted Pansies. hers are Arabis (single and double), Alyssum (double and single), Cam- Saxifrages, Arenaria, Semper- dum, Cheiranthus, dwarf Phloxes, . These make a brave show if set of half a score of plants towards the ctober. The frame must be kept l shaded from the sun if not set orth wall or similar position. Such ngs require careful setting, making ach one rests on a firm base. Some oted can be increased by division, gs usually make the best plants if ifted and replanted. J. M.

Haberlea rhodopensis

a fine plant for growing on the N. ide of the rock garden where some from the wind can be given. The ls in the fissures of rocks, where can obtain plenty of moisture. It be planted on the level, but in a irection, so that water will not be nain on the foliage. At the same a moisture-loving plant. A top- f sandy material will be beneficial , helping to keep the plant cool as oviding it with nourishment. Side ssed firmly into sandy soil in a cold ke nice flowering specimens the spring. H. Stevens.

thus deltoides Brilliant

s slightly larger leaves of a darker flower being like that of the old ot that it is somewhat larger and ant in colour. Few plants are so carpets of glistening verdure in n June and July the flowers begin among the leaves, gradually rising lant becomes a mass of rich colour, a long time in bloom. It is a de- ant and is most suitable for the rock garden, thriving in full sun on the level ground or in fissures between rocks closely packed with gritty soil. In deep, open soil the plant flourishes without any preparation, but where a place is prepared for it it is wise to add plenty of broken rock and grit as it is apt to perish in winter if made to grow too grossly. H. Stevens.

Alum Root (Heuchera sanguinea)

This is a charming rock plant, and the wonder is that it does not more frequently occupy prominent positions in our gardens of to-day, a group of a dozen plants set about 18 inches apart, and at the back a similar number of that excellent early-flowering Campanula, C. persicifolia, the white form. This, in conjunction with the bright red, slender spikes of the Heuchera, gives us a floral feast throughout the month of June not easily excelled for either rock garden or herbaceous border. The Heuchera when in full flower does not exceed 2 feet in height, and the spikes are most useful as cut flowers. The plant, itself less than 1 foot high, makes an excellent edging either for large beds or the herbaceous border. Both are easily raised from seed about this date and are as easily increased by division when a couple of years old. This Heuchera (H. sanguinea) is by far the best of the half-dozen varieties catalogued from a floral point of view, while the foliage of all are very pretty, especially that of H. Richardsoni. J. M.

Veronica diosmæfolia

This, of neat dwarf habit, is in its greatest beauty when about 18 inches high and well covered with its pale lavender-coloured flowers, which are in full beauty for many weeks. The plant revels in sun-baked positions, and a heavy soil suits it well. It must not be encouraged to grow quickly otherwise it may perish during the wet season. The principal defect of the plant is the want of hardiness. It should be given a warm, sheltered spot protected from N. or N.E. winds. The plant should be protected during bad weather with an evergreen branch of Yew or other shrub. H. Stevens.

Rock Roses flower freely on poor stony soil
To make up for winter losses cuttings should be taken in August

Morisia hypogæa

This is a lovely dwarf alpine plant bearing many bright yellow flowers, each about ¾ inch across. It is easily grown in the rock garden in a sandy soil. The best position for it is on a level with the eye on a well-drained, deep, rather dry sandy soil. An exposed position should be selected as the plant revels in full sunshine. A top-dressing of sand will ensure dryness of the crown and help to guard against slugs. The plant is not difficult to increase if seed is sown as soon as gathered. H. F. Stevens.

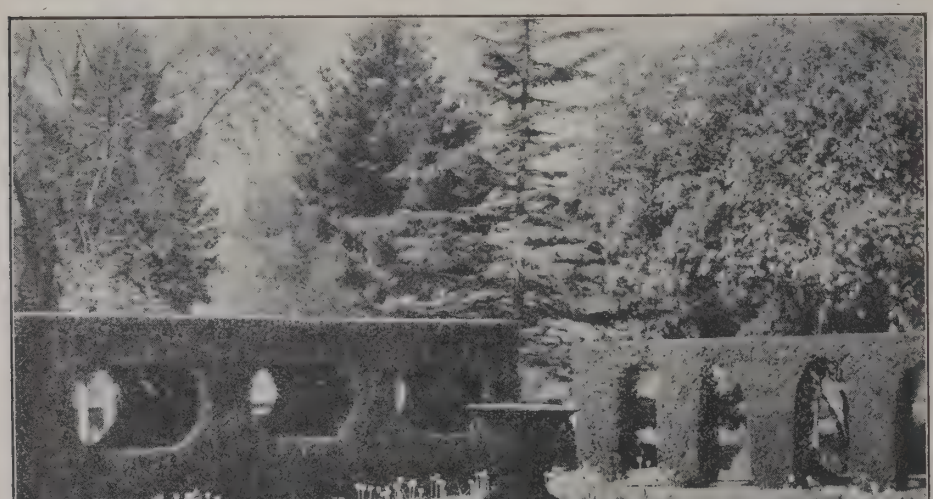
2, *Elm Dale Villas, Chepstow, Mon.*

TREES AND SHRUBS

Evergreen hedges

A selection of subjects and times for clipping

THE value of Holly is well known, and for the purpose of a boundary hedge it is unbeatable. But is it so well adapted as a garden hedge? Perhaps not, since the bright shiny leaves of the Holly reflect so much light that the hedge detracts from the effect of border flowers. Better effect can be obtained by planting against a background of Yew. Like Yew, the Holly grows slowly. Whether or not it is true that "a hedge between keeps friendship green," a garden that is enclosed gives greater pleasure and delight than one that is exposed to the view of every passer by. To the real flower-lover a garden is a very personal possession and is cherished partly, at all events, for the privacy it affords. The best enclosure is that of an evergreen hedge, which, alas! grows old rather slowly and displays its charms only when aged. It is common knowledge that Yew forms the best evergreen garden hedge, but since it makes such leisurely progress it is sometimes expedient to try and find a worthy substitute. There is probably none better than that evergreen conifer known variously as Thuya plicata, gigantea, and Lobbii. It grows fairly quickly, is easily managed, and forms a good and reasonably thick hedge. At its best it is not comparable with the Yew for dignity and old-world charm, but it is "the next best thing." Cupressus Lawsoniana and Arbor vitæ are used also to form evergreen hedges, but they are not so suitable for hedges of moderate height as Thuya plicata. They who live in mild maritime districts, or whose gardens are sheltered, may plant the Monterey Cypressus (Cupressus macrocarpa); this does not make such a close-set hedge as Thuya, though it serves well as a wind screen. Evergreen hedges need clipping only twice a year, in April or early May and again in August or early September, so that they remain neat and presentable during the winter months. In clipping a young evergreen hedge it is wise to cut the top more severely than the base, otherwise the latter may become bare. Evergreens can be planted in September with every hope of success; it is better to carry out the work then than in winter. If they are planted during the latter season, and especially if the plants are of considerable size, choice evergreens may prove very disappointing. They will look perfectly happy during winter and early spring, but those that have not really survived the transplantation will gradually turn brown and by midsummer they will be worthless.



Trained Yew hedges enclosing a spring garden

Trailing and climbing plants for balconies

Mention was made in a recent number of GARDENING ILLUSTRATED as to the claims of Cobæa scandens for the above purposes, and there is no doubt, if it is a matter of foliage alone, both this and its variegated form will cover spaces very quickly; indeed, they are almost too rampant unless the area to be covered is a large one. When, however, flower rather than foliage is the first consideration, other plants are required, for the flower of this Mexican climber is not conspicuous, and scentless, and only produced freely if the plants are in poor, light soil. I like Lonicera Halliana as well as anything for the purpose. It grows strongly, but not over-rampant, the foliage is bright and well retained, it flowers profusely, and the perfume is very pleasing, the sort of perfume that one can always enjoy without having too much of it. A fairly strong loam with a dash of leaf-soil is a good compost, better than a richer soil, which is apt to cause over-luxuriant growth at the expense of flower. Liquid stimulants can always be applied, if necessary, when the plants are well clothed with foliage. Red-spider and thrip are apt to be troublesome in very dry seasons, necessitating a free use of the syringe early in the attack. Another useful white flower for the purpose is Solanum jasminoides, of graceful habit and very free. This was introduced as a greenhouse climber, but has proved itself fairly hardy in favoured situations. It should not, however, be planted where exposed to biting winds from north and east. Where a considerable amount of space, eit balcony or pillars, has to be covered nate plants of this Solanum and Plu capensis give a very pleasing effect. plants of Maurandia Barclayana wi prove very useful for the purpose, the coloured violet flowers always att notice. This can be readily obtained bit of seed sown early in the year in warmth. In yellows there is p nothing better than Tropæolum can the only drawback being that it is ap off rather unexpectedly at times, lea gap it is not always easy to fill a notice. I have found the very dwarf variety Ball of Fire, with dark folia brilliant scarlet flowers, goes off in a manner. E. BUR

Hardwick.

Practical hints

Of late I have come across seve stances of shrubs either being lost alt or robbed of their season's bloom t careless or inexperienced treatment. in point I noted a few days ago of a n well-established plant of

CÆSALPINA JAPONICA which had been back to a close spur each year, and t beautiful flowers which should now sperse the graceful leaves had been cu This shrub should never be more than shortened back, laying in, in their e as many of the stout summer grow possible without overcrowding the sp

FABIANA IMBRICATA, often coddled a sidered difficult to grow, is almost a some gardens. Instead of allowing i bare and leggy it should be cut bar immediately it has flowered, and th will be fine bushy plants which will freely the following year. These qui cover from severe pruning, and thei green appearance is most enjoyable t out the winter and spring. This Chilian plant strikes like a weed if are inserted in sandy soil in Septem kept in a cool, close, and shaded fram

WISTARIAS.—Many people are in d to the treatment of these, especially vigorous plants which have furnishe allotted space and continue during s to send out long trailing shoots wh tossed about by rough winds and ar useless. These should be cut away a a foot from their base and encoura form spurs for future flowering. sometimes found it necessary to t tops out of young specimens which ha growing too rampantly in order to fo branches, and even stop the latter to obtain a uniform distribution of sp

PRIMULAS.—The seeds of most of th ripe, and many of us keep them u spring before sowing, which is not wise, as Primulas, Auriculas, and s the Gentians suffer from being kept seed-rooms for any length of time. better results may be obtained by these at the first opportunity after ga Cool and moist positions and shad bright sunshine are the conditions which the seeds germinate best, neve ing them to become even moderat until the seedlings appear. E. MARI

Improving soil

(H. B. D.).—It will be advisable t plenty of good strawy manure, Brac leaf-soil, with a free addition of u lime or chalk. The latter we find ex Coal or coke ashes are better tha ashes, and burnt clay is excellent f tion. Another good plan is to throw land in ridges in autumn, allowing w frost to penetrate and thus render i able in spring.

free flowering bulbous plant, Tritonia Lyalina

ion pink form of the better known Orange. Shown by Mr. E. A. ddelton House, Waltham Cross. Award of Merit

The new Deutzia tawainensis

A free flowering shrub with a great profusion of white racemes of powerful fragrance. The calyx is covered with farina, giving it a mealy grey purple colour, and the stamens are bright yellow. Award of Merit. Shown by Mr. Gerald Loder, Wakehurst, Ardingly, Sussex

Nymphæa amabilis

ely beautiful Water Lily with large rosy red flowers and vivid golden yellow which Mr. Lionel de Rothschild gained an Award of Merit. This is one recent of the Latour-Marliac varieties; the flowers open a pale salmon colour t day and pass through rose to a very rich colour deepening towards the centre

Campanula Donald Thurston

A tall, erect-growing perennial of the C. Telham Beauty type but with much larger flowers of pale Cambridge blue colour. It bids fair to prove a great acquisition for border planting, where the pleasing colour of its large bell-shaped flowers might be used with good effect. Award of Merit. Shown by Mr. F. L. Thurston

'ORTHY PLANTS AT RECENT MEETINGS OF THE ROYAL HORTICULTURAL SOCIETY

FRUIT GARDEN

Watering fruit trees

THIS is a matter which requires more attention than it generally receives. Figs, Vines, Peaches, and Plums, and other fruit trees grown in pots and otherwise all want abundant waterings during their season of growth. My pot Vines, after they are fairly in leaf, are watered every day, though the pots are plunged, and sometimes twice a day in dry weather. Not long ago I finished cutting a heavy crop of excellent fruit from a house of these, and up to the time when the last bunch was cut the water was poured on to the soil through a wide-spouted can in floods. The drainage is ample, and I never allow the surface to become dry. My young pot Vines, struck from eyes in spring, receive the same treatment. Shutting up with a steaming atmosphere is avoided, as a certain cause of warty leaves, but at the root the water is supplied unstintingly. Some of my Figs, large bushes in large pots, which are packed with their roots, receive each 5 gallons or 6 gallons daily, and would take more sometimes if I had time to give it to them. They had ripened their first crop of fruit, and are heavily laden with the second, and their ability to carry all through successfully will depend almost wholly on the liberal use of the watering-pot. It is not from want of liquid-manure that many plants appear starved, but from want of water simply and nothing more. The amount of feeding material contained in a pot of good soil is almost or quite sufficient for a plant without any additional stimulant, provided it is diluted judiciously and enough. In the matter of Vine borders, for example, the most important and real lesson which has been learned of late years is that we can hardly over-water them if they are ordinarily well drained. Water in more than sufficient quantity at the roots of the Vines is now recognised as a chief agent in the protection of good Grapes, and results have proved that this recognition is correct. So it is with Peaches and other stone fruits grown under glass. The amount of moisture a large and healthy Peach tree will imbibe in a day is enormous. The tree may be compared to a sheet of moist blotting-paper exposed to the sun; it would dry completely in an hour or so. What, then, must be the amount of evaporation from a Peach tree placed against a warm wall covered with glass? In the case of a hard and well-drained border, and a healthy tree thinly trained and protected with glass, I believe it is hardly possible to overdo the watering during the summer season. It may be asserted that the best results have not yet been attained, even in Peach culture. It has been shown beyond a doubt that the grossest Peach shoots can be perfectly matured in this country with artificial aid, and it has still to be proved what can be accomplished by the extension system of training and liberal feeding and watering such as the Vine has been subjected to. Take the Strawberry again; it does not like being treated like an aquatic, as pot plants sometimes are; but a well-drained Strawberry quarter should be deluged with water throughout the summer season, and also mulched, whether we have regard to present or future crops. A droughty June and July ill suit the Strawberry, and liberal waterings alone, under such circumstances, will nearly double the weight of crop. I have, as a rule, always light crops of Strawberries when I have a light hay crop, and both are due to the same cause—want of sufficient moisture at the root. C.

Outdoor Peach culture

Summers like the last bring out markedly the advantages which follow attentive cultivation in regard to such fruits as the Peach when grown on open walls, and which, taken collectively, as seen in the majority of gardens throughout the country, I always consider receives the most indifferent treatment that is given to any of our cultivated fruits. In some places at the present time there is on the trees an excellent crop which can now scarcely fail to mature satisfactorily, whilst in others in the same localities, where the conditions as to soil, aspect, climate, and protection to the bloom are the same, the trees are fruitless. One of the greatest mistakes in the management of Peach trees is the retention of too much wood at the time of thinning the shoots, which, even when laid close in, so as to be fully under the influence of the heat reflected from the surface of the wall, never gets so thoroughly matured (except in the warmest summers) as to give a fair prospect of the bloom being what it should and can be under more favourable conditions. There are those I know who contend that a given amount of frost will kill the bloom whatever its character may be, but this spring the temperature in most parts of the kingdom where Peaches succeed on open walls was not low enough whilst the trees were in bloom to prevent its setting; failure, therefore, evidently arises from the non-ability to produce fruit of the small imperfect flowers, so different in their development from those which are produced where no more shoots are allowed to grow in summer than are needed to afford a crop, and in this way the trees to which I have alluded as bearing satisfactorily are annually managed. It is only natural for cultivators to feel a disposition to keep plenty of young wood to select from at the winter pruning; but following this course is fatal to success, as the crowding of the young shoots makes it impossible for our insufficient sun power to ripen them properly. To this, and neglect of the trees in letting them get overrun with insects and mildew, clearly may be attributed the failure of very many Peach trees on open walls to give the return which they would render if better treated. Where the first leaves produced in spring are, as is too often the case, allowed to get injured by aphides, so as to cause them to fall off and prevent the earliest efforts of the trees from making wood in a satisfactory manner, the growth made later is necessarily weak, and frequently fails to get matured, unless when the summer and autumn are exceptionally favourable.

A. G.

Hints on Strawberry culture

In the culture of Strawberries the best results will generally be obtained where the soil has been trenched or deeply dug and enriched with plenty of good rotten manure; and the beds or rows are not profitable when allowed to remain longer than three years on the same soil. A good strong loamy soil is the most suitable for the plant, but as this is not found in every garden, a mixture of stronger soil can be added to a light soil where good crops of Strawberries are a desideratum. Plants of Strawberries which have been forced in pots will, if planted out in a rich sandy soil, produce excellent crops, for the ball of strong soil at their roots will make them bear well for at least two years after being planted out. I raise all my best crops from pot plants when planted out as early as possible after the fruit is gathered. In general the plants, after forcing, are huddled together, and often neglected in dry weather as regards water, and not planted out till the pots are wanted again for the newly-laid young batch of runners. This does not give the old plants so good a chance of into the new soil as when they are out early. When the weather is fa in autumn some of the varieties planted out early from pots, produ second crops of fruit. In plantin plantations of Strawberries from they will be found to succeed be planted in July or August, for then t time to root well before the winter and if the runners have been stro planted they will produce some fine year following. When the plantin runners is delayed till the spring, dry often prevails in March or April b roots have progressed much, and a lost as regards getting much fruit fr Late autumn planting is, likewise, practice, for the early frosts heave t out of the ground unless well protec litter. I find that a top-dressing of on in the autumn as a protection severe winter frosts is requisite fo berry beds, whether newly planted In the spring the young leaves grow it, and the strawy litter keeps the fr after the heavy rains or showers. better than using tan, short grass, o this purpose, as seeds are shed in the and take labour to eradicate them a dry summers Strawberry plants, wh ling their fruits, will enjoy any a liquid-manure.

Peaches and Nectarin

These should be gone over as ofte require it, removing all superabun ill-placed shoots. Take care, how destroy none that will be required fo next year. Want of observation thought in this matter is the cau many of these trees being deficient in of bearing wood in the centre, the fr borne almost exclusively near the ex of the branches, instead of being ev tributed over the whole surface. Su as are to be retained should now b close to the wall, an operation necessary in late localities, where t difficulty in getting the wood ripe each tree; moreover, now and then the fruit is fully exposed to the where any symptoms of mildew, eith leaves or fruit, show themselves, tree, or at all events the affected pa flowers of sulphur. Let the sulphu undisturbed for four or five days be syringed off. Be assiduous in syringing with water, and also in copious supply to the roots; this is necessary to enable the fruit to atta size, but also to prepare good another season. Probably half the that occur in the cultivation of Pea Nectarines, particularly in small gar due to the trees not receiving sufficie tion. With the exception of prun nailing, they are, comparatively often left to take their chance, or subjected to a course of alternate neglect, which results in a crop of fr obtained in such seasons as it is t with everywhere, but none at oth There is also an immense differen size and quality of fruit borne by t receive the requisite attention as with that produced by those existi neglected conditions.

Layering Strawberrie

Preparation for layering the requi ber of runners for forcing and for new plantations should now be mad ing into 60-sized pots filled with loa post which has been enriched wi Mushroom dung or well-rotted m really the best method. The pots

n wet days, and when the runners ntly advanced in growth the layer- e quickly effected. Pegs made vigs of worn-out Birch brooms, or r galvanised wire for holding the position until rooted should, to d number, be made ready before- en young plants are not set out or supplying runners the needful ould be obtained from the young- bly those set out last autumn, of plants.

sion of summer growth

sful fruit growers are agreed that emoval of superfluous wood about the year tends to improve what s as well as admit sun and air to ood for next year's formation of There is evidently a diversity of to the exact date to commence This is a very difficult question so much depends upon locality, tree, and position occupied.

Peaches, and Nectarines flourish- m walls naturally require extra on in this matter, but how seldom s turn their thoughts to the Plum like positions until the season has d? Much useless wood of this h could well have been dispensed early in the month of June. l large fruit gardens under my many years in the south-west of lways managed to finish the first ning of wall trees by the end of ust named, and then tackle the l other trained trees in the open, with the bush trees, and found quite successful. All shoots not extension of the tree should be fourth or fifth leaf from their by shoots with a less number of est left as they are. It is much an to go over the uppermost part which is usually more robust, a doing the lower part, thus avoid- en a check. It may take a little t affords the tree breathing time, recuperate between the manipu- ension shoots 18 inches or so in d be stopped. This timely re- nnecessary wood takes with it pests that are sure to be present spring spraying has been carried ay should occur ere all the prun- thered up and burnt. If time nd to well wash each tree with arden engine it would prove im- eficial, doing this late in the a hot day or at any time when t full on them. Morello Cherries t intact and fastened in to the e case of the Peach, but shorten- spur growths as in the other Red and White Currants, after e cleared, should have the lead- duced by one-half.

J. MAYNE.

ded

e Grapes sent are badly and this is generally caused or imperfect ventilation on some morning, whilst the internal f the vinery and even the berries with moisture. The Muscat of nd Lady Downe's Grapes are able to this affection. The best nt it is to leave some air on at e house all night, and to keep r pipes warm to maintain the perature and produce a rather ant atmosphere. This will pre- mulation of stagnant moisture he house and on the Grapes.

Arranging Flowers

THE artistic arrangement and display of cut flowers are, perhaps, the most neglected phase of the horticultural profession. It is not sufficient merely to excel in the culture of flowers; it is essential that we cultivate the taste to display them to the best advantage. As one looks over the vases of a hundred wonderful Roses or a hundred beautiful Carnations one realises the remarkable possibilities, were they arranged with a view to effect rather than being simply a representation of quality and perfection of culture.

It is impossible to lay down any hard-and-fast rules on the principle of flower arrangement. Natural ability, a love of Nature, and keen interest in the work will achieve the finest results, and with such an assortment of vases, bowls, baskets, and other receptacles as is now to be had, there is unlimited scope for one's skill. Pottery, which is obtainable in various shapes, colours, and designs, makes the most popular and adaptable receptacle, provided the colours are not so glaring that they detract from the flowers. The flowers and not the vase should dominate. Whether a simple vase or an elaborate creation is contemplated, it is essential to have a definite idea in mind and to picture in one's imagination the finished product. The flowers should be approximately one-and-a-half times the height of the receptacle, though the stems should vary in length in order to avoid an "equal-ranging" or a "sheared-off" effect. Arrangements, in which there is but one kind of flowers used, give a much more natural and pleasing effect if a few buds and half-open flowers are placed with full blooms.

When arranging flowers in combination, colour harmony should be the first consideration, whether it be harmony of contrast, harmony of analogy, complementary harmony, or dominant harmony. In a harmony of contrast, such as red and white, or in a complementary harmony, such as yellow and blue, one of the two colours should be predominant in order to give character to the arrangement. Different tones of the same colour constitute a dominant harmony and, when these tones are used in the proper proportion, a very delightful combination results. The best effects are obtained by using the pale tone as the tertiary line or base of the arrangement, the bright tone as the secondary line, and the medium tone as the principal or outer line. The bright tone should be employed sparingly and, if very bright, should be subdued.

Flower-baskets in their various characters provide unlimited opportunities for the practice of the floral art. The principal fault lies in the fact that they are usually overdone; the flowers protrude beyond the handle, over the sides of the basket, and the whole arrangement is spoiled. The lines of the basket ought not to be hidden—in fact, they should be accentuated. Some baskets, owing to their broad bases, are difficult to make up, but this may be overcome by packing the container with common Fern or a few sprigs of Evergreens, which will tend to hold the flowers in place.

Bowls in their numerous types and colours are most popular for dinner-table decoration. They are more serviceable and more appropriate for this particular purpose than any other receptacles. It should always be borne in mind that flowers on the dinner-table should not detract from the dinner itself, and they should never be so profuse as to interfere with the proper serving of the meal. While the high centre-piece with small corner vases is still quite popular at exhibitions, it is really too elaborate for the home. In arranging this form of floral decoration great care should be taken that the flowers do not overhang and obstruct the line of vision across the table.—WM. G. ELLIS in *Gardeners' Chronicle of America.*

Heeria rosea elegans

An award of merit was granted on July 13th for this large mass, literally smothered with hundreds of rosy pink Epilobium-like flowers, shown by Mr. J. Preston, The Warren, Hayes, Kent. This plant, which is generally regarded as somewhat tender, is sub-shrubby, of low prostrate habit, and the flowers are borne on short stems less than one inch above the ground

REMINDERS FOR THE WEEK

Southern and Midland

Late Peas

The sudden heat after the welcome rainstorms has caused the plants to grow rapidly, and the soil should be well hoed and a little drawn up on either side of the row previous to staking. It is also advisable to give them a mulch of some light material. In some gardens tits and other birds are destructive to late Peas, so netting should be fixed over the rows.

Salsify

Where this crop, and also Scorzonera, have been sown it should not be forgotten that to obtain serviceable roots the plants must be thinned out to 8 inches or 10 inches apart. A dressing of artificial manure, such as Peruvian guano, sprinkled between the rows and well hoed in, benefits the plants immensely if applied after thinning.

Runner Beans

Attention should be paid to these plants, and any shoots not clinging to the stakes should be secured with strands of raffia or other soft material. Black aphis is liable to attack the shoots during hot weather, so spraying with an insecticide should be resorted to on plants that are not bearing. To induce the plants to set freely copious supplies of water should be given and the sides of the rows liberally mulched. When Beans are forming freely weak liquid-manure may be applied twice a week with good results.

Wallflowers

No time should be lost in transplanting the seedlings, and they should be set out on land that has received no fresh manure in lines 1 foot apart and 9 inches between the plants. Water well in, and when they attain the height of 6 inches pinch out the tip of each plant. This will cause a break and lay the foundation of fine bushy specimens for planting in autumn.

Tufted Pansies

Where beds are planted entirely with Tufted Pansies the present is the most critical period to induce them to flower freely, especially in sunny positions and soil that is of a light and dry nature. Ample supplies of water should be given, and if from 1 oz. to 2 ozs. of nitrate of soda are dissolved in each gallon the plants will revive quickly. All dead blooms should be constantly removed.

Flower gardens

These are now at their best, and constant attention is necessary to make the flowers last as long as possible. A chief item is removing dead flowers from all plants, as, once seed-pods are allowed to form, growth is impeded. All surface-rooted plants should be given copious supplies of water during the dry period, thinning and tying in the growths as is necessary.

Mignonette

Now is a good time to sow seeds in pots for winter flowering. As the plants resent transplanting it is advisable to use those of 5-inch or 6-inch size. These should be well drained and filled with a compost of loam, leaf-mould, and decayed manure mixed with a proportion of coarse sand and old mortar-rubble. Five to six seeds should be sown and covered lightly, these being kept in a cold frame and shaded until germination has taken place.

Greenhouse shrubs

All Azaleas, Rhododendrons, and other hard-wooded plants should now be placed in the open for a few weeks to assist the ripening of the wood and the formation of flower-buds. It is advisable to plunge the pots in a bed of ashes as a protection against wind blowing them over and damaging the plants, while it also lessens the watering.

Freesias

The bulbs of these winter-flowering plants should now be thoroughly ripened and may be shaken out of the old soil and repotted. Ten fair-sized bulbs should be placed in a 5-inch pot of good friable compost and kept in a cold frame facing north until growth appears.

Walnuts

Where these nuts are required for pickling they should be gathered before they become too hard and woody. Although difficult to gather from large trees, one need not hesitate to knock them off with a long stake, as no injury will be done to the trees.

Gooseberries

The greater part of the fruit has now been gathered, so the shoots may be thinned and the soft tips cut back. Where caterpillars or mildew are prominent the trees should be thoroughly cleansed with insecticide or fungicide to suit each case. Any badly-infested or worn-out trees should be grubbed up and the ground thoroughly prepared for new ones.

W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Fernery

At this season a little relief from the green fronds is appreciated, and this can be obtained by using some of the variegated grasses such as Eulalia japonica variegata and Carex lineata. Use, too, can be made of a few bright Crotons, Dracenas, and the like, while Begonia Rex is always worth its place in the fernery. Young Ferns of all kinds may be moved on now, and it is always best to have a supply of such rather than to rely upon older stuff. Shade and moisture are essential at present.

Young Vines

Those who may have planted young rods earlier in the season ought to encourage growth in every way. Young canes are now usually rushed to the top of the house in a season, and it is not unusual to see such canes rather heavily cropped in the following year. Where permanency is desired, however, this course cannot be recommended. It is better, I think, to stop the rods after 6 feet, or thereabouts, of growth have been made. This will give the back eyes more strength, and afterwards the new leader can be laid in.

Peaches

Ripening Peaches and Nectarines can hardly have too much air, and if good colour be desired nothing ought to be permitted to obstruct the sunshine. Cut cleanly out all sub-lateral growth. All young wood required for extension or for furnishing the centre of the tree should be kept neatly tied in. Less water will be required, although, of course, there must be sufficient moisture to keep red-spider at bay. Trees which are allowed to become dry during the fruit-ripening period are certain to be eaten up by this pest.

Stove

All the young stuff intended fo flowering will now be better in pi frames where the wood will ripen u depends upon thoroughly ripe wo many people realise. Shift the plant require; small shifts are preferable the growth will be sturdier and m pact. Use a good loam freely—two- the compost is not too much. Pot ve as firm potting leads to the free p of bloom. Eucharis Lilies which are to bloom during the winter can be a cooler house to rest. This, bein evergreen, ought not to be dried o of the Orchids, such as Dendrobiu which have completed their growth a time be better in the drier atmosp vinery in which the pseudo-bulbs satisfactorily.

Fruit trees on walls

If the summer pruning has not b pleted the work ought to be presse conclusion. This necessary attenti too frequently delayed until the further advanced, but the sooner i (within reason) the better it is for Exception, however, may be made t in districts where crops are light. cases summer pruning need not b and a greater length of spur may ally be found beneficial. Plum trees this season appear to be more tha fly ridden, and in such cases the use insecticide is imperative.

Stocks

It is not too soon now to mak sowing of East Lothian and of Stocks. Sow thinly in boxes c light, sandy soil; place the boxes frame and water carefully until ge takes place. Prick off into a prepa a frame giving abundance of air i produce stocky plants which will winter in a satisfactory way.

Wallflowers

Wallflowers and Cheiranthus A now large enough to handle, and lings should be run out into nur without delay. When transplant desirable to pinch the tap-root in the plants may lift with plenty of fib when the time comes for transferrin their flowering quarters in Sept October.

Kitchen garden

Some of the herbs are now suffici for harvesting, and where these quest during winter they may be and carefully dried off. See that salading is put in at needful Cut over a line or two of Parsley. advisable to make a sowing of this has not already been done. In so tuces at this time I prefer to fall some of the older sorts—Bath C Hardy White (also a Cos variety), a Year Round, for instance. Make sowing of Endive as an insurance a first sowing proving unsatisfactory ing of Cabbage seed may be ma about the 20th of the month. S ample supply of Leeks is put out and spring use, and if the weather the time of planting water the yo until the roots lay hold of the soil. Purple Sprouting Broccoli and Kale for spring use in ground which good heart, is not too rich.

W. McO

Mabie Gardens, Kirkcudbrightsh

WER GARDEN

lue-flowered Linums

ALPINUM, from the Alps, es, and many hilly parts of e, is a gem for the rock garden. eeding 8 inches in height, its lovely rs elegantly poised on wire-like ar over a long season, but most during May and June. It enjoys sunny position, where it quickly npact clusters of dwarf shoots, be taken up and divided where desired. It is seen to the best when planted in small colonies of a dozen plants at least. There varieties, but none so important ener as the true Alpine species.

ONNENSE, a native of Southern a plant of sterling value either for arden or flower border. It occasumes a prostrate character, but habit is bushy and with an in- spread. A bed here (Sussex) a couple of dozen plants has been feature for weeks and gives every a long continuation of bloom. are each about 18 inches high, of graceful form, carrying hundreds s deep rich blue flowers each 1½ iameter, delightful on sunny days. can surpass well-grown colonies Flax. I find it comes true from h ripens in this country, and may be struck from cuttings, the the more satisfactory method of The finest plants are not grown on arved, sunny borders, but in fairly ed but exposed positions. A very rm of this handsome Flax which vn for the past two years, though ery little in colour (although a is claimed for it), possesses the actory characteristic of suckering nd the base, and even where been removed I have found little healthy plants springing up from tly small portions of roots left in

NE, a perennial Flax, native of our counties, is a fine border plant egant form bearing myriads of lt-blue flowers each about 1 inch hen closed in the evening or on ys these droop from the 2 feet tall wiry stems. On bright days a se plants presents a very striking freely are the flowers produced ct is one loose and waving sea of petals of this pretty Flax overlap at the edges and a rounder and er bloom results. This plant from seed.

ISI.—A charming and strong- ennial Flax is this, which reaches ight, and although its growth is very elegant plant bearing enortities of lovely pale blue flowers. (end of June), a bed filled with a more of this plant is a sight to Some of the plants being dwarfer a wavy effect is produced, the heet of blue, the inner, erect ing to 2 feet or so before throwing rooping blooms fountain fashion. plants were raised from seed sown 1925, and this is, therefore, their mer in this position. It may also adcast in the open where it is inrow, April being the best month hinning afterwards as desired. e Flax, and a very important one spects, is L. usitatissimum (the Plant), of unknown origin. The nd delicate fibre of this is the mmerce, while linseed is obtained ds. Otherwise, although a pretty plant, growing from 2 feet to 3 feet high and bearing quantities of small blue round-petalled flowers, it is of less importance in the garden. There is also a blue form of the annual Flax, L. grandiflorum, called L. g. var. cœruleum, which is very rarely seen.

L. AUSTRIACUM is also a pretty blue-flowered perennial Flax which I have grown with other blue kinds, but failed to recognise any special difference from the above.

E. MARKHAM.

Liatris, or Kansas Gay Feather

THE first to flower of this interesting genus is Liatris scariosa, a hardy North American plant belonging to the Natural Order Compositæ. The flowers are arranged on stout scapes 2 feet tall on short pedicels from the axils of the lanceolate leaves. The curious characteristic of the genus is that the flowers begin to expand on the top of the spike, and continue to open downward, which is contrary to the general habit in flower expansion. The carmine-purple flowers are freely produced on stout, erect-growing stems. When planted in a mass it is extremely effective. Plant the tubers in autumn in well-drained ordinary soil 3 inches deep and 4 inches apart.

W. LOGAN.

Liatris scariosa
The large shaggy purple flower heads are now a source of interest and admiration

Anemone Halleri

This is a fine bold plant a foot or more high and blooming in April. The plant is tufted in habit and bears numerous leafy flower-stems, each carrying a solitary nodding, hairy blossom of a beautiful chocolate colour. It may be planted in the open border without fear of failure unless the soil is stiff. The true position for it is some well-drained half-shady spot on the rock garden where it can get moisture during the hot season. Plants occasionally divided and grown in well-drained places flower freely.

H. STEVENS.

The Ryburgh Poppies

A gathering of the annual Poppies, known as the Ryburgh Hybrids, proves a delight to an old admirer of the Poppies. They are of the Ranunculus-flowered form, double, very large, and varied in colour, many of which are delightfully shaded and crimped. These flowers were from an autumn sowing, and the results are superb. The only adverse criticism which one would make is that the odour of the flowers is very pronounced in a room.

S. ARNOTT.

A new and destructive pest of Water Lilies

Species of Nymphæas growing in a tank in some private gardens in the Isle of Wight were early this year found to be suffering from a form of attack not hitherto recorded in this country. As the new leaves appeared and developed they commenced to exhibit signs of distress, rapidly turning brown and unhealthy, and in a short space of time becoming reduced to a state of putrefaction. Upon close examination the undersides of the decayed leaves were found to be covered with numerous aquatic larvæ of some species of the Diptera Order of Insects. Closer examination showed that these larvæ belonged to the Chironomidæ (Midges) family, although at the time it was impossible to say what species. Furthermore, it was not, at the time, considered possible for these creatures to be responsible for the destruction of the leaves of the Water Lilies, as it is distinctly rare for this group to be found attacking living plants.

No other form of animal life which could be associated with the destruction of the Lilies being discovered, specimens of the destroyed leaves, together with the larvæ described, were removed for laboratory examination. Examination with the microscope revealed, however, that these larvæ were undoubtedly responsible, for not only could they be observed chewing the leaf, but pieces of the latter could be seen passing into their glass-like bodies.

The larvæ have since been carefully bred out, and two or three females and a male were secured. These have been identified as Cricotopus ornatus (longipalpis). The adult insect is very small; in fact, much smaller than the size of the larvæ would lead one to imagine.

To the already formidable list of Dipteræ, or Flies, the larval stages of which do incalculable mischief to land crops, must be added this aquatic form which attacks a water plant. In common with the rest of the members of this group the insect lays its eggs on the surface of the water. The eggs soon hatch and the peculiar larvæ appear. They are extremely active and possess glassy transparent bodies. When fully grown they are nearly ¼ inch in length. Judging by the rapidity with which they were reduced to a state of decay these larvæ must attack and devour greedily the leaves of the Nymphæas.

Growers of these charming and valuable plants should keep a sharp eye for the appearance of this pest, for if it once become firmly established it may be impossible to eradicate it, and the cultivation of the Lilies would have to be abandoned.

Suggestions as to control are not at this stage easy to make. Investigations into this problem are necessary before anything definite can be advised. The difficulty is that the Lily plants would probably object to many things that might be poured into the water to kill the larvæ. These aquatic larvæ breathe differently from those on land, and the issue of any remedy based on experiences with the latter must necessarily remain in doubt. If the tank in which the Water Lilies are growing is not large, pure nicotine at the rate of ½ oz. to ¾ oz. per 10 gallons might be tried. Nicotine is expensive, but so (often) are Nymphæas, and they are worth trying to save from the ravages of this pest.

A. H. H.

BOOKS

"Britain's Economic Plight"*

As seen through American eyes

THE author, an American newspaper correspondent who has lived in this country for some years and got to know much about our habits and institutions, has produced a volume full of American "pep," with vivid and, on the whole, shrewdly accurate generalisations, and an eye for seeing both excellences and defects of which the native Englishman is often unconscious. The book covers a wide field, touching in turn on such questions as the coal crisis and unemployment, Empire markets and the textile industries, the British business man's attitude to the Baldwin Government, the secret of high wages, newspapers, banking and advertising, England and the League of Nations, England as a tourist ground, and so on, down to our old-fashioned courteous ways, our terrible climate, and our impossible cooking. It is a book worth the study of every business man on the look-out for new ideas, or for the man of leisure who likes to know what observant visitors think of his country.

While Mr. Plachy finds much at which he genially pokes fun, his real respect and admiration for the British race is revealed in one of his many conclusions—that Britain's greatest exports are its men and institutions. The book should be read to get from it all the benefit of an acute observer and racy journalistic writer, but the spirit and the substance of the conclusions are indicated in the following passages:—

"Britain's resources are tremendous and incalculable; probably far greater than the British people themselves have the slightest idea. It has the transportation, the manufacturing plant, the credit, the raw materials, the reputation, and apparently everything that goes to make a trading and manufacturing nation pre-eminent in its sphere. But as matters stand to-day, it isn't using the kind of economic intelligence necessary to turn these national resources to the best account. It is the human element that is at fault. Ships, machines, money, and raw materials are not enough, there must be the genuine spirit of co-operation between workers and employers that is becoming more and more the rule in America, and there must be a greater loyalty on the part of the people of the British Isles, a market numerically half as large as the American market in itself alone, in demanding and getting British-made goods."

"The truth is that the British worker has been misled and made to suffer for old evils which might have been removed decades ago. His leaders, with some honourable and brilliant exceptions, have too often been of the type who prefer violence, disruption, and acrimony to peace, co-operation, and plenty. The great question is whether the workers will wake up to the situation and realise that the more they give for a day's pay the more there will be for everybody and the more wages may ultimately be paid when British goods are produced at so low a cost as to be sold in competition with the goods of Germany, Italy, Japan, and the other nations where the workers are not told by their leaders that the least each one does is the best, on the theory that more jobs will thereby be made available."

"General statements are seldom true, but it seems to me that taking things in the broadest sense, the working-class of England to-day is definitely lower in economic intelligence than the same class in America, Germany, France, Belgium, and possibly Italy. The leaders must take the biggest share of the blame for this, because prior to the war the English workers' industry was almost the standard of Europe. To-day there were too many always looking for something to disagree with and complain about; too many like the famous Irishman who would rather have his grievance than his job."

"But it is hard to be pessimistic about the future of Great Britain when one turns to the credit side of the ledger. The resources of the Empire are so tremendous they stagger the imagination. With modern methods of exploiting the tropics and with the discoveries in hygiene that make possible the inhabitation of that part of the world by white men and women, the possibilities along that line are unlimited. . . . The foundation already exists on which the British may rear that structure pictured by United States Ambassador Houghton, when he said, in Washington, that within 20 years Great Britain would become one of the most prosperous nations in the world. To an outside observer it would seem that only the British themselves can prevent that dream coming true."

*"Britain's Economic Plight." By Frank Plachy, Junr. London: Ernest Benn Ltd. Pp. 214; 7s. 6d.

VEGETABLES

Lettuce

DESPITE spells of hot weather, Lettuce has up to the present (July 20th) done remarkably well, and one has had the material for what is universally admitted to form the foundation of a salad, a good crisp Lettuce. This, I think, is partly owing to the fact that the ground is fairly moist just below the surface, and, once established, the plants have shown little sign of flagging. For mid and late summer it is a good plan to choose a partially-shaded border for the Lettuce, say, a south-west aspect. Sow thinly in shallow drills that have been well soaked (if the weather is hot and dry), thin as required, and draw soil back into drills when thinning is done. I prefer a Cabbage Lettuce myself, and often think of the innumerable varieties that have appeared during the last few decades and how few that are really distinct. I had some plants this year supposed to be a grand new sort. Rather is it a case of rejuvenation, for it is identical with Golden Queen that I grew many years ago. This, Perfect Gem, and Continuity were three dependable sorts, and it is a question if there are three better to-day. Anyhow, in the case of the sort I have now and Golden Queen it shows that "imitation is the most sincere form of flattery."

E. BURRELL.

Herbs

In drying herbs an open shed or room, where plenty of air can be given, is necessary. Stretch out a piece of netting, such as is used for protecting fruit from birds (wire netting if at hand will do); on this lay the herbs (which should be cut when quite dry) thinly. Thus treated, air acts upon them from all sides, and they dry quickly without losing their best properties. When perfectly dry put them loosely in white paper bags, tie them up, and hang them where they will be free from damp. Herbs treated in this way will be found to be but little inferior to such as are fresh cut. Sage should now be propagated by slips, taking off middling-sized branches and inserting them moderately deep in the ground in rows where they are to be grown. If the weather becomes dry give them plenty of water until they are The advantage of growing Sage fr or cuttings is that plants so produc not such a disposition to flower raised from seed.

The Cheshunt compoun

(REPLY TO "T. J. P.")

A fungicide for application to th the growing Tomato plant. This is chiefly as a preventive against the " off" of Tomatoes, and has been d the result of investigation at the Research and Experimental Static compound consists of definite quan two ingredients obtainable from the namely, finely-ground copper sulph fresh ammonium carbonate, which mately mixed in the proportions of t by weight of the former and 11 weight of the latter. To make t mixture, take, for example, 2 ozs. of copper and 11 ozs. ammonium c and crush them finely, preferably and mortar. After being well m gether, the powder is put into a stoppered glass or stone jar and stor least 24 hours. The solution is pre dissolving ½ oz. of the mixture in a water and then further diluting with the rate of 1 gallon to each ½ oz. of mixture. Larger quantities may pared so long as the proportions re same. One advantage of the Compound is that it can be applie seed-boxes, pots, or ground in whi are growing, and will destroy th parasites without injuring the plan harmless to roots and top growth.

While this is a fungicide for appl the soil round the growing plant, cheap and easily-applied treatment, be understood that plants that hav been attacked by the fungus causing ing off" will receive no benefit Cheshunt Compound, but will event These may be saved by cutting off above the diseased part and treatin tings. It is essential that the should be applied as soon as th makes its appearance, in which watering, thoroughly saturating the be sufficient. Where the disease the houses each plant should be re it is attacked, and a fresh hole mac dibber. The hole is then watered w of the solution, and replanting carp with a fresh plant, which is again Apart from killing the disease organ solution has a beneficial effect, nitrogen from the ammonium carbo parts greater vigour to the plants.

Mustard and Cress

Extra care is necessary in the so treatment of this salad during July and September. The sunny borde be abandoned, as not only is the sal in such a position inferior in quali no sooner arrives at the cutting sta commences to run to seed. A nor is the best position, and it always fork in a little good loamy soil on allotted to it. Hand-lights also, ev advanced date, should where avail used, as heavy rains are apt to dash amongst the salad and completely p When the seed is sown the tops of lights should be left on crosswa while shielding it from rains, als sufficient air to promote a stur growth. It is astonishing how long and Cress last in good condition o border.

Answers to Queries

s—*Queries and answers are inserted in* ILLUSTRATED *free of charge if corre- follow these rules: All communications learly written on one side of the paper addressed to the* EDITOR *of* GARDENING *Bouverie House, Fleet Street, London, E.C. 4. business should be sent to the* PUB- *name and address of the sender are addition to any designation he may used in the paper. When more than is sent each should be on a separate per, the name and address being added s* GARDENING ILLUSTRATED *has to be sent me days in advance of date, queries ays be replied to in the issue immedi- ing their receipt. We do not reply to post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

LOWER GARDEN

h green centres

Tree).—Your Roses have what is green centres, a freak which is some kinds. If this malforma- s on the same plants year after ould advise you to destroy them. wever, these green centres are some sorts, the trouble may be in your case, by a check of some as frost or unseasonable weather. detect these green-centred buds it remove them and encourage the vers, as in all probability with the ather such will come more perfect.

Coulteri

Vallis).—This is quite hardy in s, enjoying best a warm loam. vill not grow well in the open it o in many places against a wall hern aspect. When once planted verse to root disturbance, often gh well cut back. Planting ys be done in spring just before ts. It is also advisable to pro- in a pot. A little protection over uch as rough Cocoa-fibre, is ad- ing the winter. During very her a mat may be put over the moving this directly the weather ild. If you can find one of the nclose the same in a small bottle our best to help you.

ahlias

.).—In staking Dahlias (which ys be done) do not tie them up in f a broom by drawing all the ly to one stake, for this mode an unnatural and ugly appear- when strong winds prevail the requently blown down together. h more effectual and better-look- use four or five moderate-sized each plant, to which tie the t; this has the double advantage g their appearance and letting through the plants, which keeps inned out, dwarf and strong. t be given liberally when the t all dry, or they will receive a check. If grown in beds by the whole surface of the soil nulched over with 3 inches of re; if in borders amongst other ce ought to be mulched round as far as the roots extend.

dy Albemarle

This fine crimson Godetia de- re in any garden where a bold, r is desired. It is compact in ee-flowering, commencing to do s about 6 inches high, and con- loom until it is nearly 2 feet in flowers, which are bell-shaped, imson with white centres. It cellent plant for pots or window- d it gets plenty of sun and water.

Red spider on Peaches and Roses

(R. Ware).—The attack of red-spider on your Peaches and Roses is due to the house being kept too hot and dry, the roots of the trees also suffering from dryness. Your only remedy is to syringe freely with clear water, taking particular pains to see that both the upper and under sides of the leaves are thoroughly wetted. As soon as the fruits have been gathered—if any are on the trees—take 2 gallons of warm water, in which dissolve 3 ozs. of soft soap. To this add $1\frac{1}{2}$ ozs. of sulphide of potassium (liver of sulphur), and when dissolved syringe the trees with the solution, taking the same care to thoroughly wet both sides of the leaves as when the plain water was used. If one application fails to destroy the red-spider, then you will have to repeat it. Also see to it that the roots have a thorough soaking of water, as the soil in which the roots are is no doubt dry, this in great measure being responsible for the attack of red-spider. Next winter, when the leaves have fallen and the trees are quite dormant, dress either with Gishurst Compound or syringe with caustic alkali solution. The woodwork and glass must also be thoroughly cleaned, and the back wall of the house, if a lean-to, washed with hot lime, to which has been added a good handful of sulphur to a pailful. For the aphis and white-fly you will have to fumigate with XL All or Corry's White Fly Death.

Treatment of young Ferns

(R. B. C.).—The seedlings should now be pricked out in clumps of six to a dozen together into other pots and pans, as they are presumably too small at present to be potted separately. As they gain in strength use a little loam in the potting compost, increasing the quantity as the plants get larger for all robust kinds, as Pteris, etc. After each removal into larger pots they must be kept close for some days till established.

Mignonette for winter flowering

(Reseda).—Seed of this should be sown now without delay in the pots in which the plants are to flower; 5-inch or 6-inch pots are good sizes to use. These should be drained and filled with a compost consisting of loam and a little leaf-mould, well-rotted cow manure, and a sprinkling of sand and lime-rubbish. The pots should then be placed in a cool and airy frame, and in due time be transferred to the greenhouse.

Spiræa Aitchisoni

(L. Bigg-Wither).—This differs from S. Lindleyana by reason of its young bark being red, its leaves narrower and without down, and mostly simply (not doubly as in S. Lindleyana) toothed margins and its larger flowers. From a garden point of view it is a more elegant shrub in every way, rarely exceeding 10 feet in height, whereas S. Lindleyana often attains 20 feet or more. The young shoots, freely developed from its base, keep that part of the shrub well furnished, whereas in the case of the older Spiræa the lower portion is generally represented by a few stout leafless stems. S. Aitchisoni is said to be hardier than S. Lindleyana, but exposed to full west winds, yet sheltered from the north and east it has often been considerably reduced in winter here. SUSSEX.

Agathæa cœlestis

(R. C.).—This is the name of the blue flower sent. It is frequently called the Blue Marguerite. It is a very beautiful old plant, and may be increased by cuttings in spring. The soil should be loam and leaf-mould made sandy, and it may be planted outdoors in the summer.

TREES AND SHRUBS

Azalea leaves turning brown

(A. L. T.).—The leaves are covered with "thrips." Lay the plants on their sides and well syringe them with strong Tobacco-water. Place them afterwards in a partially-shaded situation out-of-doors, setting them on slates to prevent the worms entering the pots. Syringe them freely every afternoon with clean soft water, and repeat the Tobacco-water washing (placing the plants then on their sides) twice a week for two or three weeks.

Climbers for a bleak aspect

(B. A. C.).—Try Ampelopsis Veitchi, Clematis Jackmani, Lonicera grata, and Jasminum nudiflorum; one or two of the variegated Ivies might be added. We once saw the front of a house covered with a small-leaved silver variety of Ivy, and the other side with a golden form. All that was required to make the walls of that house look perfect was a few trailing plants of Clematis, or some other flowering creeper, over and among the Ivy.

Rhododendrons not flowering

(R. N. F.).—The situation is a bad one for Rhododendrons—they require partial shade and shelter; the moisture in such a position is sure to produce good results with them. Can they be moved in due season to some more sheltered situation? They will never be satisfactory where they now are.

FRUIT

Melon canker

(C. J. M.).—The portions of plant you have sent in to us are affected with Melon canker. This disease in certain seasons and in certain districts causes much trouble to Melon growers. We should advise you to take up at once and burn the rest of the affected plants. If any healthy plants are growing near they should be sprayed with dilute Bordeaux Mixture or lime sulphur. When the crop of Melons is finished the soil in which it has been growing should be removed and sterilised by heat or steam, or if it is not required again it could be done away with altogether. Spreading the soil on the top of pasture is an easy way to get rid of it. When the bed has been removed give the house a good clean out and limewash all the brickwork. If you do not already practise the plan you should plant your Melons on a little mound of soil so that when you are watering the plants you need not wet the stems of the plants, especially at the collars. Pay strict attention to watering and ventilation another season.

Grapes scalded

(Mrs. O'Grady).—The sample of Grapes sent bear unmistakable evidence of their having been scalded. This happened, no doubt, one fine sunny morning when, as a result, perhaps, of the border having been afforded a watering on the previous day, the

internal atmosphere would be overcharged with vapour and the berries coated with a film of condensed moisture. The berries being cold, in addition to being covered with moisture, would, as soon as the rays of the sun came into contact with them, begin to scald, and the rapid rise of temperature and consequent steamy atmosphere would help to make matters worse. A chink of air left on at the top of the house all night or put on in the very early morning would probably have averted the trouble. When climatic conditions are very variable unheated vineries require careful attention in the morning while the Grapes are passing through the stoning stage.

Saving Melon seeds

(C. J. M.).—The pulp containing the seeds should be placed in a fine wire sieve; allow water to run through the sieve, frequently stirring up the pulp and seeds. If this is done properly it should remove the pulp by washing, and the seeds will be retained on the sieve. Afterwards thoroughly dry the seeds and store in a dry, even atmosphere for use next spring.

Figs dropping off

(R. O. F.).—Figs often drop off in the way stated, especially if the roots are buried deeply and are unrestrained in their run. The blossoms of the Fig are inside the fruits, and their setting is not perfected until the fruits are half grown. During the period of flowering plenty of ventilation and a brisk temperature should be maintained. Do not water with cold spring-water; pond or rain-water is the best. Chills of all kinds should be avoided. Lift the roots in the autumn and bring them near the surface, working in some fresh loam and old mortar-rubbish.

Cherries falling

(L. L.).—The falling of the Cherries is no doubt due to dryness at the roots, aggravated by want of lime in the soil. Trees against walls are liable to get very dry at the roots, this ending in the collapse of the fruits at stoning time. You ought to have watered the trees and applied a good mulch of rotten manure to retain the moisture directly you found that the fruits had stoned. Morello Cherries are best grown on north walls, reserving the more favourable positions in the garden for the sweet varieties. It would be advisable to fork in some lime-rubble as well.

Apples cracking

(Buchanan).—When Apples crack it is a sure sign that the roots fail to find the needful fruit elements. Your only remedy is to lift the trees carefully, preserving every piece of lateral root, cutting off all downward roots, then replanting. Before doing that throw out several inches depth of the lower soil, replacing with fresh soil from the vegetable quarter, keeping the roots nearer the surface than before. Replace the top soil with fresh, and, before filling it in, have it thoroughly mixed. If you can add some bone-meal, lime-rubble, and wood-ashes such will be helpful. After the soil has settled down lay a mulch over the roots.

Aphis on Plum tree

(C. E. B.).—The growths sent are severely attacked by aphides. This should have been attacked as soon as first seen with Tobacco and soft-soap and water, syringing them with it and following it up until all were destroyed. The only thing you can do now, seeing the pest has got such a hold, is to wash the trees frequently and vigorously with the garden engine and encourage them by root waterings and mulchings if the weather is dry to make fresh growth. This must, however, not be overdone, as it is late in the season and the wood will not ripen.

Grapes not colouring

(E. H.).—The badly-coloured Grapes are what is termed "shanked"—that is, the stalks of the berries have failed at a critical moment, due to a falling off in the nourishment, or to badly-ripened wood, which is pretty much the same thing. Bone-manure and turfy loam will do good, if one is quite sure of the roots finding it, but it often happens in these cases that the roots have wandered away and come into contact with some cold, inert soil from which nothing can be got besides cold water, and good Grapes cannot be produced from cold water extracted several feet beneath the surface of the ground. If the roots could be found and brought back to the loam and bone-manure there would be plenty of good Grapes. Would it be possible to lift the roots of one of the Vines as an experiment?

Strawberries in pots

(P. H.).—These should stand thinly on a bed of ashes after potting, in some open situation where they can receive as much sunshine as possible, regularly removing all runners and weeds. Two or three good waterings with liquid-manure will, when the pots are filled with roots, be beneficial at intervals of a week or so, but they must not be continued too late in the autumn, especially if the plants be intended for early forcing, or it may excite their crowns too much, and so delay that maturation which is essential to the production of a good crop of fruit.

Pruning nut trees

(D. C. R.).—The proper way is to cut away annually all the suckers and young, straight shoots from the base, as also any worn-out or crowded wood, leaving only the twiggy branches, upon which alone the fruit is produced. Even these should be thinned out, if necessary, so that the sun and air may act freely upon every part. The Kentish growers open out the centre of the trees well also, and endeavour to get them to as near the shape of a huge vase or stemless wineglass as possible.

VEGETABLES

Late gathering of Rhubarb

(R. G.).—Rhubarb should only be gathered sparingly, if at all, after this date. We have known plantations of it seriously injured by clearing off the late crop for wine-making. A moment's consideration will assuredly convince anyone that a certain amount of foliage is necessary for the healthy development of the buds or crowns for next year's supply.

Vegetable marrows dying off

(D. O. F.).—The absence of sunshine (being planted in a shaded spot) has made the large leaves of the Vegetable Marrows soft, flaccid, and especially liable to blight and mildew, and the blossoms no doubt partake of the same weakly character. Keep the growths thin and pegged out, stopping the leaders if running away too fast. In a small degree perhaps the male blossoms weaken the plants, but their presence is necessary to set the fruit if you should require seed.

Failure of Onions

(E. R. K.).—The Onions appear to have been attacked by the fungus known as the Onion Sclerotia. The best thing to do is to pull and burn all the affected bulbs, and spray such as remain healthy with a solution of liver of sulphur, 1 oz. to 3 gallons of water being the strength at which to apply it. Keep a sharp look-out afterwards, and spray immediately should the slightest sign of the fungus appear. Avoid growing Onions on the same site for the next few seasons to come, and give the soil a good dressing of lime at digging time next winter.

Celery leaf spot

(H. B. H.).—Your Celery is affe Celery leaf spot, which is caused by known as Septoria apii. The sm spots to be observed on the foliage in to us are the fruiting stage of th The spores which are produced fr patches, if they reach healthy plan nate, and the disease is set up centre. The spores are, of cou easily distributed by wind, rain, or watering. We should advise you t and burn all the plants showing a the disease; the rest of the plants sprayed with potassium sulphide ir Dissolve 1 oz. of potassium sulp little boiling water and then m to 3 gallons with cold soft wa will probably have to repeat the several times before you get the dis control. Make a point of burnin outer leaves and trimmings of yo crop and grow your Celery on a new season.

MISCELLANEOUS

Description of wireworms

(E. M. C.).—Wireworms are long yellowish grubs; they are smooth a and of much the same thickness t their length. Their heads are brow vary in size up to about an inch when they are a tenth of an inch in Just behind their heads are three pa and at the extreme end of their b projection from the under part o joint which serves as a leg. Vari as well as Millipedes, are at tim wireworms by those who do not better.

Right to remove plants

(A.).—The occupier of a priva may not remove any plants, neith claim compensation for them. seem very hard, but it is the law. landlord allows an outgoing tenan some of the plants away. You s your landlord to extend the same c you, but he may refuse if he choose

SHORT REPLIES

Rother.—Your Strawberry lea been attacked by the shot hole fu reply to "Peregrine" in our iss 24th, p. 448.

T. J. P.—You can buy the ingre making up the Cheshunt Compo any chemist and mix yourself. some horticultural sundriesman m to supply it ready for use. See a 462.

F. Calvert.—If you follow the in given in the issue you refer to you soon get rid of the ants.

Romsey.—Do you mean the Avo (Persea gratissima), Agua Cat Mexicans? We cannot find such a you give.

NAMES OF PLANT

R. N. J., Auchlochan.—1, Rho ponticum seedling; 2, Hieraciu tiacum.

R. W.—Silene compacta.

Mrs. E. B. Lacey.—1, Spiræa dis S. ariæfolia); 2, the Wig pla Cotinus); 3, Leycesteria formosa.

Thomas.—1, Rose Evangeline; lanata; 3, Impatiens Roylei.

R. N. J., Auchlochan.—1, Anem tilla.

J. E. Webb.—1, Rose Mrs. John Centaurea macrocephala; 3, spe sufficient; must have flowers.

T. C. B. Cole.—Your best plan send blooms to a specialist.

J. Benson.—Rhus Cotinus (the Sumach or Wig plant).

A Chat about Roses

Special Show of New Roses

'ETITION for the "Daily Mail" Scented Rose Cup proved very dis- inting and the cup was withheld. ther has been blamed for this, but we

A representative group of Roses at the special Show of new Roses on July 23rd
The varieties Mermaid and Penelope figure prominently in this group

Judging in progress to find the best new scented seedling Rose
Mr. Courtney Page, Secretary of the National Rose Society, is seen on the left (with papers in hand). The Cup, valued at £250, was not awarded, and it will be offered to be won outright next year

ıelp thinking that the competition carefully thought out. The raising Rose worthy of so costly a trophy kely to be accomplished in a few It may take years to produce the variety, and one condition of the as that "only new seedling Roses ve not previously received any award le." This, of course, ruled out such grant Roses as Dame Edith Helen ord Crimson.

way, the Clay Cup, offered for the e not in commerce before 1926 and g good form and colour, with the Rose scent, was recently awarded ıriety Dame Edith Helen, shown by Alex. Dickson and Sons. This e clear pink H.T. received the gold medal last year, and is one of promising of all new Roses.

. Alex. Dickson and Sons also igh praise for their new Rose, Lady gton Evans, which gained first place 2, and was the most outstanding ety at the special show of new Roses incent Square on July 23rd.

oups of Roses on this occasion were gly good. Messrs. Elisha J. Hicks t in Class 3 for a grand display in ıe pillars of Mme. Butterfly, Lady ı, Betty Uprichard, and Mabel ere among the brightest features in

ss 4 Messrs. R. Harkness and Co. st for a group of cut Roses, the eties being Independence Day, Mrs. owles, Christine, Los Angeles, Sun- Golden Emblem.

. S. McGredy and Son had a very ıp, containing many grand varieties own raising, *i.e.*, Emma Wright, enry Morse, Florence L. Izzard, Morse, Gwyneth Jones, Golden Norman Lambert, and the new R. Barraclough, truly a wonderful ety.

oups by Benjamin Cant and Sons, lter Easlea, A. Dickson and Sons, and A. Warner and Son, Buxted, near Colchester, were all worthy of special mention, and among the Roses well represented in these groups were Cecil (single yellow), Innocence (white with crimson stamens), Etoile de Holland (dark red and of fruity fragrance), Mrs. Henry Bowles, Shot Silk, Marcia Stanhope, and Lady Inchiquin.

The late Rev. J. H. Pemberton

The Late Rev. J. H. Pemberton

All Rose lovers will regret to hear of the passing of our old friend the Rev. Joseph Hardwick Pemberton, who died on July 23rd at his home, The Round House, Havering-atte-Bower, Romford, Essex.

Of late years Mr. Pemberton retired from parish work in Romford and devoted himself to his favourite garden pursuit. Fifty years ago he was one of the founders of the National Rose Society, and in due course its President for a time. He was an unfailing exhibitor and prize-taker at its shows, as well as at all the important Rose shows in the country, and he could reckon trophies and awards running into four figures. He had a true flair for hybridisation, and brought to light many well-known Roses, especially in the Musk and Tea Rose classes; and used to boast that he and his rivals and colleagues (among whom he counted his staff of highly-trained gardeners) had so extended the calendar of the Rose that our altars can nowadays be graced with Roses even at Christmas. He was the author of a study of "The Coronation Service, with Notes," but his best-known and most characteristic work was "Roses, their History, Development, and Cultivation."

Mr. E. J. Holland, a past President of the National Rose Society, endeavouring to find the best new scented Rose

Although Mr. Pemberton was not present at the summer show of the N.R.S. he was represented by a magnificent group of Roses from Havering-atte-Bower, which place he has made famous as a centre for Rose-growing. He was also represented by a glorious group of Roses at the special show of new varieties held at Vincent Square on the day on which he died. In this group Mermaid, Pax, and Penelope were shown in grand form.

H. C.

Ulverston Rose Show

There were larger entries at the Ulverston Rose Show held on July 22nd than there has been for some years, and the quality of the blooms was of a high grade. The Hodgson Memorial Shield, open to all, was won by G. Burch, of Peterborough, with a magnificent group of cut Roses. The Donard Nurseries won the Society's silver medal for the premier bloom with a George Dickson Rose, and the challenge cup for 18 cut blooms shown by an amateur was won by C. Dixon, Sheffield.

Gerald Garnett, of Lancaster, was successful in the local classes, winning the Garnett Challenge Vase for 18 cut blooms, also the gold cup for 12 cut blooms and the Miles Woodburn Trophy for the best bloom in the amateur section, and the Mrs. Myles Kennedy Challenge Cup for noisettes. C. Sloers won the Ulverston Council's award for nine cut blooms, and a silver trophy went to T. Huntington, of Grange.

In the Sweet Pea classes John Pilkington, of Poulton-le-Fylde, won the Towers Trophy for 18 bunches. G. Penney, of Garstang, won the Settle Challenge Cup for six bunches, and the Ulverston Council's Challenge Bowl for six bunches of distinct varieties was won by F. Stables, Ulverston. The gold medal open to the northern counties for the best vase of Sweet Peas was won by W. Baines, of Witherslack.

The silver trophy in the herbaceous class was won by Wilson Butler, Broughton.

LATE NOTE

An appeal for Lavender

Our correspondent, Miss Phyllis Lambert, 79, Eaton Rise, Ealing, W. 5, appeals for Lavender on behalf of hospitals, and we feel sure that many readers will be only too ready to respond to this request. The Lavender should, if possible, be pulled from the stalks, though this is not absolutely necessary, and care should be taken that it is very dry when picked. It is hoped that Lavender in plenty will be sent off to Miss Lambert at the above address within the next few days.

LATE REPLIES

Cauliflowers going "blind"

(B. C.).—"Blindness" in Cauliflowers or any other member of the Brassica family may arise from various causes. The heart of the Cauliflower plant in its young state is no larger than a pin's point, and at that early period the least injury to it is fatal. Insects are often the cause of "blindness." Thick sowing may be conducive to it, as may also drought, or any cultural condition that produces a sudden check; and it may indirectly arise from constitutional defects.

Sowing winter Onions

(W. O.).—The first or second week in August is the best period for sowing Winter Onions. A well-drained, well-cultivated piece of ground should be selected, but if in good heart it need not be freshly manured. In addition to the Tripoli varieties sow a good breadth of White Spanish, Globe, and James's Keeping for transplanting early in spring. This is the only plan in difficult situations and seasons to ensure a good crop of large bulbs. South of London the sowing of the three latter kinds may be delayed till towards the end of the month. Yes, the Silver-skinned is a good kind also for autumn sowing, as it turns in quickly in spring.

Benn Brothers' Other Journals

The Cabinet Maker.—Retail Advertising: The Supply of Craftsmen; Competitions for Industrial Design.

The Chemical Age.—London Congress of Chemists: Further Reports of Papers and Discussions at the Annual Meeting of the Society of Chemical Industry; Colonial Issue; British Chemicals in Imperial Markets.

The Electrician.—Special Marine Issue; "Electric Propulsion of Ships," by Chas. Rettie; "The Marine Electrician," by A. C. Hardy; "Wireless at Sea," by John A. Slee.

The Fruit Grower.—"The Control of Soil Insects," by H. W. Miles; Commission Salesmen's Bill in the Lords; "British and Best" Propaganda.

The Gas World.—Training-in Employees; Dr. Carpenter on the Blessings of Co-partnership; Low Grade Gas—Important Judgment of the Chancery Court.

The Hardware Trade Journal. — The Hollow-ware Industry Reviewed: Exclusive Facts on the 1926 Purchases of Buyers at Home and Abroad; Cutlery and Plate: Cheaper "Stainless"; The World's Largest Testing Machine for Braced Structures.

CATALOGUES RECEIVED

Barr and Sons, Covent Garden.—Autumn and winter flowering bulbs for early planting.

V. D. Clements and Co., 12, Stockton Gardens, Tottenham, London, N. 17.—Superior Dutch bulbs.

John B. Vanderschoot, Hillegom, Holland.—List of bulbs, 1926.

Edwin Murrell, Portland Nurseries, Shrewsbury.—The Shrewsbury Roses, 1926-1927.

AUGUST HORTICULTURAL SHOWS *(continued).*

52nd Year
SHREWSBURY GREAT MUSICAL AND FLORAL FETE
Wednesday and Thursday 18th and 19th AUGUST, 1926
Upwards of 1,350 CASH PRIZES
Specially Manufactured COALPORT CHINA Value £200 to be won outright
for Orchids, Sweet Peas, Roses, Fruit Classes, and Non-Competitive Exhibits. Gold and Silver Medals, etc.
President's Prize—SILVER PLATE.
Entries close August 11th
For Schedules, apply W. G. BRAZIER, Secretary, Shrewsbury.

WORTHING AND DISTRICT
GRAND FLORAL FETE
ORGANISED BY THE
Worthing Allotment Holders' Association
A Floral Fete & Seventh Annual Exhibition of
VEGETABLES, FRUIT, & FLOWERS
Open to Allotment Holders, Amateurs, Professional Gardeners, and Fruit Growers
will be held in
HOMEFIELD PARK, WORTHING
on
WEDNESDAY, AUGUST 18th, 1926
The Fete will be opened at 2.30 p.m. and closed at 10 p.m.
The Borough Band will be in attendance.
Schedules from Hon. Sec.—
Mr T. C. BROWN, 3, Cortis Avenue, Worthing.

BOURNEMOUTH & DISTRICT ADULT SCHOOL FEDERATION
Fourth Annual Fruit, Flower, and Vegetable SHOW
BOSCOMBE TEMPERANCE HALL, HAVILAND ROAD,
WEDNESDAY, AUGUST 25th, 1926
Opening Ceremony at 2.30 by His Worship the Mayor of Christchurch, Alderman, F. E. Abbott.
Flower Show Secretary—
Mrs. F. H. PAYNE, 15, Corhampton Road, Bournemouth.

THE GREATEST FLOWER SHOW
with Horse Leaping in the Provinces
SOUTHPORT
AUGUST 25th, 26th, and 27th
Over £3,000 in Prizes. *Entries close August 16th.*
THE NATIONAL ROSE SOCIETY
will hold a Special Jubilee Show in conjunction
Schedule, etc., from—SECRETARY, Town Hall, Southport.

GRAND FLOWER, FRUIT and VEGETABLE SHOW
of the
Dunoon and Cowal Horticultural Society
to be held in the Burgh Hall, Dunoon, on
THURSDAY, AUGUST 26th, 1926
Schedules from Secretary—
MR. JAMES FULLARTON, Dunoon.

SANDY SHOW
AUGUST 26th, 1926
FLOWERS, FRUIT, VEGETABLES, HONEY, NEEDLEWORK, BREAD, and LIVESTOCK.
Schedules from—
F. W. WESTERN, Sandy, Bedfordshire.

NEWARK and DISTRICT HORTICULTURAL and ALLOTMENT HOLDERS SOCIETY
ANNUAL SHOW
of Flowers, Fruit, Vegetables, etc.
to be held in the TOWN HALL, NEWARK
on Friday and Saturday, August 27 and 28, 1926
All communications to the Hon. Sec.—
J. W. BROWN, "Cosmea," Winthorpe, Road, Newark.

Dunfermline Horticultural Society
AUTUMN FLOWER SHOW
August 27th & 28th, 1926
Open to all Classes for Roses, Sweet Peas, Pansies, Herbaceous, etc.
Schedules on application to JOHN HYND, Secretary, 53, Victoria Street, Dunfermline.

BIRLEY CARR AND WADSLEY BI HORTICULTURAL SOCIETY
will hold its
TWENTY-FIRST ANNUAL
in the Council School, Wadsley
on
SATURDAY, AUGUST 28th, 19
Schedules from Hon. Sec.—W. J. DANCER, Cross Road, Wadsley Bridge, Sheffield.

POYNTON HORTICULTURAL SC
will hold its
THIRTY-FOURTH SHOW
In POYNTON PARK
on SATURDAY, AUGUST 28th,
Schedules from Hon. Secs.
MR. E. PEARSON, Park Terrace, London Rd
MR. B. FROSCH, Lyme View, Midway, Poyn

THIRTEENTH ANNUAL EXHI
of the
Lowton and District Horticultural
to be held at LANE HEAD, LOWT
on SATURDAY, AUGUST 28th
Hon. Sec.—GEORGE H. COE, F.R.H.S., New Lowton, nr. Newton-le-Willows.

COALVILLE & DISTRICT COTT. HORTICULTURAL SOCIET
27th Horticultural Industrial an and Confectionery Exhibiti
will be held on
SATURDAY, AUGUST 28th, 19
when over £170 will be offered in Prize Money, Cup
Schedules, Entry Forms, and any informati thereto on application to D. SUMMERS, Hon. B·lvoir Road, Coalville.

Advertisements of early August appeared in the issue for July

September Show Announcements included on August 21st.

When in doubt

LET "GARDENING ILLUSTRATED" solve your gar problems and those of y friends.

Make use of the QUERI and ANSWERS Page.

It costs nothing, and the adv of experts in every branch is alw at your disposal.

The name and address of sender is required in addition any "nom de plume" under wh the query appears.

Each query should be o separate sheet, the name a address being added to each.

No queries can be answe by post.

Address
Editor, "Gardening Illustrate Bouverie House, Fleet Stre London, E.C. 4

GARDENING ILLUSTRATED

2474—Vol. XLVIII. AUGUST 7, 1926 [Prepaid Annual Subscription to any part of the World, 15/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

mildew ... 468
ums 477
a Bee's 477
ELUS RA- 469
orts (Epime-is a ground *e* 468
nch, Veitch's *g* 474
la persici- *erheimi* .. 477
FLOWER BEDS OF REGENT'S PARK, THE 472
Flower garden, pink shades in the 477
Fruit trees, trained, summer pruning ... 478
Garden, making a bog and water 479
Garden, planting a front 479
Hound's Tongue (Cynoglossum) 477
Hydrangeas, Blue ... 469
Larkspurs dying off, annual 479
Lawns and their treatment, starved 469
Lilies, growing 479
LILIES, THE MARIPOSA 475
Lilium candidum (the Madonna Lily) ... 475
Lychnises 472
Margyricarpus setosus 471
Onions, sowing winter 474
Ononis Natrix 471
Peaches out of doors ... 478
Plants for garden on Pentlands 479
Plants in unorthodox "flower pots" 469
Plants, twelve choice rock 479
Plants with handsome foliage, hardy 467
Potentilla ambigua ... 468
Rhododendrons, clay-coloured weevil and 470
Rosa sericea 468
Rose, budding American Pillar 479
Rose Caroline Testout 470
Roses from cuttings, growing 479
Roses, garden 471
ROSES, SOME OLD 470
Salading 474
Strawberry beds, making 478
Strawberry the Duke 470
Strawberry Waterloo 478
Sweet William, the old double 468
Tamarisk in bloom, the 467
Tomatoes without manure 468
Valeriana sitchensis 468
VERBASCUM OLYMPICUM 467
Verbenas 477
Wahlenbergia tasmanica 471
Zinnias 477

Hardy Plants with Handsome Foliage

HOUGH by no means equal in ity and general usefulness to the nerous flowering herbaceous subjects ich our gardens are—or, at any rate, -now so richly furnished, these have ndoubted value in modern garden n, and when judiciously employed effects are to be obtained by their

llowing are all excellent when well nd if carefully placed and arranged fine effect. As a rule, they require ordinary cultivation of hardy herplants, a deep free loam suiting them it need not be very rich.

US.—These are very hardy and ants, with noble foliage. The com-'s Breech (A. mollis) is well known, tifolius and A. longifolius are even l A. spinosus and A. spinosissimus distinct and equally valuable in

EDULIS, A. racemosa, and A. nudi- vigorous subjects, growing from 6 feet in height, with very handge. Even the Japanese A. Sieboldi ntly hardy to remain permanently en air in most of the parts of the country, e foliage gets slightly by severe frost in cold

A SCABRA is a South plant, with remarkably showy leaves and of the ossible culture.

(Plantain Lilies) are and, either for pots or borders. F. cœrulea, flowers, F. japonica grandiflora), white, the all, and F. Sieboldi, the chief varieties, and also a kind with varieige (F. albo-marginata). re no trouble to grow, l near large towns they om nearly as freely as untry places, and someltogether. The

(Rhubarb) are also fine, coarse, subjects; R. ith red-veined, and R. with deeply-cut foliage, cially valuable.

COMMUNIS (the Giant a stately plant, occaaching a height of 10 F. tingitana, F. glauca, , and F. asparagifolia, the last with finely-divided leaves, are also desirable. Some of the larger-growing

ERYNGIUMS, or Sea Hollies, are also very fine for this purpose, notably the stately E. giganteum.

CENTAUREA BABYLONICA is remarkable on account of its silvery foliage combined with its great stature, often 8 feet or 9 feet high.

LAVATERA ARBOREA VARIEGATA (the variegated Tree-Mallow) is a very handsome subject, with beautifully marbled leaves. Grows 4 feet to 6 feet in height. The

BAMBOOS are grand in the sub-tropical garden, especially such kinds as B. falcata, B. Metake, and B. viridi-glaucescens, and in light soils they are also sufficiently hardy.

AILANTHUS GLANDULOSA (the Chinese Tree of Heaven) is useful in sub-tropical gardening. If the plant is cut down to the ground every year strong young shoots, bearing very fine foliage, will rise to the height of several feet the following season. Even the common

ASPARAGUS is not to be despised in connection with some of the above, the finely-cut foliage producing a very light and elegant effect. Lastly, the foliage of some of the Mulleins (Verbascum) is really handsome; and a strong plant of the common Burdock (Arctium) appearing in a border lately was so striking that the owner had not the heart to cut it out, and it now forms a really fine object, fully 4 feet high, and as much through.

Verbascum olympicum
A very handsome foliaged plant

NOTES OF THE WEEK

Verbascum olympicum

AMONG plants that are classed as biennial there are a few of the largest that take two or even three years to come to blooming size. One of these is Verbascum olympicum, the largest and handsomest of the pale yellow Mulleins. The illustration shows a plant in its second year. The silvery, downy coating of the great leaves is almost lustrous as they gather together to the heart of the plant. The outline of the leaf varies in different specimens; sometimes it is quite plain, sometimes strongly waved as in the example shown. In the third year the massive spike of bloom rises to a height of 7 feet or more. With its many side shoots it has the appearance of a great candelabrum of pale yellow with one tall central column. It is one of the plants that may be called wayward, for it has a way of coming when and where it will, and when and where it is quite unexpected. In the garden where this one was photographed there had been none of this Mullein for several years. The seed must have remained dormant from the time of its former cultivation.

G. J.

The Tamarisk in bloom

The Tamarisk is often employed as a screen or shelter plant close to the sea, for the salt spray which injures so many shrubs only adds to the richness of colouring in this; still, the fact that it will thrive inland and under favourable conditions form a most graceful specimen seems to be generally overlooked. An additional feature is furnished by the flowers, which are of a very pretty shade of pink. They are borne in densely-packed spikes, which are thickly arranged towards the upper part of the long, thin, wand-like shoots, and so light and elegant is the entire specimen, that when in full bloom and at a little distance the upper part appears to be enveloped in a

pink cloud. A well-balanced specimen of the Tamarisk is a very beautiful lawn shrub, more especially where the soil is fairly cool and moist, but even where dry and sandy it will succeed better than many other shrubs.

Rosa sericea

It is seldom that one meets with Rosa sericea in private gardens, while it is also rare in nurseries, although seen in some of the best botanic gardens. It is of erect growth, with pleasing foliage and very distinct flowers, inasmuch as they are composed of four petals only, and assume the appearance of a Maltese Cross. They are pure white and are freely produced on an erect plant of moderate height. A striking form is that called Rosa sericea pteracantha, which has large, bright red spines. A group of this latter is very effective in the garden.

S. ARNOTT.

Potentilla ambigua

An excellent little rock garden plant with bright flowers is that named P. ambigua, sometimes also called P. dubia. It has quite pleasing foliage, and only grows about 3 inches high, producing its large golden-yellow flowers only a little above the leaves. It does well in sun or partial shade, while it gives its bright blooms for a good while in its season. It is easily propagated by division, and seeds are sometimes obtainable.

S. ARNOTT.

Valeriana sitchensis

This Valerian is very handsome when growing by the waterside, where it will reach to 5 feet in height. It is attractive in every stage of its growth. The leaves are dentate, its flowers, which are of a pinkish-white, borne in clusters on thick stems and delightfully fragrant. Because of this it is called in Canada the wild Heliotrope. It grows in moist woods there. It is a plant of easy cultivation, and can be propagated by seed or root division. To those seeking an addition to their bog-loving plants this Valerian will be acceptable.

R. MOORE.

Thorpe Hall.

The old double Sweet William

A very old plant in gardens, but now quite rare, is the dark crimson double Sweet William. It has been known to me for about 50 years as "Murray's Double Dark Sweet William," so named, I believe, because it was distributed at one time by an amateur of the name of Murray, who dwelt in the west of Scotland. It is only some 6 inches high, has dark foliage, and large-sized heads of double deep crimson flowers. It is a fine plant for the front row of the border, or for the rock garden, and is one of the few Sweet Williams which do not seem out of place in the latter. It is a true perennial, but sometimes flowers itself to death. It is always wise to strike or layer a few of the side growths so as to retain a stock of plants.

S. A.

The Barren-worts (Epimedium) as a ground work

I wonder if any readers of GARDENING ILLUSTRATED have given the Epimediums a trial for the purpose named above. If not, I would strongly advise their use, even if only in a small way, where flowering shrubs are not planted close together, or among newly-formed plantations where considerable ground space often necessarily occurs for a few years and which it is desirable to carpet with some living plant. The Epimediums are elegant plants and do not rob the ground to any serious extent, yet their beauty, especially during the early summer when developing their choice and tender-looking leaves, is considerable. The beautifully-marked leaves are almost like satin in texture; indeed, they look so frail that one would expect them to get knocked to pieces by the first hailstorm, but I have never known them to be seriously damaged in this or any other way. I use them to carpet quite heavy clayey soil among deciduous Azaleas, in which position they are very beautiful and useful in keeping down weeds, the leaves remaining upon the plants until the flower-buds begin to rise in the early spring, when they are removed, but close to the ground, as in this way leaf-stalks afford a light protection flowers. Most of the kinds thrive way and flower profusely, their flower deep yellow in E. pinnatum, sulphur sulphureum, E. alpinum, sulphur-re yellow, E. roseum, of a bright rose sha E. niveum, white.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Tomatoes without manure

I HAVE read the article under the above title, signed by "M.," on page 218 of GARDENING ILLUSTRATED, and agree with all the writer tells us with regard to overfeeding, but, as I tried to point out last year, I am of the opinion that there are many thousands of Tomato plants which would crop very much better if they were better fed. If, as "M." points out, Tomatoes are grown in pure loam, or if planted out in a rich garden soil, they generally do well without any extra feeding. Under these conditions much harm can be done by giving manure containing nitrogen before fruit is set and swelling nicely. There are, however, many small gardeners and allotment holders who do not grow their Tomatoes in pure loam and who have not a rich garden soil to fall back on. I have seen many a small greenhouse in various parts of the country where the Tomato plants have been simply starved during the early part of their life. The owners of these houses have always told me that it was wrong to feed Tomato plants until the first truss of fruit was set. I have always asked them to try feeding a plant or two with a good complete fertiliser have done this, and within a short they have fed all their plants and wisl had started sooner.

Personally I have no fear for tho have been growing Tomatoes for a of years. One should soon learn strike the happy medium betwee feeding and under-feeding. My fe rather for those who are beginners. thing they read in connection with growing drives home the fact that th not give manure until the first truss is set. They wait for that truss of fr in consequence, never feed. To son good loam is a very definite thing. W exactly what we mean by the term a we can grow with good loam. On t hand, there are many who do not kn good loam is, they have never used their lives, and failed to get it if they it. To them good loam means the s out of their gardens and placed in the houses. Sometimes this garden so tremely good, often it is extremely b

We have, then, two distinct cl Tomato-growers who are readers of ING ILLUSTRATED: A, those who u loam for indoor work and plant out T in rich garden soil; B, those who nary garden soil for indoor work. in class A the advice given by "M. be followed. To those in B class suggest that manure be added to when putting the soil into the hous the plants, when put out into t manent places, do not get away w them.

Asphodelus ramosus; A nearer view

American mildew

I have noticed from time to tim columns of your paper articles on mildew on Gooseberries, and also c berry caterpillar. I grow a large qu fruit, Gooseberries being predomina many years I have had a hard st keep down the two above-mention and have spent much time and m spraying, with little or no result, of the Gooseberries being severely while the fruit came in for a large sh

The past winter we had a lect the Board of Agriculture, Edinbu this mildew was one thing he gave lecture on. The formula he ga under:—Common washing soda 1 gallons of water, adding 2 ozs. of b for each lb. of soda, starting sp May, when the berries are just form keeping on with the treatment on night or three weeks. I am not a low out this instruction as careful but I have done it a few times, beneficial results; so much so th only a very few berries affected handful as yet, while the wood— and there has some signs, a thing seen for years.

While spraying for the mildew soda solution my bushes were at the Gooseberry caterpillars. I h

ou kill two dogs with one stone. I had ond attack, but on spraying again it d them out. RELIEVED.
gswood, Peebles, N.B.

Asphodelus ramosus

the end of a double border for June owers is a group of grey-foliaged ants backed by a Yew hedge. In the ound are Nepeta and Santolina, at the young plant of Euphorbia Wulfenii, a main planting of this handsome lel. It is one of the most striking and ting plants of the last days of May and rliest of June. The photograph was hen the flower was in its earlier stage, le growths, which add much to the of the long raceme, being not yet de- l. The flower has a warm white and is ornamented by an outside -brown line down the middle of each t. These warm brown lines give a and delightfully harmonious colour- the upper portion of the flower when t is still in bud. The root is a bunch ny tubers. It is a South European most frequent in Southern Italy and In some regions where it abounds croaches on cultivation it is said to poisonous effect on workmen engaged oying it, but in English gardens, in t warm soil that suits it well, it is no an a beautiful and beneficent garden To the writer of this note it is tly reminiscent of rides in the Roman gna and here and there in various ranean regions. G. J.

The Asphodel in the Mountains of Majorca

By high and rough mountain tracks of Majorca the Asphodel is abundant in places, sending up its tall flower spikes in great profusion. The picture is prepared from a photograph taken in June of last year in the northern mountains of this enchanted island. The plants are seen growing among rough, rocky boulders and fully exposed to sun and wind on the mountain top

Blue Hydrangeas

e been very interested in reading the s about the colour of Hydrangeas; it cussion that has been going on ever can remember, and I have never f any satisfactory conclusion being at. That Hydrangeas can be turned doctoring there is no doubt, but I am whether, as H. J. Jones, V.M.H., n your issue of July 17th, "No geas are blue naturally." About the of these flowers in pots I know I can only speak of them as we have Cornwall as bushes. I have at pre- of these bushes in my garden, one is other mostly pink with a few bluish They grow within a few feet of each other and are about 13 years or 14 years old. The blue one has certainly never been doctored. Oddly enough, sometimes the flowers are rather bluer than they are in other years. This year they are very blue. Perhaps the blue one is a little more in the shade than the pink one. In a garden I know well there were two very large Hydrangea bushes very near each other, one pink, the other blue. These two have died, but there are two more in the same garden, only not so near each other. In each case the blue ones were slightly more in the shade. Indeed, the reason that used to be given for some being blue was shade. But I have seen two bushes, one each side of a cottage door, both in the eye of the sun, one pink, another blue, and only the other day I passed a terrace and noticed a blue Hydrangea in one garden and a pink in the other, both in the sun. I have asked the opinion of many florists on this subject, but no one really seems to know much about it. One person told me he had taken cuttings from blue plants and they turned out pink and of pink ones that became blue. F. E. J.
Cornwall.

—— In reference to recent articles as to Blue Hydrangeas, I may say I have had one of them for over 15 years—a really true blue —and was purchased as such. It is a large shrub now and covered with beautiful flowers of a perfect blue. Nothing has ever been done to it. It is sheltered by other shrubs and faces S.W., and blooms well every year and keeps its colour well. K. L. LINGARD.
Fellside, Windermere.

Asphodelus ramosus in a Surrey garden

Starved lawns and their treatment

We have read with interest a reply in your issue of July 24th, page 448, relating to the use of sulphate of ammonia on starved lawns. We are very pleased to see mention made of sulphate of ammonia in this reply, but we feel that perhaps a better suggestion would have been to apply a certain amount of phosphates and potash immediately to such lawn, followed, if necessary, in the autumn with a dressing of lime and loam, and followed next spring by a top-dressing of sulphate of ammonia. T. H. J. CARROLL.

Plants in unorthodox "flower pots."

It was recently stated in GARDENING ILLUSTRATED (p. 435) that "many an old woman can grow in a cottage window and in a broken teapot a Hydrangea fit to hold its own with the best that ever came out of a greenhouse." This is quite true. I have seen wonderful Zonal Pelargoniums, both single and double, grown in cottage windows in ordinary jam-pots. One of the finest lots of Chrysanthemums—border varieties I mean —which I ever saw had been lifted on the approach of frost and put into old zinc pails in the bottoms of which a few holes had been punched. The display was magnificent; the variety was that old favourite white of bygone days, Sœur Melanie. I have seen Ferns, chiefly Polypodiums, and Fuchsias thriving in syrup-tins. The true enthusiast is not daunted by difficulties in the way of pots or of fancy composts. It is surprising, too, how well many plants succeed in cottage windows. On one occasion the late Mr. James Jeffrey, then at St. Mary's Isle, and myself were judging pot plants at a fairly important

village show. Among the exhibits was a splendid and shapely specimen of Abutilon Sawitzi which took the eye of both of us at once. "I wish," said I, "that I could grow a piece like that!" "So do I," said Mr. Jeffrey. On making inquiry we found that the plant in question had never known heat—as we gardeners understand heat—but, summer and winter, it stood in a window. Other incidents which have come under my notice at shows and elsewhere might be quoted, but sufficient has been said to show that, even under difficulties, our amateur and cottager brethren can, at times, give us a lead.

W. McG.

Clay-coloured weevil and Rhododendrons

Reference "Answers to Queries" on pp. 252 and 335 in GARDENING ILLUSTRATED, may I, please, point out that the name of the clay-coloured weevil is Otiorrhynchus picipes and not O. sulcatus as recorded in your columns? I enclose a reprint of a paper on "Pests of Rhododendrons," *vide* p. 50.

G. FOX WILSON,
Entomologist.

Royal Hort. Soc. Gardens,
Wisley, Ripley, Surrey.

Contributions from the Wisley Laboratory XLV., "Insect Pests of Rhododendrons," by G. Fox Wilson, N.D.H., F.E.S., page 50, par. 10:—

The clay-coloured weevil, Otiorrhynchus picipes F.—This species is widely spread, and its fondness for Raspberries has given to it the alternative name of the Raspberry weevil. Its host plants include fruit, *e.g.*, Apple and Strawberry, root crops, Hops, and pot plants, and, occasionally, Rhododendrons. In May, 1923, both seedling and bush Rhododendrons were severely attacked by this weevil and Strophosomus coryli at Woodham, about 3½ miles from Wisley. The Rhododendrons Ascot Brilliant and Doncaster were the most badly attacked, whilst at Wisley R. basilicum, a new Chinese species, suffered most.

The last-mentioned species had its foliage riddled, although the leaves are above the average thickness and their under-surfaces are covered with thick brown pubescence. On examining the bushes after dark by means of a lantern, large numbers of these two weevils were captured by jarring the bushes over a beaten tray, as many as 20 being shaken from a small bush 2 feet high. Considerable numbers were captured by laying pieces of sacking round the bases of the bushes, the weevils using them for hiding in during the day.

Description.—The adult is about ⅛ inch long, black, and covered with a light brown and greyish pubescence. The thorax is strongly granulated, and the wing-cases are covered with varying shades of brown scales, giving to them a tessellated appearance. The legs are reddish-brown.

The larva is about ⅓ inch long, whitish and legless, and closely resembles the last species.

The pupa resembles the Vine weevil, but the eyes are black.

Life-history. — There is a close resemblance to the Vine weevil in its habits, except that this species prefers the buds rather than the leaves.

Strawberry The Duke

I was considerably astonished to read Mr. Wright's eulogy of this Strawberry in the issue of GARDENING ILLUSTRATED for July 31st, page 452. I procured a quantity of runners in the autumn of 1923 and planted these on well-prepared ground the following spring, fruiting them in 1925. It is a splendid grower and heavy cropper, but here its good points end so far as this garden is concerned. The berries are, for the most part, very small and very soft, and useless for preserving, while the flavour leaves a gr to be desired. I have not grown Mme but notice it in other local gardens, a ing it is absolutely flavourless, do no to take up space trying it.

C. F

Rose Caroline Testout

I was well pleased to read "A Gardener's" remarks on this fine o on page 452 of the July 31st issue journal, and I consider that it fully the praise he bestows on it. I have bed of 18 plants of this variety plan 20 years ago which, at the moment, fect treat, and has been each year sin got it. It may interest "A Scotti dener" and other readers to know th plants, when received, were so sma actually planted them with a trowel, the soil about the roots with my finge one died, and to-day all are in full vig likely, from all appearances, to con for some years yet. I do not know stock they are on, but noticed that t been grafted.

C. T

—— "A Scottish Gardener" speak of this old favourite Rose on page GARDENING ILLUSTRATED dated July 3 as a wall or pillar Rose it is one of t provided the climbing variety is o This is a sport of Caroline Testou Scottish Gardener" is wrong when mises that Mrs. W. J. Grant was r America. This beautiful old Rose wa and introduced by Messrs. A. Dick Sons in 1895, and its climbing sport Hill in 1899. La France de '89, a h Rose, seldom met with now, was in in 1889 by Messrs. Moreau-Robert, one of the best exhibition Roses of and very vigorous in growth. A hedg Rose, Gruss an Teplitz, and Ulrich planted together was the most con sight I have seen, as far as a Rose concerned.

W. E. Wi

SOME OLD ROSES

THE Roses of a hundred and more years ago have acquired a legendary beauty, so that there is a certain risk of disillusionment in bringing them back into cultivation and seeing their homeliness in the light of the sun; nor may we hope to find in them all the charm and freshness of the Roses among which we played when we were children, for time has claimed those beyond recall. But most of them have the stamp of character and an individual kind of beauty which makes them worth growing not only for their associations.

Our modern concept of a Rose has been influenced, I think, by the solid sculptural design of the Teas and their hybrids; their high-centred, helical flowers are at their best before they are fully developed, and although their *beauté du diable* is very lovely it does not belong to a natural flower pattern. It is none the less admirable for that, but there is a peculiar satisfaction in the Tudor Rose design of, for example, the old semi-double Tuscany, which appeals to a far older and one might almost say ancestral idea of a Rose. The velvety petals are deep crimson, backed with scarlet, and open flat to uncover the old gold of the stamens. A dowdy old Rose, perhaps, for it "blues" badly and the velvet looks dusty with age, but it has a great deal of charm if it is grown well away from any modern Roses, and it has the deep, rich scent of all the Gallicas.

The older and less sophisticated Damask is attractive in quite a different way, for the typical, semi-double form is a gay and careless Rose with large, loose flowers of bright carmine, very freely produced. It is the Rose of which Omar Khayyám wrote:—

> ". . . 'Lo,
> Laughing,' she says, 'into the world I blow.'"

and it grows on his grave at Naishapur. It is not the Damask Rose of poetry, for that seems always to be dark red, nor is it very likely that it was brought with the Damson from Damascus by the Crusaders, but it is one of the oldest Roses in cultivation, and as it is the chief source of Otto of Roses in Eastern Europe it is not likely ever to die out. Its scent, though very powerful, is not quite so rich as that of the Gallicas nor so delicate as that of the Provence Roses.

The striped Damask, York and Lancaster, is said to produce pink, white, and striped flowers on the same bush, and Camillo Schneider makes the interesting suggestion that it is a graft-hybrid, like Laburnum Adami, but I have never been able to obtain it, for the beautifully-named Rosa Mundi, a striped Gallica, is almost invariably supplied instead of it. This is a very old Rose, for Clusius says, in 1601, that John Resteau, "a worthy gentleman and citizen of Cologne," had an elegant Rose in his garden with red, white, and parti-coloured petals. He calls it Rosa versicolor, and we may take it to be identical with one, Rosa Mundi.

It is a large, open Rose splashed and striped carmine on a pale pink ground that fades to white as the flowers age. It looks particularly well as a cut flower, perhaps because its sharp, bizarre pattern harmonises with the straight lines and angles of and furniture.

The fully double forms of the Pro Cabbage Rose are, to my mind, a tri and clumsy, and I grow them only clear, incomparably sweet scent a associations.

Rosa alba, an ancient hybrid bet Gallica and R. canina, has given beautiful climbing Roses, of which known is probably the Maiden's B old cottage gardens. The shapely, fla are soft, very pale pink fading to wh in the time of the Empress Joséphin called "Cuisse de Nymphe," perhap shade of millinery that was fashio the period. But the finest form alba is the "Celestial Rose," which and rather more deeply colour Maiden's Blush. It is probably t called, rather unthinkingly, "Gross de Nymphe" by the French rosarian

The Moss Roses, with their artful tion of primness and abandon, mig been designed expressly for the V cards they once adorned and with wh went so completely out of fashion. F large quantities of them are being year in the streets, so perhaps the wave of enthusiasm for mid-Victoria is bringing them back into favour.

The common pink Moss is the bes and most typical, but there is a c character in the formality of the lit Moss, "Nuits de Young," and the oddity of "Œillet panaché." "N Young" must be the darkest of al

Rosa Mundi

ed Rose, almost invariably supplied as York and Lancaster

Black Moss "Nuits de Young"

Probably the darkest of all Roses and certainly one of the sweetest

, when full blown, like a dusty-ıpom Dahlia. A perfumer friend, lom given to enthusiasm, described ıs "marvellous and unmatched by ı Rose." Œillet panaché is striped white, with very long Mossy sepals formal flower. Both these Roses d, many years ago, by T. Smith, in an old nursery at Orleans, and ill included in the wonderfully rich ıf old Roses at Daisy Hill.

nothing is known of the date and rigin of the Moss Rose, but it is greed that it began as a sport from nce or centifolia, and in 1829 a ilar sport, Rosa centifolia cristata, on a ruined tower in Switzerland an origin that seems to be quite nticated in spite of its suggestion orary Gothic romance.

ter-coloured Moss Roses have the weet scent of their family and ı it a rough resinous smell of their comes from the glandular hairs of s," a combination that matches the contrast in the design of the

old Roses have the disadvantage flowering season (though there partial exceptions in the Damask they make vigorous and shapely ch often bear a decorative crop of autumn. Their natural place is ı the shrubbery or mixed border, in association with other old-lants. They are sometimes grown themselves, but this arrangement rather an air of museum speci- the best of them have merit look well anywhere in the garden within sight of their modern

F. A. Hampton.

Garden Roses

ırming garden varieties are quite by admirers of the Rose. I feel many would be glad to include ıese beautiful old Roses in their collections if they made their acquaintance. It is a great pity that so many of these fine old Roses are neglected, for it is only in a few gardens one sees them in good condition. Take, for instance, the splendid clear yellow Austrian Briar, Rosa Harrisoni. Few flowers equal it in tint, and it blooms with such freedom here that I can cut hundreds of flowers and hardly notice it, so freely does it bloom. As a companion to it I have Austrian Copper, which has orange-red, beautifully-formed flowers. When cut for vases for the decoration of the house they are delightful. Then there are the Scotch Roses, varieties of Rosa spinossissima. These are little gems with neat flowers sweetly scented and produced in great profusion. Some are single, some double, and others semi-double in white, blush, pink, and bright rose.

North Devon. F. H.

ALPINES

Ononis Natrix

A NOBLE plant when well grown. The flower-stems are often 2 feet in height, freely branched, carrying endless pairs of yellow flowers opening successively to the extremity of the stem. The stems are so thickly produced that they form a dense full tuft, and when a shoot falls away from the closely-packed centre it produces a fine effect. The blossoms are drooping in the bud. It should be planted in a sunny position in a crevice or small pocket between the stones. This keeps the roots moist and protected from the hot sun, which otherwise the plant enjoys. The compost should consist mainly of good loam to which a good proportion of broken rock is added, and the soil should be open to a good depth as the tap root strikes deeply into the ground. It is a truly imposing plant and should be planted in positions where a rich summer effect is desired. The plant is perfectly hardy, but objects to water hanging about the crown for any length of time. This must be avoided by planting at a slight angle to allow it to get away quickly.

H. Stevens.

Margyricarpus setosus

This is suitable for the rock garden where a plant of trailing habit is required. Few things make a more pleasing feature during the dreary season than a broad patch of this evergreen, free-growing plant hanging gracefully over a huge rock. The plant has no brilliant flowers to recommend it, but it produces large numbers of pretty white shining berries which nestle in the handsome yellowish foliage. In congenial quarters it spreads into broad masses covering the face of large rocks with the richest verdure. The plant is not fastidious as to soil, any fairly light garden soil suiting it. The position must be well drained, as stagnation is fatal to it. The plant may be increased by seed sown in pots in light soil or by cuttings. It is perfectly hardy in well-drained sunny positions, but it is advisable to keep a few plants in pots for fear of loss during the wet season. It has a peculiar knack of going off for no obvious reason when about three years or four years old.

H. Stevens.

Wahlenbergia tasmanica

This is a dwarf free-flowering plant which sends out runners under the soil and forms a compact little tuft of short leaves and produces a solitary sky-blue flower on slender stems fully 4 inches long in endless succession. The roots ramble very much and form neat, spreading patches. It succeeds in deep sandy loam and is best on the ledge of a rock garden where the plant may spread in a free way. The plant must have sunshine, for though it will grow in shade it will not flower so freely. It is well to work a top-dressing of sand in and about the plants in autumn and spring. It is easily raised from seeds, which set freely, and if sown as soon as gathered germinate quickly under glass.

H. Stevens.

The Flower Beds of Regent's Park

Regent's Park has long been famous for its bedding plants, which are the source of great display and attraction at the present time. Groups of trees and shrubs on mounds provide ideal backgrounds for planting in this extensive and varied flower garden. The flower-loving public are well provided for in this popular London Park

THE remodelling of this park in North London was commenced in 1812, and finally opened to the public in 1838. It was named after the Prince Regent. The area is about 472 acres, and, with the addition of Primrose Hill, which is approximately 61 acres, the whole provides a valuable open space, the main portion of which is devoted to playing and recreation fields. Such games as cricket, football, tennis, and hockey are provided for, and to recognise the value of these open spaces in thickly-populated districts it may be mentioned that during the last season the following number of games was played, viz., cricket 1,700, football 650, besides tennis and hockey. These figures help one to realise the demand that exists at the present time for recreation in the open air. Not the least interesting development made during recent years has been the provision for young children of enclosed playgrounds with sand-pits, swings, and see-saws. These have proved an extremely popular form of amusement for children and a relief to parents, who know that their children are comparatively safe in these recreation areas rather than wandering about the crowded streets. Much credit is due to H.M. Office of Works for providing these facilities for the younger generation. The flower-loving public is well catered for in the park, with its extensive and varied flower garden which has been a source of great interest and attraction for a long period. Generally speaking, the soil in Regent's Park is a stiff clay, retaining a great deal of moisture on the surface during winter and cracking readily during hot, dry weather in summer, and by no means an ideal soil for the gardener. Yet with perseverance excellent results are obtained with trees, shrubs, and flowers. Good specimens of the London Plane are to be seen by the side of the lake. In the flower garden are some fine trees of the Cornish and English Elm, and near the top of the flower garden are two large Elms with their branches sweeping down on the trimly-kept lawns. It is seldom we see so finely-balanced and well-branched specimens as these.

Near by is a very large specimen of Cotoneaster frigida. This has attained a great size, and when covered with its coral-red fruit is a wonderful sight. Unfortunately, birds are very fond of this, and soon clear the trees when the fruit ripens. Incidentally it may be mentioned, the wood of this Cotoneaster is said to provide good material for making golf-clubs. The flower garden, with its broad walk lined on either side for part of the way with Horse Chestnuts, provides a pleasant promenade for visitors on their way to the Zoological Gardens, or with its numerous seats, as resting places, where others can enjoy the beauties of the flower garden. In the original laying out of this garden the happy idea of forming mounds to break the level surface had been adopted. The effect of grouping the various shrubs and trees on these raised portions can be seen to-day, and they provide ideal backgrounds for planting the various subjects used in the embellishment of the flower garden, forming charming pictures from various points of view.

A Delphinium corner in Regent's Park

Regent's Park has long been famous for the displays of bedding plants provided, and this year leaves little to be desired. During a recent visit the most notable beds were of Salpiglossis. These annuals were covered with their bell-shaped flowers in all shades of colour. This is by no means an easy plant to do well in London. Beds of Godetia, Lavender, and Carter's Double Pinks were most pleasing, likewise beds of Viscaria and Petunia Silver Queen, which form a charming combination. Another bed was planted with Pelargonium Rossway (crimson), a variety which seems of a much brighter and freer-flowering habit than the well-known Paul Crampel. Fuchsias, ever popular with the public, are represented by well-flowered beds of Sylvia and Dr. Wildman. The newer Hydrangeas, which have become so indispensable for this form dening, are to be seen in well-grown perhaps the largest-flowered variet La Marne, but for colour none ple writer so much as that delightful Parzival, which has been extensive this year. A bed composed of th yellow bedding Dahlia, H. J. Jone planted with Dahlia Mona, will effective in a short time.

A large bed is devoted to Dahlias Robe and Mea Vota, with a ground the small Mignon Orangetelg. On with a good background the usual di Dahlias is full of promise, the colle presenting hundreds of varieties accommodating plant for town and One of the principal features in th time is the magnificent display o rhinums; both the tall and inte forms are used. The position for th been well chosen on a sloping borde background of shrubs and trees. I dom we see these Snapdragons reac dimensions these have attained; man taller varieties have reached close o and the intermediate varieties in like tion. I am not sure that we always see Antirrhinums so tall; neverthe the position they occupy they are cr gorgeous feast of colour with their spikes towering above the well-flowe shoots. Mr. Campbell, the Park intendent, is to be congratulated on t vation and position he has chosen useful plants. Amongst varieties no Eclipse, Prima Donna, Pink Beauty Fascination, Lilac Queen, Madonn Pink, and Tall White. Roses, o many varieties have recently been have proved very satisfactory, the be instance being Mrs. Courtenay Page

The long herbaceous border reach end to end of the flower garden, co area of approximately 400 yards in l 12 feet wide, is bright with its m varied flowers. Amongst the goo noted were groups of Sidalceas, Salvia turkestanica superba, Ve Amber Queen, and the uncommon wort, Trachelium cœruleum. He coronarium, by no means so often s should be, with its bright red flowers, is worthy of a place in th border. Not the least imposing at sent time are the free-flowering Pelargoniums in vases. This form decoration is not often seen now, b its uses, and in such a flower g Regent's Park, with its innumera and shady paths, it adds considerab artistic effect of the whole. Londo indeed, fortunate in having this op in which to spend leisure hours, understand the care, attention, and quired throughout the year to ob splendid displays that are annually the various parks of London.

Wisley. R. F

Lychnises

Lychnises are amongst our old-fa hardy perennials that retain their p Their cultivation is simple. The m require is to divide them occasiona bright scarlet L. chalcedonica has s admirers, and it shows up well in a hardy flowers. L. Haageana is a ta with scarlet trusses. L. Viscaria alb flora is a good white. A sunny sit desirable.

MIDL

EFFECTIVE FLOWER BEDS IN REGENT'S PARK

Those who have not seen the bedding-out at Regent's Park should take the opportunity of doing so during the next few weeks. The display of flowers provided is worth journeying a long way to see. Annuals are here used on a large scale for flower bedding

VEGETABLES

Salading

ENDIVE is so useful for filling the salad bowl during the autumn and winter that it cannot well be dispensed with. Except it is required as early as it can be had, there is nothing gained by sowing the first lot of seed before the end of June, and even then the plants will probably run to seed as soon as they get to a good size. For use during October and November, the seed should be sown about the middle of July. There are lots of so-called different varieties, but seed obtained from a good strain of the ordinary curled-leaf sort is as good as any. The Batavian is also unsurpassed as a plain-leaved kind, although one of the oldest. This is much hardier than the curly sorts, and therefore a good breadth should always be sown to furnish plants to stand through the winter in the open. The seed-beds may be in any position in the open where the sun can reach them, and the ground should be fairly rich. A little space will serve for the first sowing, but the seed must not be sown very thickly, or the plants will be drawn and weak when the time comes to put them out. The second sowing, which should take place a fortnight or three weeks later, should include both the plain and curled kinds, and a larger breadth should be covered. To furnish plants for the winter supply, another sowing of each should take place about the first week in August. Lettuces being equally as necessary to make a good salad as Endive, provision must be made to keep up a regular supply, which can only be done by making frequent sowings of seed. For sowing up to the middle of July a good strain of white Cos is unsurpassed, although some of the little Cabbage Lettuces are very good for use during the autumn. All the early sowings should, if possible, have a position on a cool north border, where the soil is rich, for it is impossible to have them tender and crisp in poor ground; and, as Lettuces do not bear transplanting well during the summer, rather large breadths should be sown, so that the plants can remain where they are sown. To keep in frames during the winter the white-seeded Brown Cos and the hardy Hammersmith are the best sorts, and early in August is a good time to sow the seed. I have already referred to the plain-leaved Batavian Endive as the hardiest of them all. I return to it again to say that at least two plantings should be made—one in September and another about the middle of October. The last will, except in the severest winters, go through unharmed, and then they will be found immensely useful in the spring, as the plants will begin to grow again in mild weather in March, when they may be tied up, and blanched in the usual way. Although to the uninitiated such a commonplace subject, there is no department in the garden that gives more trouble and anxiety to the gardener than to keep up a regular supply of salad throughout the year. This is especially the case with providing a supply for the winter. The character of the weather during the autumn interferes a good deal with one's calculations. If mild, growing weather continues up to the middle of November the plants are sure to get larger than is desirable, and then they want a lot of protecting to keep the frost out of the frames. On the other hand, if the autumn is cold and dry, the plants will be smaller than is wanted. To obviate such contingencies the anxious cultivator makes two sowings of seed, one about the third week in July, the other at the end of the first week in February, and then there will be a choice of plants. Very often I have been glad to use some of both sowings, because for late winter use small plants are better than large ones for keeping.

A. G.

A lovely Mariposa Lily or Butterfly Tulip (Calochortus Plummeræ)

A desert species shown by Sir William Lawrence at Vincent Square on July 27th. The large, satiny, soft lilac-coloured flowers are clothed at the base with golden hair

Sowing winter Onions

Last autumn I sowed a portion of my Tripoli Onions on a plot occupied for two years previously by Strawberries, a friend having told me that very fine Onions that had thin necks and kept well were annually grown on a similar plot in a garden he knew. The seed was sown the second week in August. The surface of the old Strawberry bed was so hard that it was with difficulty the drills were drawn out. The seed germinated rapidly, and as soon as the young Onions would bear handling their numbers were reduced, the final thinning being left, of course, until spring. Another plot was prepared in the ordinary manner, with plenty of manure, and seed of the same variety sown on the same date. After the Onions had grown to a good size in October we had several gales of wind, the result being that many of the plants on the prepared plot of ground were much loosened at the base, whereas all those on the firm ground remained unmoved. I thought this an advantage at the time, as my experience is that once autumn-sown Onions become loosened through wind at the bottom, frost, should it prove severe, is certain to play havoc with them. It may interest some to know that not one blank occurred through the frost in the row sown on the old Strawberry bed, and that at the present time these are much more shapely and larger bulbs than those on the other part, while only one or two thick necks are to be seen. In reply to some remarks on this subject last autumn, the editor stated that in one garden in Scotland where spring Onions had always failed an old Strawberry plot was heavily mulched in autumn with rich manure, the strength of which was washed in by the winter rains. This was raked off in spring, and without any preparation the drills drawn and t sown, with the result that Onions finest size and quality were produced years ago old gardeners used to gro of their spring Onions on slightly rais having a narrow alley between, a chance a seedling came up in the h and was allowed to grow, it always larger bulb and had a better neck a majority of those on the beds. The bined facts prove, I think, that Onio and, indeed, require a firmer surf root-run than can be secured by any e or even rolling. Certainly those w much difficulty in growing this in crop might, if practicable, give the ol berry bed system a trial. If winter are to be sown and the surface cann fore be mulched with manure, th liberally with liquid-manure when growth.

French Bean Veitch's Clim

Not so generally grown as the dwar this is worthy of the attention of the have to provide large quantities during the summer and autum variety must not be confused with th Runner—it is a French Bean, th growing to the approximate height c As a cropper I consider it unequal the quality of the pod leaves nothi desired. For forcing, too, I think l this Bean. In a small span-roofe from which Melons have been cle variety may be planted in the soil i the Melons were grown, and, given supply of fresh pods is assured at when they are appreciated. So g few dozen plants of this Bean will g better return than six times the sa ber of plants of a dwarf variety in po

A SCOTTISH GARD

The Mariposa Lilies

POSA LILIES of California are ing and beautiful, with their wide e of form, colour, and habit. These onging to the genus Calochortus, Mariposa Lilies, because of the e of some of the species to butter- word Mariposa is Spanish, and utterfly." Many of the species etals of a delicate colour, with a liantly-coloured spot resembling f a butterfly. The bulb is rather aging one-half to three-fourths of n diameter. The bulblets, very cely more than an eighth of an meter, are borne at the base of either singly or in groups up to ike many other bulbous plants, s are not formed as offshoots of bulb, but are borne at the base of Not all species of Calochortus lblets. The flowers are borne on the stalk, which is either simple d, depending on the species. They ed either singly or in groups of ree. There are three types of nd in the genus Calochortus—the ily, the Star Tulips, and the Globe e members of this genus are dis- roughout California, being found ast ranges, which parallel the California along the coast, in Nevada Mountains, and in the lying between the two ranges. osa Lily, or Butterfly Tulip, lled, bears a cup-shaped flower er stem. The petals are three , reflexed, so that they give ance of being bent back when ded. They are found in yellow, lilac, each species having distinc- gs. The leaves are long, narrow, een, up to about a foot in length, umbent from their weight when . The flower-stalk is straight striking appearance when a mass rs is in bloom. Perhaps the best s is

TUS VESTA. The colour is white, lilac or rosy-purple, red at the purple on the backs of the petals. are 3 inches to 5 inches across, ng stalks, separately, and make cut flower, as they will last for s when placed in water immedi- cutting.

TUS VENUSTUS resembles C. s not so large, the flowers reach- aximum size in a diameter of The stems are short, being from 10 inches long, and branched, several flowers to a plant, each orne separately. The colour of is white, with pencillings of rose, oloured blotch at the base of each species is found in open fields or alkaline character throughout nges and extending through the y of California into the Sierra ntains.

ENS, the true Mariposa Lily, is a wer. The predominating colour lilac, with whitish hairs toward the petals. The flower is rather stems 1 foot to 1½ feet high. This es an excellent flower for cut- often used as such where it is Its range extends through the s of central California. The posa Lily,

S, closely resembles the white ily, C. venustus, in habit and ibution, often being found asso- it in the coast range foothills. penetrate into the Sierras. This llow, with central blotch lacking, its place being taken by finely-pencilled lines. Other species of this type, showing different habit and distribution, are :—

C. UNIFLORUS, a rather low (4-inch to 8-inch) plant with a lilac flower borne on the end of the stalk. It is found in wet meadows.

C. OCULATUS is of a creamy colour, with a large, widely-zoned eye, with a very large flower.

C. CITRINUS differs from the preceding in colour, being yellow, and is different from the other yellow, C. luteus, in possessing an eye in each petal, the eye being almost black. The Star Tulips are small, very delicate, woodland plants having simple or branched stems, and leaves up to a foot or more in length, being longer than the flower-stalk. These are all similar in shape, but have a wide range of colour.

PUSSY'S EARS (C. Maweanus) is a delicate plant, from 3 inches to 5 inches high, and bearing several blooms at the end of the flower-stalk. The flowers are white, covered on the upper surface with long silken hairs, so that the general appearance is that of the inside of a kitten's ear, hence the common name. Other species of this type are C. Benthami (bright yellow) and C. lilacinus (lilac), which resemble the Pussy's Ear very much except in colour. The third group is popularly known as Globe Tulips, and is well represented by Calochortus albus, known as the Fairy Lantern or White Globe Tulip. The flowers are greenish-white, each about an inch in diameter, with the petals incurved, giving the appearance of a globe. The flowers are pendent from branching stems, from 1 foot to 1½ feet high. This is a truly beautiful species, found in shady woods of the coast range of California. Closely resembling C. albus is C. amabilis, the colour of which is golden-yellow. It, too, is a native of shady woods.

The few species mentioned above do not make up the entire genus as found in California, but they will serve to give an idea of the different types, colours, and conditions under which they are found. These species are all worthy of cultivation, and are found in a few gardens in California, and are offered by a few florists for sale, both in California and in other States. Perhaps the largest use the members of this genus have under cultivation is for naturalising. A few bulbs of any of the above species, if placed in a shady, well-protected corner of the garden will do well and produce beautiful blooms under California conditions, and I can see no reason why the same should not hold good for eastern gardens. Care would have to be taken to protect them from frost in the East if they were used for naturalising. When planted in pots good results have been obtained, the plants producing fine flowers which were beautiful in addition to being rather a curiosity.—PAUL R. HICHBORN in *The Flower Grower*.

Lilium candidum (the Madonna Lily)

At times when one may be, perhaps, a trifle depressed by the failure of certain plants, some recompense may be found in the outstanding success of others. I have been admiring some magnificent clumps of Madonna Lilies in the hardy plant borders. "Magnificent" is the only word which describes them. Each clump contains from 12 to 18 bulbs. Each bulb has grown into a plant over 6 feet in height, and each spike has, at least, a dozen blooms—some of them more. It is now close upon three years since I planted them, and annually since they have thriven. The soil, rather light and not very deep, appears to suit them. They are healthy and vigorous, and apparently immune to that disease which, in some districts, makes the culture of this exquisite Lily impossible. The disease is of fungoid origin and soon kills the plants which it attacks. Remedies have often been suggested. A friend of great experience has found spraying with the old Bordeaux mixture mitigate, at all events, the effects of the disease.

A SCOTTISH GARDENER.

Mariposa Lilies or Butterfly Tulips (Calochortus Vesta) in the open at Tunbridge Wells

It is an admirable flower for cutting

REMINDERS FOR THE WEEK

Southern and Midland

Spring Cabbage

During the next 10 days is an important time to ensure a crop of an early Cabbage for next spring. Harbinger, Flower of Spring, Emperor, Wheeler's Imperial, and April are all reliable kinds to sow. The seed bed should be brought down to a fine tilth and drills made 1 inch deep and 10 inches to 12 inches asunder. The beds must be protected where small birds are troublesome.

Beetroot

Keep the soil well stirred amongst the early-sown crops, and any that show signs of bolting should be pulled up and used at once. The resultant plants from a late sowing should be thinned and given every encouragement to make as much growth as possible during autumn. Backward crops may be assisted by sprinkling a little nitrate of soda along the rows and hoeing in.

Celery

Beware of the Celery-fly and the Celery spot disease, and at the first signs steps should be taken to check both. Keep the plants well supplied with water during dry weather, and early rows may have a few inches of soil worked in around the plants. Remove all side shoots and decaying foliage.

Cardoons

Where these are grown it is now time to mould them up. A good supply of water should be given to the roots and the soil well pulverised. It is essential to see that the foliage is dry, or decay will set in and ruin many of the plants.

Dahlias

The Dahlia is a moisture-loving plant, and in dry soil requires abundance of water during dry periods. As flowering progresses the plants may be assisted with weak liquid-manure and soot-water. Keep the shoots carefully staked and remove all flowers as they fade. If earwigs are troublesome place some small flower-pots filled with Moss on the stakes and examine each morning.

Pansies and Violas

Now is a good time to sow seeds of a good strain of both these. They may be sown thinly on beds made up of light sandy soil in the open. When large enough to handle they should be pricked off into a nursery bed 6 inches apart, when they will make good plants for bedding out in autumn. In cold, wet, and heavy soil they are much better if pricked off into a cold frame and planted in early spring.

Lavender

This is usually left to become too old before it is gathered. The best time is just before the blossoms become fully open and when the bushes are perfectly dry. Where increase of stock is required cuttings of young shoots should now be taken and dibbled into a frame or under a handlight where a bed of nice open sandy soil has been prepared.

Cyclamens

All old plants should now be repotted in a good compost containing a little old mortar-rubble or crushed oyster-shells. The pots should not be over 6 inches in diameter, and the crowns of the bulbs must not be buried. Seed may now be sown in pans of light sandy soil. These should be planted 1 inch apart and covered lightly with fine soil. Shade the pan with a sheet of glass and paper until germination has taken place.

Herbaceous Calceolarias

Where seed was sown as advised in a previous calendar the young plants should now be fit to pot up into 60's, or 3-inch size, in which they should remain until early spring. It is essential to grow these plants as cool as possible. Enough heat to keep away frost is all that is required. If aphis puts in an appearance fumigate the frame or house with XL All vapour.

Strawberries

No time should be lost in getting the rooted runners into their fruiting quarters. The ground should have been previously prepared and well enriched with manure. Make moderately firm by treading before setting the plants in lines 2 feet 6 inches apart, allowing 2 feet between the plants. The Strawberry crop has been practically a failure in these gardens, and the only kind that has done any good is The Duke, a variety that can be well recommended.

Figs

Where trees on walls are carrying a heavy crop and the roots confined in prepared beds they should be liberally supplied with water and stimulants.

Black Currants

Where the bushes are unduly thick, August is the best month of the year to prune them. The aim should be abundance of young wood, allowing as much light and air to penetrate through the branches as possible. Cut out old wood at the base, but do not interfere with the young shoots that are left, as it is these that carry the future crop.

W. E. Wright.

Stockton House Gardens, near Rugby.

Scotland

Hollyhocks

Everyone admires these stately plants, which are now, as a rule, raised annually from seeds. Yet there is generally a favourite or two, and it is not a difficult matter to propagate such from cuttings. These should be taken from the flower-stem toward the end of July when the wood is beginning to be a trifle firm. Cut the stems into single joints, or buds, with 2 inches below and ½ inch above each bud. Put the cuttings into sandy soil in a cold frame or under a handlight, keeping them moist, and no more, until roots are emitted.

Carnations and Pinks

The layering of these is annually necessary if a stock is to be kept up. It is a truism that young plants of either are always more satisfactory than old ones, and while Pinks will root readily from cuttings it is always best to layer Carnations. At the same time there is what may be termed a psychological moment at which cuttings of Border Carnations will root as freely as Fuchsias, and that is when the grass is just on the turn between greenness and the first stage of hardening. Insert such cuttings thickly in boxes and place in a cold frame.

Ripe Grapes

If the crop of such Grapes as Black Hamburgh and Madresfield Court is finished, and if the bunches have to hang for any length of time, it is wise, I think, to allow a little shade. This may be done by permitting the sublateral growths to extend for a time, but if that course be considered objectionable a double thickness of any spare fruit-nets thrown over the roof of the vinery will serve the purpose. This ought to be al remain until the crop is cut. It is too, to mulch the borders with so litter in order that dust may be ke Ventilation must, of course, be an the way, why is it that, nowadays, planters appear to know of the hi ties of the Frontignans, especially Frontignan? If the berries be s flavour surpasses that of any other not even excepting Muscat of Alexa richness.

Melons and Cucumbers

As the former approach the ripen they require more ventilation and l ture. This is the season at which apt to attack the late plants, and in minimise the danger a handful of slaked lime, or a few knobs of char be laid round the stems. When these late plants keep the water a the neighbourhood of the stems as possible. The fruits of Cucumbe they reach a usable size, ought to once in order to permit of the dev of others. They will keep fresh f siderable time if stored in moist s dark place.

Plant houses

Watering continues to make inroa available time, but the worst of the over, and judicious shading and fre tion will ease the work. It is a goo move a few plants into fresh positi sionally; some plants when so mov to regain vigour. In some cases t stimulants may be needful, but th always to be given with judgment a too lavishly. See that good su batches of flowering stuff are co hand for autumn work in conserv greenhouse.

Chrysanthemums

I am of opinion that in some seas is more danger from earwigs than This, unfortunately, appears to be wig year," and the needful precauti way of trapping should not be Routine work in respect of disbud specimen bloom plants and in sec stems of all should be timeously further pinching in the case of bush now permissible.

Hedges

The cutting of Beech, Hornbea vitæ, and Yew hedges is now du the operators are highly skilled it is use the shears than the bill. Priv will, of course, have been cut bo date, but, of course, they will requi attention before long; indeed, I fin sary to trim these nuisances th during the season.

Kitchen garden

Do not omit the sowing of Cabb at the proper time, and if a s Parsley has not been made, do it no the Celery moving by supplying with plenty of moisture. Any em may yet be filled with a good dwa such as Early Ulm or Tom Thum is just a sporting chance of getti dishes of very late Peas by sowing early variety on a warm border. At the expense is not great, and if the likelihood of pods the tops of the p always useful in the soup-pot.

W. McC

Mabie Gardens, Kirkcudbrightsh

FLOWER GARDEN

Verbenas

)UGH there has been great im-nent in the habit and flowers in years, it is to be regretted that it so neglected. I can remember when the flower garden was not complete without one or two beds s. The plants, being dwarf and owering, make an effective dis- grouped in the front of mixed l beds. Grown in pots they make ojects for the decoration of green- conservatory. Propagation can out both from cuttings and by m February till end of April cut- very quickly in a genial tem- about 65 degs. Old plants placed heat some weeks previously will ce shoots, which should be re- n about 2 inches in length. In- cuttings in pans of light sandy nsisting of equal parts loam, leaf- sand, passing the whole through ve. Cover the pans with a bell- ace in a propagating-frame. As cuttings are well rooted put them small pots and keep them grow- rm and genial temperature. The ay also be rooted in July and serting them in a bed of sandy old frame and keeping moist and When rooted some pot them up, s prefer to place them in shallow keep moist. At the end of Sep- boxes are removed to a shelf near a house where the temperature below 40 degs. through the win- arch they make nice robust little are potted up separately into

ng by cuttings is only practised ng the choice named varieties, stock may easily be raised from as good as named varieties if a of seed is obtained. The seed n in February, March, and April ned pans of light sandy soil. Give good watering and, when drained, ed, covering slightly with fine Place in a temperature of 65 degs. When the young seedlings ough to handle place them singly pots. To obtain fine large plants l early in September and treat in ay as advised for summer-struck raised in this way they form very nd flower profusely the following ring the spring grow them on as possible to obtain nice-sized harden off, and plant out by the . The beds for them must be and enriched with good rotten orporating it thoroughly as the eeds. In hot weather mulch the Cocoanut-fibre refuse or similar d give liberal supplies of water, are moisture-loving plants. In garden if the shoots are pegged y grow they soon cover the whole he bed, and when in flower the fine.

e plants to adorn the greenhouse tory good cultivation must be n the autumn and spring batches most vigorous young plants in nd shift on into 6-inch. A good wo parts loam, one part of well- nure and leaf-mould, and half a sand. To obtain larger speci- must be shifted on when the 6-inch full of roots, but on no account ecome potbound.

Verbenas are moisture-loving e early stages careful watering until they are well rooted. Later on, when the flowering pots are full of roots, liquid-manure should be given them twice a week.

During growth nip out the points of the shoots occasionally to make bushy plants, discontinuing this five or six weeks before required to be in flower. The best place for the plants from the end of April till October is a cold frame, transferring them in batches as required for the decoration of the green-house or conservatory. F. H.

Antirrhinums

Whilst I like to see an old plant here and there it is by far the better plan to keep up a stock by sowing seed every year and treating them as annuals, as by this means far finer flowers are obtained. I wonder, however, how many sow the seed out of doors where they are wanted to flower instead of trans-planting from boxes. I find it has its ad-vantages, especially on the rockery, where soil is not always the most plentiful. In scattering some seeds amongst stones where the soil was shallow the plants grew and flowered well, whilst others that were trans-planted died off. Antirrhinums have been wonderfully improved, and the colours are so pure that it is not surprising there is such a revival of this old-fashioned plant. Now is a good time to sow the seed for next year's display. Packets may be obtained of named varieties which come quite true from seed.

F. H.

Pink shades in the flower garden

The opening buds of Phlox Elizabeth Campbell remind one of the many beautiful shades of pink and rose that are available for the summer decoration of the flower garden. Really a fair-sized garden could be filled with the same, and a very beautiful picture they would make. This is a lovely Phlox with large trusses and pips of good substance that hold out remarkably well, although this naturally depends much on season and situa-tion. The new Lavatera is of somewhat similar shade, also a lovely and long-enduring flower. Another tall flower of quite a different shade of pink is Pink Pearl Fuchsia. On a carpet of White Swan Viola it makes a very striking bed. Antirrhinums and Pentstemons supply their own particular shades in the colours under consideration, the tallest of the former being about the same height as the Phlox and Lavatera. There are also some lovely shades in Begonias, the very delicate rose-pink that one gets in Major Hope in the tuberous section, and the bright clear pink of some of the fibrous varieties. There is also a clear pink Sweet William that is becoming a very popular flower. In very dwarf plants there is not quite so much choice through the summer. There are, however, one or two very pretty things, notably, Rosy-morn Petunia and William Niel Viola, and one can generally pick out a pink Verbena from a batch of seedlings that will make a good carpet plant.

The above may not appeal to all tastes, but, personally, I am very fond of the pink and rose shades, and like to gather together in my small way some of the best representa-tives. E. BURRELL.

Hardwick.

Campanula persicifolia Moerheimi

This is a beautiful plant, the flowers grace-fully suspended on straight, stiff stems each from 18 inches to 2 feet in height. The flowers, which are pure white and semi-double, are produced in great abundance all up and terminating the leafy flower-stalk. It succeeds in rich warm soils in any position and looks well when associated with Del-phiniums. The plant grows freely and soon forms large tufts which require dividing every second year at least; in fact, every year in some districts should be the rule. Cuttings may be taken at once and rooted in the open ground. There should be plenty of surplus basal growth for this purpose with-out injuring the general appearance of the plant. H. F. STEVENS.

Zinnias

"A very deceptive annual" was the de-scription I once heard given in regard to Zinnias, and there is some truth in it. They are often indifferently grown, and success does not always follow the raising of plants. The leaves, though looking very robust and strong, give one the idea that they can with safety be planted outside in May. Some who followed this course this year realised that it would have been better if they had given them frame room for another month. Most people who grow them treat them much in the same way as other tender annuals by pricking out the seedlings into pans or boxes and transferring them direct to their summer quarters. When this is done, it almost in-variably happens that the roots are disturbed, and they take some time to get over it. Not many go to the trouble of shifting Zinnias from seed pans to single pots before planting out, but it reduces root disturbance to the lowest minimum, and I am convinced that though it involves more trouble, it brings the best reward. The place where they are to be planted should be prepared by having incorporated with the soil old manure, loam, and leaf-mould. In effect it is taking as much trouble in the getting together of a suit-able rooting medium as if plants were in-tended for pot culture, and it pays to do so. Zinnias love a hot season. They are amongst the few annuals that keep in flower for a long time. WOODBASTWICK.

Hound's Tongue (Cynoglossum)

Some friends coming into my garden last May, when a few plants of Cynoglossum were in flower, were much surprised to be told that it was a biennial named Cynoglossum. I do not think it is very well known as I seldom see it, but one could not have a more ex-quisite blue. The flowers are borne on erect stems about 18 inches in height, and bloom simultaneously with Wallflowers, although they often outlast them. Seed is best sown in June, but I would not hesitate to sow at this date in a pan of light soil in a cold frame, pricking them into the open ground in a place where the winter would be the least felt. It is the intense Forget-me-not-like blue of the Cynoglossum which rivets the attention of those seeing the flowers for the first time. It is a biennial I can recommend to those who desire something very showy in late spring.

W. F.

Armeria Bee's Ruby

This forms a dense, compact tuft about 6 inches high, with leaves about 4 inches long, so closely packed that the plant has a cylindrical appearance. The flowers are freely produced on stiff stems fully 1 foot in height and are rosy-pink in colour. The in-dividual flowers when fully open are $\frac{1}{4}$ inch in diameter and borne in globular heads of from 15 to 20 on each stem. It blooms for several weeks and lasts a long time in flower. It should be planted on a level spot in full sun rather low down in sandy soil with plenty of drainage. The plant is worthy of a good position, being very effective when grouped either in the rock garden or by the margins of borders. The best way to increase the plant is by basal shoots separated from the tuft in autumn, and pressed into sandy soil in a cold frame. H. STEVENS.

Summer Pruning Trained Fruit Trees

THIS work, like a good many operations in the garden, does not admit of the application of hard-and-fast rules. The condition of the trees should form the guide as to how and when to prune. Any tree making strong growth on wall or as an espalier should be checked now. There will always be reciprocal action between roots and branches, and any tree throwing out a cloud of soft spray will be making corresponding root action. This exuberance of growth is often the result of deep rooting, permitting the growth to extend till nearly the end of the growing season and aggravating an already existing evil. It is true this tendency to grow unduly can be met by root-pruning, but trees of a considerable size and age are difficult to put right by root-pruning alone, simply because the feeding roots are difficult to get at without running the risk of doing too much, and thereby crippling the trees for a number of years at least; besides, stopping the visible growth of a tree checks its tendency to grossness just as effectually if taken in time as root-pruning does, and I contend that leaving trees with crowded branches unpruned till the summer is waning keeps the fruit smaller than it would otherwise be. What would be said of a Peach or Grape grower who neglected to thin and stop the young wood, so that the fruit could be properly supported, and have free access to air and sunshine? Where a tree is carrying a heavy crop of fruit there is not much pruning required, for the simple reason that the crop has obtained the mastery. But I think this mastery, whether of the crop of fruit or undue development of foliage, is in itself a pernicious thing which ought to be checked when it becomes prominent. A crop of fruit which stops growth entirely is too heavy a load, and should be lightened immediately. On the other hand, a tree which is making more than the normal amount of growth should be taken in hand at once, and its leaf-surface reduced. The most perfect system of summer pruning, I think, would be to go over the trees and stop all the strongest shoots, no matter on what part of the tree they are found, leaving the weaker shoots to take up the running, as it were, and act as a check upon the production of soft spray which is cast forth when a strong-growing tree is pruned rather closely back all over its surface at the same time. This plan is, I think, better than the one borrowed from the French years ago of pruning the top of the tree first and leaving the bottom branches till last, in the hope that more strength would be turned in that direction, and a stimulant applied where most required.

Any tree that is merging on to a gross habit and is getting out of hand, as it were, will not be brought back to fruitfulness by leaving the pruning too long. As a rule, the branches of wall trees are trained too near each other, and if the back buds and the leaves which nourish them are covered up and shaded, or robbed by projecting growths, they must be weakly and not likely to be fertile. No doubt, mischief has been in some instances done by close pruning when the upward pressure of the sap came after the removal of the branches, causing the back eyes to break into soft sappy growth, which necessitated still further pruning. What is wanted is to select the right time to cut off the redundant summer growth, leaving spurs of sufficient length to check the outburst of young leafage late in autumn. There should be no difficulty in doing this if the right course is adopted and each tree considered individually. It is true the face of the wall may lack that even condition of leafage which those who wish for uniformity desire to see. In the case of Plums and Apricots, lay in as much young wood as room can be found for, and then there will be an outlet for growth, even where the fresh wood has been removed. On some soils old Pear trees are often difficult to deal with, either by root or top pruning, short of cutting off the branches and making a new start altogether. This will sometimes bring forth useful wood again, but in a general way I am not in favour of this retention of old trees after their work is done. It is always best to have a series of young trees coming on to take the place of any which are past their best; in no other way can walls or espaliers be kept perfectly furnished. T.

Peaches out of doors

I have frequently noticed that amateurs leave far too many fruits on their trees to their detriment and at the expense of quality. Where clusters of fruit are seen, probably of a dirty brown colour, and making but little progress, it is safe to assume too much strain is being placed on the trees, and although this stagnant condition may be got over by manurial dressings it is not by any means advisable to allow more than one fruit on each growth. If a large number is allowed to remain the quality is inferior and the flesh thin, and while the production of a fair crop to a great extent prevents over-luxuriance in growth, which in Peach culture is a great evil, the thing can easily be overdone, and the trees become weakly, the fruit only fit for the stewpan. It will thus be seen that judicious thinning is necessary, and it should not be forgotten that the partially-matured fruits are excellent stewed.

Judgment must also be exercised in the application of artificial stimulants. I have heard of amateurs administering heavy and frequent doses of nitrate of soda. As far as the fertility of the trees is concerned it is suicidal. For fine-foliaged plants, vegetables, and grass it is wonderfully effective, but it is not a fruit-producing element. A guano that contains a high percentage of phosphates is most beneficial, and should be employed. If preferred it may be applied in solution, but the most convenient method is to give a dressing on the surface and thoroughly water it in. Should the soil have become set loosen it by all means to the depth of 2 inches or 3 inches prior to the operation. Mulching is also of great value to the trees. The whole surface becomes a network of fibre.

Although manure is such a price in these days this dressing need not be an expensive one, for little manure is requisite. Any half-decayed vegetable matter which will become a kind of humus before a year has passed will suffice, but a little stable manure mixed with it will, of course, greatly improve it. Being as I am surrounded with woods and plantations, I use a good many leaves with a little manure mixed with them. Mulching affords a good opportunity for administering water at the roots, which, applied on baked soil, does but little good. For the production of superior fruits I think it essential that liberal waterings should be given, especially in June and July. Some may consider this a great trouble, but it is worth it, for it involves more chances of success. Another very important point is the securing of the current year's growths, which are to produce next year's crop, close to the wall; not necessarily nailing them permanently at this season, but passing small prunings of fruit-trees over them and under the nailed portions. This allows the sun to play upon the fruit, and also encourages a free circulation of air.

Some of the early varieties are now being gathered, but others are incr size and will not come to maturity weeks. These should at once be t the lines indicated.

Making Strawberry be

This is the best time of year to making new Strawberry beds, for t the runners can be obtained and pla greater probability is there of a g the first season, every day while th is warm being of more importance t later in the season. The best plan ing a site for the new bed is to m that Strawberries have not been on of ground for several years. At son of the year a good many early crops are being cleared off, and af Beans, and Potatoes, the land will and in the best possible condition fo pose in view. Put on a good coat o and dig or trench it in accordin nature of the soil. In a porous s mistake to bury the manure deeply, heavy rains come in the autumn the properties get washed down into th We would, therefore, prefer kee manure near the surface, simply the second spit with a fork. If t dry it can hardly be trodden too Strawberries like a firm surface make the most of the time, the should be layered into pots, or on to turf, as in dry seasons they do not of the dusty surface like they do w moist, and as soon as they are w they may be planted out without an

The distance between the rows varied according to the size of th that the plants carry, but strong should not be less than 2 feet apart if very large fruit is desired. After give a good soaking of water, and runners pinched off as they app other crop should be put on the gr the surface should be frequently hoe down weeds, and in winter a goo manure should be spread on the This acts both as a stimulant to and a protection to the crowns i severe frost. In spring the soil s be dug or forked, as the firmer it is crowns the better. A mulch of litt be put between the rows before t expands, as it keeps the moisture in and also the fruit dry and clean splashing of heavy rains. In dry plenty of water must be applied, fo suffers more than the Strawbe drought. Directly the crop is gath enough runners secured for new plants must be cleared of old le runners so that their strength ma centrated on the formation of cr another year. Plants well treated will remain fruitful for many years

Strawberry Waterlo

This time-honoured Strawberry favourite with many gardeners, as in late, especially if grown on a nor The Mulberry-coloured fruit in sometimes grows to an enormous if gathered before too ripe, fairly fi flavour is, we think, such as wou most people. Waterloo is, howev means a market Strawberry, as i good cultivation, makes runners la not a heavy cropper at any time, mu yearling plants. If the plants ar second year they crop much better, from these that runners should be they are produced earlier.

Answers to Queries

s—Queries and answers are inserted in ILLUSTRATED *free of charge if corre- follow these rules: All communications clearly written on one side of the paper addressed to the* EDITOR *of* GARDENING *Bouverie House, Fleet Street, London, E.C. 4. business should be sent to the* PUB- *e name and address of the sender are n addition to any designation he may e used in the paper. When more than is sent each should be on a separate per, the name and address being added ls* GARDENING ILLUSTRATED *has to be sent ome days in advance of date, queries ays be replied to in the issue immedi- wing their receipt. We do not reply to post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

Roses from cuttings

s to Know).—The best time for this ie early weeks of September. The hould be selected from well-ripened ie current year. Often the growths e bloomed provide hard and excel- rial. These should be torn from with a heel attached, and should be from the flowering end so that the about a foot long. The cuttings are the best, but Ramblers strike l even long shoots may be cut into ths, provided they are well ripened, with success. Choose a sheltered ich should have been dug and pre- made moderately firm. Take out ches to a depth of 5 inches, prefer- e slope, and along their base place yer of sharp sand. Press the cut- ly into this, taking special care to soil very firm about the base of the nd water thoroughly. Should the e hot and dry the cuttings should l every fifth day for the first three llowing which they will take care lves, and should provide excellent transplanting a year hence. The uttings should be 18 inches apart. y be increased by the same method same time.

r garden on Pentlands

3.).—Unless you can put them on a th wall you will be safer to avoid thus and Wistaria, but the latter where the former would fail. macrocarpa would do for the l would protect the Roses if of any re is no reason why you should not e H.T. Roses, Scotch Roses, and he species such as Moyesi. Until ssus hedge gets up you could put h wooden trellis and cover it with ng Rambler Roses, which would others.

Larkspurs dying off

you herewith a specimen of my rkspurs, and shall be grateful if you why they are all dying off. When the border the plants seemed very A few of them withered at the root, ght it was probably due to injury in ing. Now, when the plants are and coming into flower they are all the same way. I should be glad to ere is any remedy or any precaution ke another year. My ground is nd heavy, rather sodden in wet nd hard-baked in hot sun.

L. S. T.

rkspurs have been damaged at the from what cause it is difficult to insects were present on the speci- nitted. Have they been given too dose of artificial or other manure? ecaution against similar attacks ear apply a dressing of a soil fumigant to your soil when digging it over in the autumn. This will rid the soil of eel-worms and other pests. Work plenty of opening material, such as leaf-soil or strawy manure, into the soil to assist aeration.]

Budding American Pillar Rose

(Spot).—(1) The buds are correctly taken, but seem very weak for such a vigorous Rose. Choose a stouter bud near the base of a good flowering shoot. (2) A well-ripened shoot should be selected, as on such the buds possess more substance. The ones you send are too young and tender. (3) Yes, but the above are better. (4) This is not our experience. (5) The shoot you send is quite all right except that it shows lack of nourishment, and we have no doubt will flower in due course. In future do not cut your climbing Roses back so hard when pruning, merely remove very thin and old growths, tying out the best-ripened shoots to furnish their supports at about a foot apart. Cut away unripened tips as this particular Rose makes late growth, and shorten back any side shoots to six or eight buds of their base. Do not prune this Rose before the first week in April.

Growing Lilies

Please give me information as to the cultivation of the following Lilies:—L. centifolium, L. monadelphum Szovitzianum, and L. phillipinense formosanum.

H. BROWNE.

[Lilium Szovitzianum is a strong-growing Lily reaching from 4 feet to 7 feet in height, thriving best in a deep, moist, loamy soil, which, before planting, should be well prepared by trenching and adding plenty of well-decayed cow manure to the bottom layer of soil. The best results will not be seen for a few years after planting. It thrives well under the shade of trees if not too dense. Lilium phillipinense formosanum is not a hardy Lily, and should be planted on a well-drained position in open sandy loam and leaf-soil with good drainage during winter. It is advisable to continue raising this from seed or scales, as it is inclined to dwindle and die out. L. centifolium should be planted in an open sunny position in sandy loam and leaf-soil with a covering of some light undergrowth to protect the stems from the strong sun. When planting Liliums where soils are naturally light and well drained the few special requirements of Lilies are easily met by the addition of heavier or lighter soil, as the case may require. It is a great benefit to the bulbs if a layer of rough sand or small gravel is placed under each bulb at planting time to ensure perfect drainage.]

Planting a front garden

(Mrs. K. Townsend).—No. 1 bed: The double-flowered French Ranunculi would probably succeed, and should be planted at not less than 8 inches apart. As a carpet beneath them plant the dwarf early-flowering Viola Grandeur, colour rich purple. The following Ranunculi are very fine:—Emperor of China (golden-yellow), Thalia (orange-red), Veronica (carmine-red), Vermilion Brilliant, and Couleur Cafe (deep brown). Anemone St. Brigid would also be satisfactory in this position, but would have to be planted a foot apart at least. No. 3: Tulip Duchess of Parma over a groundwork of Myosotis. No. 4: Already planted with Daffodils, should be carpeted with Nemophila insignis, the seed of which should be sown over the prepared surface not later than September 15th. No. 5: Tulip Clara Butt carpeted with Muscari Heavenly Blue.

ALPINES

Twelve choice rock plants

(W. L. S. L.).—In reply to your query for the names of a dozen rock plants of not too rampant growth the following will be found suitable for the positions as stated:—Acantholimon venustum, Æthionema pulchellum, Androsace lanuginosa, Androsace sarmentosa Chumbyi, Campanula Bellardii Miranda, Campanula pulla, Campanula Zoysii, Dianthus deltoides Brilliant, Dianthus alpinus, Erodium corsicum, Hypericum Coris, Saxifraga cochlearis major, Helichrysum frigidum, Geranium cinereum.

Making a bog and water garden

I propose making a bog and water garden. I have a small pond in my garden, but it is apt to dry up in summer. I wish to run a pipe from a small stream which is quite close in order to feed the pond and at the same time I wish to run a pipe to which I could connect a hose for watering. Is there any book which gives practical advice on the formation of a water garden and the best kind of pipes to use? Is it advisable to concrete pools? I have some very competent local workpeople, but naturally they have no experience in work of that kind for a water garden. I should be most grateful for any advice on the subject. C. G. UFFORD.

[If your pond is liable to dry up, concreting seems the only satisfactory solution. The supply of water from a neighbouring stream by means of a pipe and gravitation should be a simple matter if you own the right of tapping the stream, and it is only a matter of sufficient fall from the stream to a standpipe or hydrant to give you sufficient force for the use of a hosepipe for watering. If your water supply from the stream is constant and at your service, and you can arrange for carrying off the surplus water after feeding your proposed bog garden, there would be no need for concreting, which we should only advise if the supply was liable to fail. The natural soakage from the pond should give you suitable positions for your bog plants in plenty without constructing an artificial bog, a matter needing considerable experience, as, curiously enough, a bog for growing plants in a satisfactory manner should not be stagnant, but have a constant flow of moisture through it with ample drainage. There is a book on bog and water gardens, by Miss Jekyll, which you could consult for ideas, but if you possibly can manage we should very strongly advise you to call in a qualified landscape gardener who specialises in the construction of such gardens. The best man to have is someone who grows plants for this purpose and is well acquainted with the needs and requirements of such plants. This would probably save you much trouble, disappointment, and unnecessary expenditure, and such a man, by a visit and careful examination, may easily be able to instruct your own labourer to carry out the work to his plan. It is probable that the stream may need damming up slightly to give you a proper flow of water to your pond and bog, and it seems the merest guesswork to advise

you without seeing the site and studying the available conditions. To help you in any other way would mean your furnishing a carefully-surveyed plan of your garden and stream, and the respective elevations between stream and pond, when you might be helped by means of drawings, but, on the whole, the visit of a specialist would be the cheapest in the long-run, and certainly the most satisfactory. There are two or three firms of hardy plant growers with a wide experience who undertake this work in various parts of the country, and we strongly advise you to consult one of them.]

FRUIT

Peaches failing

My Peaches in a house are diseased, as shown by the enclosed specimens, and the Apricots are threatening to follow suit. Will you oblige by indicating cause thereof and method of treatment for cure? The disease showed itself last year, and is spreading. Previous to my coming here last February twelve months the trees had been somewhat neglected. They make very free and healthy growth with few exceptions, but are showing some signs of mildew on the leaves in a few instances. A. S.

[The Peaches and Nectarines sent are badly mildewed, and as the disease appears annually you will need to take special measures to check its progress now and to prevent it appearing another season. Doubtless, as you are aware, flowers of sulphur is the best remedy. Of course, using this freely at this season makes the fruit and foliage look unsightly. If sulphur is used, apply it freely, well mixing in tepid rain-water, and thoroughly covering all parts of the trees. You will then find it necessary to shade during bright sunshine for a few days, and may then wash the trees with clear water. At the same time it may be necessary to repeat the dose, as the moisture in the house, so necessary for the health of the trees, may cause the mildew to reappear. We would strongly advise you to take special precautions when the trees are at rest, as no matter what means you employ now, you will have the same difficulty yearly. You should have the walls and all brickwork thoroughly limewashed, also using some sulphur in the wash. It would be advisable to paint woodwork. Failing this, thoroughly cleanse with soft-soap, and afterwards syringe with an insecticide. The mildew lurks in the wood and crevices, so that every part of the house should be cleansed. The trees also need every care. All old wood should be scrubbed with soap and the bearing wood washed with a soft brush, painting the trees over when dry with a mixture of sulphur, 1 lb. to a gallon of tepid water, adding a handful of soft-soap and enough clay to make it like thick paint. The mixture should well cover every portion of the wood, allowing it to remain till the trees are syringed at the period of making new growth in the spring. We pay much importance to winter dressings when trees are at rest, as every part of the tree can be reached.]

VEGETABLES

Lettuces going to seed

I shall be much obliged if you will give me your advice as to how to prevent Lettuce plants running to seed. This is happening to all my Lettuces. If you can help me to prevent it I shall be much obliged. My Spinach also has run to seed. C. Ashwin.

[To grow Lettuces to perfection, whether of the Cos or Cabbage types, two things are very necessary. The one is, the seed should be of the best quality and obtained from a reliable source, while the other is that the ground where the plants are to be grown should be what is termed in good heart, as a result of its having been thoroughly well dug and manured. Lettuces grown under these conditions will heart properly, and, in addition, remain in use for some time before running to seed. Liberal supplies of water are, of course, necessary in dry weather. That your plants have bolted or run to seed without hearting is, we think, due to either the seed being at fault or the soil in poor condition, or perhaps both. Your soil requires a liberal addition of manure to grow Lettuces satisfactorily and unstinted supplies of water in hot weather. Then there should not be the slightest difficulty if you obtain seed of a good variety or varieties in growing Lettuces such as you desire.]

Onions going to seed

For several years I have grown Ailsa Craig Onion with great success. The seed was sown first week in August and transplanted in March (if ground was in a fit state). Last year about one-third went to seed. This year they have all gone to seed (except about 20) out of 300 or more. Anxious to Know.

[We think your trouble is due to the fact that sowing was done rather too soon last autumn. We never sow earlier than August 12th, and sometimes not till a few days later, according to the nature of the season and weather conditions. We therefore advise you to defer sowing a week or 10 days later than usual, and think you will then overcome the difficulty.]

Club in Cabbages

Having been a regular reader of your valuable paper for several years I should be very glad if you could enlighten me as to what disease the enclosed Cabbage plant is suffering from. I quite think it is clubroot, as it has affected nearly all my plants for the past three years. It is very disheartening, as I am quite at a loss to know how to cope with it. I should be very pleased if you can give me a remedy to assist me in ridding my garden of this fungus. W. J. Sharpe.

[This disease will never be kept in check or exterminated until its real nature is properly understood. The disease is not caused by any insect, but by a fungus—one of the "slime fungi" (Plasmodiophora brassicæ). The spores are in the soil, having been matured in some plant which has been infested by the disease. These spores are liberated when the root decays in any way, and under suitable conditions the spores open, and their contents, which are small masses of a jelly-like matter, exude. The little masses have the power of creeping about, as it were, among the particles of which the soil is composed. When one comes into contact with the rootlets of a plant of the nature of Cabbages, Turnips, etc., it is taken up into the root in the same way that the constituents of the soil are, and when it reaches one of the cells of which the root is composed it increases in size at the expense of the contents of the cell, and the latter, owing to its new occupant, grows much larger, so that when a large number of cells in a root are infested by this fungus it is not to be wondered at that the root becomes distorted. Eventually some of the large cells may be found to be full of spores; these, when they reach the soil again, become sources of infestation. No portions of an infested crop should be left to decay on the ground, but should be collected and burnt. Lime appears to be the best dressing for soil that is contaminated by this fungus. Manures that contain acids, sulphates, and phosphates should be avoided, as they are favourable to the growth of this fungus. All cruciferous weeds, such as Mustard, Charlock, Shepherd's Purse, etc., should be carefull minated, as they are liable to be atta this disease. Experiments have bee that prove, without any possibility take, that the fungus is the cause of normal growth of the roots. Plan been grown in soil that was perfec from infection by this fungus. Sor watered with water in which some spores had been placed, and they variably attacked, while others pla some of the same soil, but not water the spores, remained perfectly healt showed no signs of the disease. Th of this fungus may remain in the some years, so that it is not advi plant a crop which is liable to at infested soil for two or three years, has been well dressed with lime a free from all weeds that are of a natu infected. The spores are often tra from one field to another in the ea may cling to the feet of labourers, hor the wheels of carts.]

MISCELLANEOUS

Using Adco on the rubbish heap

(D. W.).—Build your garden refus shapely stack as such becomes availal ing 28 lbs. of Adco to each 15 c material and leaving it to decay fo three months, when it should be manure, rich in humus, for the gard

Weed in lake

Will you, please, tell me what the weed is growing in lake and how to g it? J. Fl

[The plant you send is the sma Weed (Potamogeton pusillum), a pes surface of stationary or sluggish water. It is difficult to eradicate, only means we have found so far is off the surface of the water by mea small meshed framework constructe shape of a tennis racket and with handle attached. This may be made cord, or thin dried Willows laced tog

Creepers for N.W. wall

Please advise me as to what creeper do well on a house with north-west not Ivy.

[Clematis montana rubens, C. Tropæolum speciosum, Rose Bouqu and Berberidopsis corallina.]

Trenching in garden refuse

(D. W.).—All woody material sh kept separate and burnt, using th later to improve the surface soil. A of lime should be applied to your gro may be trenched in with the weeds, you do not intend to trench more tha deep. If more, then the lime would b applied to the surface and pointed in trenching is completed. If properly weeds will not come through again work may be commenced at any ti preferably in September, when a tren wide should be taken out to a depth and transferred to the point where the ing is to cease, this soil being used the final trench and thus keep the gr an even level throughout. Comm digging up the base of the trench excavated with a fork, measure of wide of the next, and after clearing surface weeds and other rubbish, same at the bottom of the trench alre pared and adding a layer of manur the first spit of soil—about a foot dee the manure, repeating in the same w the second layer of soil, and if you w ground to be in good heart another manure should be placed between

soil. The ground will then have ed to a depth of 2 feet 6 inches and able for any purpose.

SHORT REPLIES

See reply to Field Fare, July 24th,

Hopkins.—We fear, from what you is but little hope of your Cedar You might try what copious would do, but it is very doubtful if any good.

Benthall.—With the exception of and, perhaps, Lettuces, unless you s now ready for planting out it is, to say, now too late either to sow nything which would be ready at pecified.

NAMES OF PLANTS

e.—Lysimachia vulgaris.

Clematis Clocheton. This should e ground each year; 2, Campanula ; 3, Anthemis Cotula.

akerley.—Spiræa Aitchisoni.

Ribes alpinum.

unsell.—One of the garden forms spicata.

., Blackheath.—1, Salvia Sclarea on Clary); 2, Campanula rapuncu-

Oxalis floribunda.

pilobium angustifolium.

The numbers, unfortunately, had ed. 1, White flowers, Veronica 2, white, very small flowers, asti.

.—Both specimens are Sambucus 1 has smaller leaves than usual.

ank.—Rose Francois Juranville.

rron.—Polygonum baldschuani-

ENING APPOINTMENT

GHT, gardener to G. B. BLYTHE, ckton House, near Rugby, and Henstaff Court Gardens, Ponty Wales, as gardener to J. S. Esq., Tregarth, Creigiau, near Wales.

Brothers' Other Journals

Age.—Metallurgical Supplement: and Nature of Liquation in fessor Thorpe—Presidential Ad- B.A.

Grower.—Standard Grades for Stock for Cut-Flower Trade," acsalf; The Merchandise Marks

Maker.—Light Furnishing's In- gns Competition—Full Report of ndow Ticketting.

—August Special British As- mber; "Reminiscences of the Association Meeting at Oxford, Oliver Lodge, F.R.S.; "Insect Plant Disease," by Kenneth M. ; "A Soldier Discovers Indus- by Lt.-Col. H. A. Hanbury- S.O., M.C.

l.—Cartoon on the Coal Posi- lace Coop; Monthly By-Product ion; Future Expansion of the stry.

Trade Journal.—The Expansion and for Safety Razors; Motor More About Standing Charges g Costs; Hardware Patents; -Working Tools.

—H.R.H. The Prince of Wales' he British Association; "The lectrification of the Western ay of France," by Theodore Balanced Sea Earth for Sub- s," by J. J. Gilbert.

Horticultural Societies' News

National Carnation and Picotee Society

The second of the annual shows of the National Carnation and Picotee Society (Southern Section) took place on July 21st by the kind permission of the Master and Court of the Worshipful Company of Carpenters at their magnificent Hall in the City of London. The Lady Mayoress opened the Exhibition, and was greeted with a beautiful bouquet of Border Carnations by Miss Mary Murray. A silver bowl, subscribed for by patrons and members of the Society, was presented to Mr. E. G. Lowe, the Secretary, as a wedding present by the Lady Mayoress.

From the number of exhibitors and quality of the flowers little remained to be desired. In the trade exhibits Messrs. Lowe and Gibson, of Crawley Down, obtained first prize for a fine display of a large variety of flowers. Mr. H. Woolman, of Shirley, near Birmingham, was second with a beautiful lot of well-known varieties, whilst Messrs. Torrance and Hopkins, of Busby, N.B., were third. Mr. J. A. Crowhurst, of Burgess Hill, had a stand of Border Carnations grown in the open border, showing the excellence of culture without protection of any kind.

The Cartwright Cup, open to all, was won by Mr. H. Woolman, who had some of the finest blooms we have ever seen, more than one being selected by the judges as "Premier" in various classes. His Sam Griffiths, which was "Premier" in the fancies (other than white or yellow grounds), was in every way perfect.

The Martin Smith Cup for amateurs was strongly contested by a number of entries and awarded to Miss Shiffner, of Lewes, once more, but this year by a narrow margin of points. Mr. James Smith, of Darvil, Ayrshire, with many glorious blooms, was a close second. The competition in the third division for smaller amateurs was not so keen, Mr. H. A. Knapton once again carrying off the Edmund Charrington Challenge Cup.

For flowers grown in the open border (the medal for these being presented by Miss J. B. Wells) was a popular division and was won by Mr. R. H. Hickson, of Leicester.

Besides the "Premiers" already mentioned, that for white ground fancies was awarded to a perfect bloom of Mrs. Edmund Charrington grown by Messrs. Lowe and Gibson. It is worth recording that this well-known variety has this year so far gained the "Premier" at every show and has been voted by the members of the Northern Section of the National Carnation and Picotee Society the best all-round variety, irrespective of class, in cultivation, as stated in our issue of July 3rd last. Miss Shiffner procured the "Premier" for yellow or buff ground fancies.

The classes for seedlings grown under glass and also from the open border were very popular, and more than one excellent variety shown by Mr. G. D. Murray was, however, outclassed by Mr. T. M. Tranter, who exhibited a superb white ground fancy he named Yenton. The second prize fell to Mr. Murray with another white ground fancy of somewhat similar type to his last year's Lady Bower, which he christened Dorothy Murray.

Three gold medals and a challenge cup in a week

Messrs. Webb and Sons, Ltd., of Stourbridge, have been awarded three gold medals for exhibits of flowers and vegetables at the Royal Show (Horticultural Exhibition), Reading, Hanley Floral Fête, and Wolverhampton Flower Show; also the silver challenge cup for Sweet Peas at Windsor (won by one of Webbs' customers). These awards were all gained within seven days.

Two Gold Medals at Vincent Square

At the last meeting of the Royal Horticultural Society Messrs. Barr and Sons, King Street, Covent Garden, were awarded a gold medal for a very interesting collection of vegetables and herbs. The vegetables, comprising 150 distinct dishes, were remarkable for their bright colours and highly attractive appearance. There were golden Tomatoes, red-stemmed Chilian Beet, New Zealand Spinach, Carrots Early Nantes, Beet Early Red Globe, and Onions in variety.

A gold medal was also awarded to Mr. J. C. Allgrove, Langley, Slough, for Gooseberries. The training of cordon Gooseberries, which is now more popular than ever, will form the subject of a special article in our next issue.

The Bunyard Medal was offered at this meeting for the best exhibit of Gooseberries shown by an amateur. Only one collection was forthcoming; it was shown by F. C. Stoop, Esq., West Hall, Byfleet (gardener, Mr. Carpenter), and included 30 dishes of such well-known varieties as Lancer, Leveller, Careless, Keepsake, Green London, Green Gascoigne, Langley Gage, and Ironmonger.

Bamboo cane growing in Ireland

At the County Meath Agricultural Society's Show, Sir Nugent Everard staged an exhibit of Bamboo grown upon his estate at Randlestown, Co. Meath. He claims that Irish soil and climatic conditions are eminently suited for the production of the cane, and that it can be grown less expensively in Ireland than in any other part of the world.

LATE REPLIES

Mealy bug on Vines

Can you inform me through GARDENING ILLUSTRATED if I could syringe Vines with any distasteful fluid to prevent mealy bug? It has been in the vinery for some years past, and now in the bunches of Grapes.

LAUREL BANK.

[Perseverance is the great factor in clearing out this pest. When you prune the Vines you must remove all the prunings and at once burn them. After this is done you must scrub every part of the house with boiling water, re-painting if need be, limewash the walls, and clear off the surface soil—we are presuming that the border is inside—burying it previous to adding fresh soil to the border. After this has been done, well wash the whole of the Vine-rods with Gishurst compound or a mixture of soft soap, clay, and Tobacco-juice. If during the following summer any mealy bug appears, touch each one with a small brush dipped in methylated spirit. If you have in the vinery any plants badly troubled with mealy bug we should advise you to burn them at once.]

Madonna Lilies

(Mrs. J., Salcombe).—The bulb sent for examination is apparently quite sound. This has not been a good year for Madonna Lilies in many districts—doubtless owing to the wet days of June the Lilies made a comparatively poor show. We advise you to lift the bulbs now and replant the largest and best in well-prepared soil.

CATALOGUES RECEIVED

Torrance and Hopkins, Busby, near Glasgow.—Border Carnations and Picotees.

C. G. Van Tubergen, Haarlem, Holland.—Bulbs.

P. Van Deursen, Sassenheim, Holland.—Special offer of bulbs.

James Carter and Co., Raynes Park, S.W. 20.—Bulbs and flowers.

T. Smith, Daisy Hill Nursery, Newry.—Hardy bulbs, etc.

The **WIZARD**
Plant Label

RED POTTERY LABELS, 2½ x 1½ in. with rustless wires, 12 in., 2/- doz.: 7 in., 1/7 doz.; 1½ x 1 in., 6 in wires, 1/4 doz. WATERPROOF INK, 9d. and 7½d. bott. CROW QUILLS, 2d., postage extra. Highly commended by R.H.S. at Wisley.
E. TORKINGTON, D.2. MAIDENHEAD

KEATING'S KILLS

BUGS
FLEAS
MOTHS
BEETLES
Carfols 2d 6d 1/-
Large Size 4/-

USE IT
TO KILL GREEN-FLY IN
Garden & Greenhouse

EUREKA WEED KILLER

LABOUR SAVERS. "EUREKA" LAWN SAND. SOILFUME. NICOTINE, INSECTICIDES, FUMERS, SPRAYS AND OTHER CHEMICALS AND SUNDRIES. SEE LIST. PLEASE ASK YOUR AGENT FOR THE EUREKA ARTICLES—THEY ARE ALWAYS SATISFACTORY. IF ANY DIFFICULTY IN OBTAINING, WE SEND DIRECT. CARRIAGE PAID
Only Address: TOMLINSON & HAYWARD Ltd. LINCOLN.

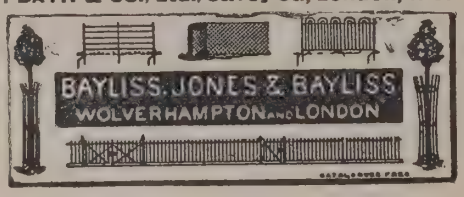
WILLMOTT
Rival Plant Stake

(Patented No. 183779.)
As used in Royal Botanic Gardens For all plants.
WILL NOT ROT, WEAR OUT, OR BREAK.
Samples of 8 sizes, United Kingdom 2/-, Overseas 4/-
H.J. GREENWOOD, F.R.H.S., *Proprietor*
Bracknell, BERKS.

OPEN

ILLUSTRATED LIST Post Free

Greenhouses from £6 10 0 — Poultry Houses from £1 12 6 — Huts from £3 12 6
Bungalows, Garages, Rustic Houses, and Poultry Appliances of every description.
T. BATH & CO., Ltd., Savoy St., London, W.C. 2.



HORTICULTURAL GLASS

Glass cut to any size. Write for prices. *Mention Paper.*
All Glass is sent from my warehouse carefully examined as to soundness and quality before dispatch.
J. B. ROBINSON, Glass and Builders' Merchants, 31, MOOR LANE, CRIPPLEGATE, E.C.
36 Years' Advertiser in GARDENING ILLUSTRATED.

Gardening Difficulties

Whatever your difficulty is in growing Flowers, Vegetables, or Fruit, we are ready to give the best Advice.
Address—THE EDITOR, "Gardening Illustrated" Bouverie House, Fleet Street, London, E.C. 4

BARGAIN IN
GARDEN WIR
2/6 PER MILE 1,760
CARRIAGE PAID.
New Army Stock on the original drums but
Get free samples of our five BETTER garden
and see which suits you best. Write to-
GREENS, 379, Albert St., LY

Dysart Parish Horticultural S
FIFTY-FIRST ANNUAL FLOWER
will be held on
SATURDAY, AUGUST 14th,
IN THE GROUNDS OF DYSART HOUSE
(kindly granted by Sir Michael Nairn, Bart.
Schedules from Secretary—
JOHN SIMPSON, 60, High Street

UTTOXETER AGRICULTURAL HORTICULTURAL SOCIET
Horticultural Section
The 22nd Annual Show will be held on 26th Aug
Direct entrance from the Railway Statio
£150 in cash prizes, with Gold, Silver, and Brone Silver Cup, value £20, and cash, £2 10s. for 24 Ro
Many other open classes.
Schedules from—
W. ELLAWAY SMITH, Land Agent, Uttoxet

RUTHIN FLOWER SH
THURSDAY, AUGUST 26
The Finest Exhibition in Wales
Fruit, Flowers, Vegetables, Deco
Fruit and Flower Tables, etc.
Schedules post free on application to—
JOHN J. BUTLER, Bryn Siriol, nr.

EXPERT ADVICE at YOUR SERVIC

These practical little books, by Mr. F. J. FLETCHER, F.R.H.S., will help every Gardener, whether working for pleasure or profit, to get the best results from his plants. They are issued at the uniform price of **2/6 each.**

GLASSHOUSES AND THE PROPAGATION OF PLANTS

CONTENTS IN BRIEF.—The Nurseryman—Greenhouses—Propagation—Seedlings—Cuttings—Practical Cutting Making—Potting—Index.

SPECIAL GLASSHOUSE CROPS

CONTENTS IN BRIEF.—Tomatoes—Cucumbers—Melons—Grapes—Sweet Peas—Forcing Bulbs—"Lifted" Chrysanthemums—Catch Crops—Index.

ROSES FOR MARKET

CONTENTS IN BRIEF.—Some Business Considerations—Propagation by Cuttings—Stocks—Budding—Propagation by Grafting—Rose Cuttings under Glass—Roses in Pots—Roses Planted Under Glass—Things that Matter—Marketing—Index.

CARNATIONS AND PINKS

CONTENTS IN BRIEF.—The Perpetual Flowering nation—Propagation by Cuttings—Potting and Gro on—Summer Treatment—Enemies—Cutting and Pac the Flowers—Older Plants and Indoor Planting—Bd Carnations—Raising Border Carnations from Seed—La ing—Planting or Potting?—Perpetual and other Bd Carnations—Dianthus Allwoodii—Garden Pinks—Inc

CUT FLOWERS FOR MARKET

CONTENTS IN BRIEF.—Annuals—Biennials—Herb ous—Roses (outdoor)—Carnations and Pinks—Chry themums—Glasshouse Flowers—Bulbs—Asparagus Fr and Smilax, etc.

DECORATIVE PLANTS, TREES and SHRI

CONTENTS IN BRIEF.—Hedge Plants—Flowi Shrubs—Conifers—Window Box Evergreens—H Climbers, etc.

EACH VOLUME DEMY 8vo. PRICE **2/6** net each. (Postage 2d. extra or 6d. for four.)

ERNEST BENN LTD., Bouverie House, Fleet Street, London, E.C. 4

ARDENING ILLUSTRATED

75—Vol. XLVIII. AUGUST 14, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

ly 489
lington, in 485
ong the—ing 483
large v. 492
Moret- 486
A ZOY-HABITAT 484
us on ... 496
e cultiva- 490
Fruit-trees, planting 495
GARDEN AND WOODLAND, THE SOLACE OF 487
Geraniums, keeping... 490
GOOSEBERRIES, HEAVY CROPPING 489
Gooseberries on walls 488
Gooseberry bushes, transplanting old ... 496
Gooseberry cuttings... 496
GOOSEBERRY TRUMPETER... ... 488
Gooseberry Whitesmith 488
Grapes, Muscat, hastening the ripening of 496
Grapes splitting... ... 495
Gypsophila prostrata rosea 486
Hydrangeas, Blue ... 485
Irises, the Dykes... ... 484
Kolkwitzia amabilis 486
Moltkia petræa 486
Peach-trees, overgrown 495
Peach-trees, renovating 495
Pears, Cordon 495
Peas, failure with ... 496
Plants for covering a greenhouse wall ... 490
PLANTS, INTERESTING FLOWERING 491
Primula littoniana ... 486
Pruning, summer ... 488
Quince tree not flowering 496
Report on condition of horticultural crops on July 28th, 1926 ... 492
ROSE CHARMING PRINCESS, THE NEW 483
Rose Mme. Caroline Testout 485
Salpiglossis... 495
Sedum brevifolium ... 486
Seeds, soaking 485
Senecio greyi 487
Solanum capsicastrum 490
Spinach 492
Statice profusa 490
Strawberries, layering 496
Strawberry Mme. Kobi 485
Sweet Peas 494
Sweet Peas, classification of (1926)... ... 494
Sweet Peas grown on the Cordon system... 494
Sweet Peas, streak in 494
Sweet Peas, the scent of 495
Tomatoes for examination 496
Tomatoes, manuring soil for... 485
Tomatoes scalded ... 496
Tomato, the exhibition status of the ... 492
VERATRUM CALIFORNICUM 485

Among the Briars—After Budding

After budding, the efforts of the Rose grower should be directed either to the buds making an early start into growth or an entire rest till next spring

T may be called post-budding cul- e is often greatly neglected, though s of the greatest importance to the lth and full and free development ses. So soon as the buds have l questions arise as to the future f the Briar towards them. Most ers agree that a Briar growing e Rose-buds is a most potent force a perfect union between the two. s point the opinions and practice of ers vary widely. Some even ques- ecessity or potency of a growing t as a means of ensuring a speedy t union. Bringing their practice ny with their theories, such stop r shoots a week or two before It has also been found that buds tolerable freedom on such stopped ts. In fact, the non-stopping of s has been ccepted in e interest n in the f the mere e bud with r. This ack to the of force he Rose- heir wild- arents and when the e strength r shall be nto the ere it not ssitudes of this diver- rce could place too ut chiefly the latter eather mong our d Roses it be effected r the time g of the ies at the the post- ulture of these are hed into soon as formed a he Briars, the Briar stopped hin a leaf or so of the bud the better. Some stop the Briars right up to the buds, and at the same time cut off any and all other outlets to the sap. This of necessity concentrates all the growing force of the Briar into the Rose-bud, and, consequently, forces it to form a shoot or bloom in as short a time as possible. The time would be further shortened if the Briar shoots were shortened before budding.

Forcing buds.—If this express mode of forcing buds into shootlets is adopted, the earlier we bud and the sooner all Briar is removed after the union of the two the better; for as our climate goes it needs every day from June or July to November to force our buds into shoot-blossom and maturity of wood before the frost is down upon them, often with killing severity. It is this risk of killing, or, in other words, the alarming mortality among budded Roses, that has suggested and enforced a very different course of treatment after budding.

Keeping buds dormant.—This consists in what may be termed the sleeping or resting system for the newly-inserted buds that results in keeping most of them dormant until the following spring. This culture of dormant buds, at first adopted for their greater safety, was found to have other advantages. It had two collateral advantages—these buds produced the finest blooms for show, and they also broke into the most vigorous shoots. In other words, the most perfect Rose blooms and the strongest Rose bushes sprang out of dormant buds. The discovery of these facts necessarily gave a powerful stimulus to this mode of cultivation, until it has almost superseded the more speedy if less safe mode of concentrating the entire growing force of the Briar into the bud as soon as the union between the two is completed. The habits of the Roses themselves run them into every imaginable variety of growth between these two general methods of forcing and repression. Some Roses almost instinctively burst into growth so soon as the buds have taken; others refuse to start till late in the autumn or spring, be the culture what it may. But our efforts should be directed either to an early start into growth or an entire rest till next spring; and either of these results is in the power of the Rose-grower who cuts in his Briars early or leaves them almost full length till the winter or following spring.

The new Rose Charming Princess, colour old gold and bright orimson

A sport from The Queen Alexandra

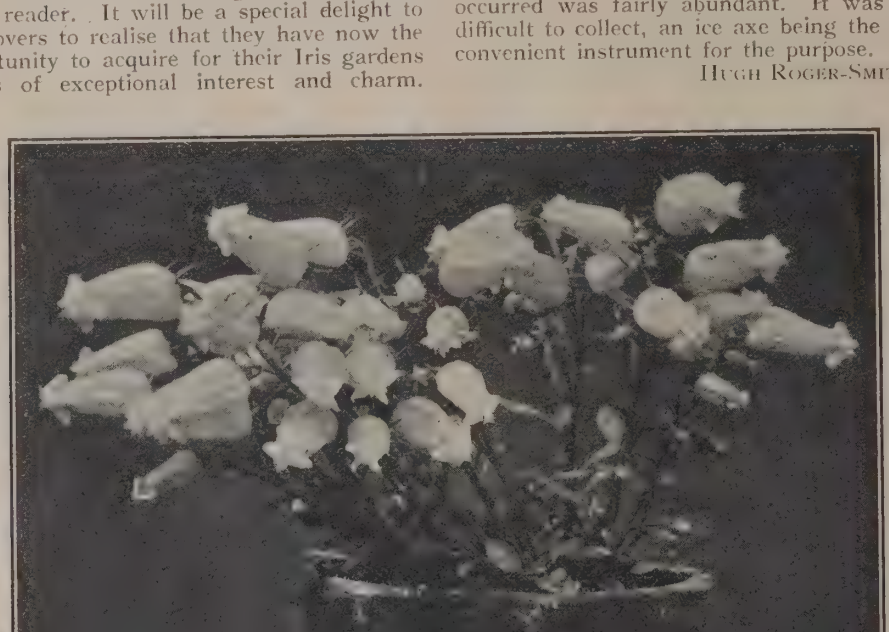
New Rose Charming Princess

THIS Pernettiana was awarded a Certificate of Merit when shown by Mr. Thomas Hancock at the National Rose

Society's recent show of new Roses. The basic colour is old gold with bright crimson reverse to the petals. The contrast in colour is very attractive or, perhaps, bizarre. It is a sport from The Queen Alexandra (a fine bedding Rose), of intense vermilion deeply shaded old gold on the reverse of the petals. In these two varieties we see the most remarkable colour combination known in Roses. The blooms of Charming Princess are of medium size and good shape. It has a fairly vigorous habit and should prove an acquisition as a bedding Rose.

The Dykes Irises

The announcement by Mrs. Dykes in this issue to the effect that she is now offering the meritorious assortment of Irises raised and collected by the late W. R. Dykes we feel sure will be noted with great interest by every reader. It will be a special delight to Iris lovers to realise that they have now the opportunity to acquire for their Iris gardens plants of exceptional interest and charm.



Campanula Zoysii, re-introduced to cultivation
Its natural distribution is limited to the Julian and Karawanken Alps

There are probably many enthusiasts in this country and abroad to whom the idea of planting a memento collection will appeal strongly. That offered in the present instance extends to some 28 varieties, and it will be a surprise to many to discover that quite a number are offered at very modest prices. All of the May-flowering varieties, for example, are quite inexpensive, and the same may be said of the majority of the June-flowering, including Goldcrest, Harmony, Sapphire, Safrano, Richard II., and Ariadne. Mr. Yeld, the doyen of the Iris world, describes the Dykes garden at Bobbingcourt as "thoroughly well adapted for the production of sturdy and vigorous plants; its exposure ensures their hardihood; Mrs. Dykes herself is an experienced and skilful gardener, and has had the invaluable teaching of the greatest of Iris growers." No higher recommendation could be given, and we are confident of Mrs. Dykes' success with the present distinguished family of Irises under her care. Readers should not only secure the catalogue for themselves, but see to its circulation among their Iris-growing friends.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The habitat of Campanula Zoysii

MR. W. L. S. LOAT asks, page 453, for the habitat of Campanula Zoysii. I have lately returned from a plant-collecting expedition to the Karawanken and Julian Alps, and amongst other treasures found this Campanula. We found it in two stations, on the Skerbinja Pass towards the Italian frontier and on the slopes of the Triglav, both in the Julian Alps. The plant was not in flower, and, being small and inconspicuous, we may easily have overlooked it in other situations. It was growing in the cracks of the limestone rocks, and where it occurred was fairly abundant. It was very difficult to collect, an ice axe being the most convenient instrument for the purpose.

HUGH ROGER-SMITH.

—— On page 453 Mr. W. Leonard S. Loat asks what is the habitat of Campanula Zoysii. I believe the Karawanken Mountains is one of its habitats, and the species is confined to the Eastern Alps. I have never had the luck to visit C. Zoysii in its wild state, but it is one of the expeditions I have long had in store. Especially I want to find the lovely albino variety. I had it once—by mistake. I had bought a batch of C. Zoysii from Mr. Stansfield, of Southport, and when flowering-time came there appeared a glorious pure albino form, one little plant of it among a dozen or so of the lavender-blue type. It was a flower of the very greatest beauty, and was, moreover, a very great rarity. Never before had we heard of a white Zoysii, much less seen one. Farrer seems to have been less fortunate, for he tells somewhere how he bought a white Zoysii for some colossal sum of money and when it flowered it was nothing but Zoysii type. Alas, the white Zoysii died all too soon, and I have never seen nor heard of it again. I forget what, exactly, we did to it, but no doubt we fussed and cosseted it to death. We know more about the species nowadays, and give it plenty of limestone and very little fussing, and if only we c hold of a plant again we should quit to keep and increase it. There mus be white varieties existing in the country. To find it would make a vi doubly worth while. CLARENCE EL

Stevenage.

—— This, the most extraordina quaint Campanula of the truly roc species, lives here and there in the most reaches of the Karawanken r formerly Austrian and now Serb Slavian territory. A friend and I great pleasure of seeing and collectin a month ago from the sheer cliffs Skerbinja Pass, quite near the Italian and a day or two later we came upon such cliff high up on the Triglav, and cases it was in vain that we quested lings in the scree and detritus at the those cliffs. Campanula Zoysii did prove of such positions, but kept re to the narrowest fissures and crevice hard limestone face and had to be chi in the merest fragments, and in no c more than the root-neck, from the h fanatically clung to. So ungetatabl home and so sheer the cliffs, and carious of foot or hand hold the tra low that I do not hesitate to information kindly supplied to me habitat. For keen, indeed, must enthusiast to invade the home of th and unless he goes supplied with and rock drills and ropes and cliff little is the impression he will make plant in its rocky strongholds, and goes at the flowering season he the greatest difficulty in locating his all, so minute are the tufts of it spoon-shaped leaves that peep here from thread-fine fissures. At the tin visit the first small buds were just on the plants, and other small Ca were not unusual in many of the cas portions of the cliff, and misled o and again and roused one's hopes. extraordinary how near Campanula pusilla persuasion in these sheer clif approached in appearance to the g C. Zoysii, and it needed the closest i and the discovering of minute jag dwarfed leaves of the impostor to sure of its identity. As a matter believe the impostor to be the cæspitosa which we found later on beds quite close to the shore of the Jezero Lake far below the towering in Nature a charming and distinc plant, and I trust that the few specir I brought home with me will prove cultivation, as, so far, all the pla cæspitosa I have bought and gro various sources have proved undis able from C. pusilla (C. Bellardii, Apart from slugs, with their mani Campanulas, I am inclined to thinl cause of failure with C. Zoysii in c is far too rich treatment. It ans for a time to very gritty soil in pots or the moraine, constructed on the proved lines with underground w without, but too often, after flowe fusely, the plant dies, to the wond its careful guardian. In Nature soil, merely the faintest trace of i black dust in the fine fissures, and I most permanent success is yet to be by planting wee little pieces into th of the beautiful, weathered lim Western Yorkshire and Westmorla seems almost identical with the r

d plenty of suitable crevices filled same fine black dust occur in it. rther be remembered that in both the in which we found it the cliffs faced north-west, and that attention to tails, taught by actual observation, l to permanent success with this plant in our gardens.

W. E. Th. Ingwersen.

Veratrum californicum

seems to be rather an uncommon —at least, I never see it in any ns I visit. It is now (August 2nd) in my garden, and is rather a plant, with tall spikes of yellow flowers 6 feet high. s plant about 12 years before cended to bloom at all, and year, for no apparent reason, p six huge spikes, and was emarkable object. That was ince when it has done practi- ing, but this year has pro- r spikes of bloom. I enclose aph of it in case you should orth reproducing.

Mark Fenwick.

vood, Stow-on-the-Wold.

Soaking seeds

who may have friends in rts and from whom they, at eive seeds, have no doubt, lf, had mixed experiences seeds. Two instances, in come to my mind. The in connection with some Erythrinas, the second con- ome seeds of Australian In both instances the first after the most careful atten- sed to germinate. It was l to make a further sowing ut on this occasion I soaked n water taken from the stove ing them in that house for before sowing. This treat- ed effective. Every seed— carefully counted—germi- e hint appears worth passing on. it is well known that the seeds of d other hard seeds require to be t in the case of others the pre- not always considered necessary. perhaps, to be added that seeds so st never be permitted to become y are, then irreparable injury may

W. McG.

trawberry Mme. Kooi

dy has had a good word for this I will stand up for it under the prevailing in our garden, where it us quantities of fruit, perhaps not t flavour, but large, sweet, and eetness in Strawberries is, after t thing, and the universal Royal is often so acid.) Ours is a very den on a slope, the soil in parts stony. Oölitic limestone, a gar- gbear, is our staple, and as the bed is in the hottest, driest, and rt of the garden we are surprised we get quite good crops of berries of the plants. Mme. Kooi has ost successful variety. M. S. W.

Blue Hydrangeas

gardener, if blue Hydrangeas are oduces them, if he can, and while olution will turn most varieties of blue, not all of them come a blue. Some soils produce blue ally, though it is not quite clear bination of mineral salts is re- Some few years ago I cleared a large piece of Rhododendron, ponticum seedlings chiefly, and planted it with Drimys Winterii, Tricuspidaria lanceolata, and about a dozen different varieties of Hydrangea. The soil was Sussex clay, but one end of the bed had been made up with local peat for the Rhododendrons. This end of the bed always produced blue Hydrangeas varying in shade; the other end always white or pink. As the Drimys spread, and one or two varieties of Hydrangea proving unsatisfactory, moving became necessary, but blue changed to pink and *vice versa*, according to the position on the bed.

W. G. Beavington.

West Byfleet, Surrey.

Veratrum californicum at Abbotswood
Mr. Mark Fenwick standing by the side

—— I have read with much interest for some weeks now the various views expressed *re* above matter, and now give my four years' experience in Hydrangea-growing. Without any special treatment I have had various shades of blue and mauve. Two years ago I had a perfect blue, to my astonishment; from this I took every cutting possible in the hope of having more blues, being careful to label on potting these up as blue. I had many inquiries for blues, but would not sell one until I was satisfied they proved blue when blooming this season. I need hardly say how disappointed I was when each cuttings flowered pink, from which same had evidently sprung in the mother plant. The solution to the foregoing is that some iron had by some means got into the soil in pot, as this, with others, received the same treatment with water. Rusty nails, etc., strewn on the top of pots and tubs have given me temporary shades of blue, and I am of the opinion that, unless specially treated, or the soil, as appears in some districts, is charged with iron, true blues do not really exist.

Near Pontefract. F. Frost.

Wellington Apples in August

Herewith, according to my promise, I send you two Wellington Apples. I hope you will receive some from Mr. Wright of a different variety and in as good condition. I shall be glad to know of a better keeper and late eater.

Thackeray Turner.

Godalming.

[The fruits sent were fairly crisp, juicy, and of good flavour. This is unquestionably a fine dessert variety at this season, and we know of no other variety of last year's crop, unless it is Annie Elizabeth, that is so good and juicy at this time of the year.—Ed.]

Manuring soil for Tomatoes

The correspondence on manuring soil for Tomatoes has been interesting in your columns of late. Much, of course, depends on soils, but, as a rule, much animal manure in the soil tends to disease. For many years I had to deal with a heavy, irony loam, the top spit of an old cow pasture; to this was added about a fifth part of leaf-soil (good Oak and Beech) to plant in. When the first fruits set, a sprinkling of artificials and a good mulching was given of farmyard manure, consisting of buttock, cow, horse, and pig manure got out some weeks before and turned and aired before using. Liquids made from animal manure were also given when plenty of fruit had set. We had an ideal house for them, rather wide, with a lean-to roof at an angle of 45 degs. It was formerly used as an early vinery with a long run up. We adopted a successful system of training. When the plants, as single cordons, had reached about three parts length up another young growth was taken up from the bottom, which gave fruit ready to pick by the time the top fruit was finished. To prevent overcrowding of foliage the leaves were shortened to one-half as they grew, with the result that we always had a heavy crop. This caused wonderment among our East Anglian Institute scientific friends coming over from Chelmsford. Their slogan then was prevent the extra growth at the roots rather than mutilate or take away the foliage, which was harmful. In front of a long orchard-house good crops were had from plants grown in similar soil in Seakale pots turned upside down and trained horizontally to a single wire about 2 feet from ground. As single cordons these had the appearance of ropes of Onions when carrying a heavy crop. They were heavily mulched with farmyard manure, and we found Thompson's Vine and plant manure and Ichthemic guano alternately, and given occasionally, beneficial. In allotments here we find it best to plant in good soil manured well the previous year, and mulch and feed from the top, being careful in dull weather not to crack the fruit by overdoing. Those who cannot get other artificials will find superphosphate of lime, given occasionally, a fair substitute.

S. P.

58, *Blandford Road, Beckenham.*

Rose Mme. Caroline Testout

In your issue of July 31st "A Scottish Gardener" states that Mme. Caroline Testout is a seedling from La France. When "A Scottish Gardener" begins to deal with the ancestry of Roses he should be sure of his ground. Mme. Caroline Testout is a seedling from a famous mother of Roses, namely, Lady Mary Fitzwilliam, crossed with a fine old Tea variety named Mme. De Tartas. As the latter was one of the parents of the illustrious Mme. Caroline Testout I procured a couple of plants of it some years ago to make certain that it would not get lost.

Then Mrs. W. J. Grant was not raised in America. It is one of the famous Irish Roses from Newtownards.

Augustine Guinoisseau is a sport from La France, and not a seedling.

Speculations as to Rose parentages are dangerous and should be left to those who know the history of the Rose thoroughly.

Edinburgh. G. M. Taylor.

ALPINES

Campanula Morettiana

I THINK Campanula Morettiana must be one of the rarest of all Campanula species in cultivation. I had been looking for it for so very many years—unsuccessfully—that I had begun to wonder if the plant was anywhere to be found in cultivation, and even if there really was such a plant at all. I bought plants from the most august Continental specialists (no one in this country seemed to offer it), and I obtained seeds from unimpeachable sources. Of plants I usually received two main types. There was a type which might or might not be the true thing, and this type was usually distinguished by arriving entirely without roots and practically without life. One could never say definitely that these were not Morettiana, because they invariably and promptly died. The other type was usually a very hearty person who made no bones about romping into flower and exhibiting its bastard origin. It was usually some sort of a C. rotundifolia mongrel, and from seed, too, I usually got something of this sort. Never the true Morettiana. But now at last I really have got the true plant. Last summer a friend collected from one of those "care takeful precipices" somewhere in the Dolomites, where alone Morettiana is to be found, a few small roots, two of which, in the smallest of small pots, he generously brought me as a gift, and, being brought by whom it was, I knew that, without a doubt, here at last was the true plant and no other. One of these plants I put out on a limestone scree in the open rock garden, wedged at the foot of a half-sunk rock, with a smaller sunken stone to form a narrow crevice. Here it survived a rather brutal winter and is now a 2-inch tuffet covered with buds. The other plant I put in a small pan in the alpine-house, gritty soil, and wedged between two clumps of limestone. This second plant is now in flower. Four blossoms out and five buds to come, all on a plant barely 2 inches across.

Campanula Morettiana is well worth striving for and waiting for. It is as striking, as sensational, and as beautiful as C. Allionii or C. Raineri, and though entirely unlike either of those species, it resembles them in that it is a singularly small plant carrying enormously large flowers. C. Morettiana is a saxatile species, growing in minute crevices in almost impregnable cliffs in an extremely limited area in the Dolomites. Besides being rare and very local, it is, when you find it, extremely difficult to collect. Yet if only one can obtain a *living* specimen of the *true* plant, no matter how small, it is apparently not difficult to grow. Here my tiny scraps have multiplied by six or seven times in less than a year. The base leaves are small and spoon-shaped and slightly notched, and as they ascend the flower-stems they graduate from the shape of spoons to more and more the shape of shoehorns, and they are covered with minute hairs which give a greyish look to the green. The flower-stems are erect, ½ inch or less high, and each carries a great solitary violet bell-flower measuring well over an inch long and an inch across. In colour and in shape the flowers closely resemble those of C. Portenschlagiana (muralis), but they are decidedly larger, and they appear to me to be a finer, more tel ng tone of violet. There is a sensational fascination about these large and brilliant flowers almost stemlessly studding the frail and tiny plant. CLARENCE ELLIOTT.

Stevenage.

Moltkia petræa

This possesses qualifications which should secure it a prominent place on the rock garden. It has a stiff, upright habit and bears greyish, lavender-like leaves. Its blue flowers are borne in drooping clusters during early summer, and they appear freely enough to make a good display. The plant in cultivation enjoys fissures between rocks firmly packed with gritty loam and peat. The plant will grow luxuriantly on level spots, but to my mind never looks so well as when seen hanging from rugged rocks. H. STEVENS.

Primula littoniana

When grown under favourable conditions the flower-stem rises to a height of 18 inches, terminated by a sharp-pointed pyramidal head of flower consisting of numerous individual blossoms in various stages. The flowers, which open from the base upwards, are pale lilac in colour, and issuing as they do from a vivid red calyx, the plant exhibits great beauty. In general appearance the flower is that of a hardy Orchid, the blossoms suspended on its brilliant calyx. The plant will grow luxuriantly among stones mixed with good friable loam, leaf-soil, and grit, where they are not surrounded by stagnant water. It is suitable for planting in warm nooks partly shaded from the midday sun and sheltered from rough winds. An eastern or south-eastern aspect is best, but a western one will do as well. It loves an open, sheltered spot with plenty of moisture at the roots during the growing season. The plant is increased by seed sown as soon as gathered in pots of light soil under glass. It is advisable, however, to make sure of seed by pulling out a flower that is advanced here and there owing to its reluctance to set naturally. C. M.

Sedum brevifolium

Sedums, or Stonecrops, are not, as a rule, favoured by rock gardeners, although some are sure to be seen in almost every garden of the kind. One beauty which is sadly neglected is that called Sedum brevifolium, found on the mountains of Spain and in Corsica. It varies considerably in beauty, this depending mainly upon the colouring of the foliage even more than the pink or pinkish-white flowers. The colour of the lovely little, almost minute leaves closely set together gives us wonderful tints of pink, green, and purple at various seasons and on different individual plants. At Edinburgh, in the Royal Botanic Gardens, there has been grown for many years a charming variety called S. brevifolium var. Pottsi, collected by an Edinburgh amateur, the late Mr. Potts, whose name was also given to Montbrietia Pottsi. It is extremely dwarf and finely coloured in the foliage. The stems are each about an inch high and bear numerous flowers which show well above the exquisite tinting of the leaves. S. ARNOTT.

Gypsophila prostrata rosea

This is not so much grown as it deserves, for not only are its graceful masses of shoots dotted over with pinky trusses of flowers, but it grows to perfection on walls. I have planted it in the most unlikely spots on walls in hot, dry places, and know few plants to equal it for riotous growth. It will grow splendidly on poor stony banks, the shoots often looking as fresh and vigorous when emerging from an old dry chink as when grown in more congenial quarters in good soil. It is useful for embellishing some arid part of the rock garden somewhere under the eye, as its beauty is not of a showy order. It is seen to the best advantage when planted in a somewhat raised position where its dense shoots may fall freely down. The plant is best cut back during autumn or when straggly, the young shoots coming up more thickly and more glistening in the freshness of their foliage. H. STEVENS.

TREES AND SHR

Kolkwitzia amabilis

AMONG the new woody plants vi cent plant introduction work i has added to gardens few have merits than Kolkwitzia amabilis closely related to Abelia and Diervi hardier than either and in elega beauty exceeds both. Obtained in has successfully withstood the vag severities of the New England clim each season for a number of years flowered freely in the Arnold Ar Our best plant is about 6 feet tall a through, and in early June is a mass ing sprays of blossom. The fruit August, but the seeds are not alway However, cuttings of half-ripe or ri taken in August or early Septem readily, and so there is really no rea this worthy plant should remain rar dens. It is sun-loving, needs loam drainage.

In a wild state Kolkwitzia is branched, twiggy shrub from 5 feet tall, and it shows no signs of greatl ing this height under cultivatio principal stems are erect or ascen the lateral ones arching, giving the compact habit. Though slender, th are rigid, for the wood is hard w little pith, and they are clothed fibrous, dark to purple-brown bar shreds off. The leaves are soft opposite, very short-stalked, ovate, from 1½ inches to 2 inches long, ½ inch to 1 inch wide, with a few sh and veins impressed above and clot pilose hairs on the underside.

The flowers are in pairs, and from or more of them are borne in rounde clusters which terminate the shor softly hairy current season's shoo from 3 inches to 4 inches long. Th stalk, ovary and calyx-tube, are den with white, spreading, strigose hairs spreading acuminate calyx lobes are and persistent. The corolla is pa deeper in the bud, tubular and lipped less than an inch long, sharply cons the lower fourth, and about ¾ inch a mouth; it is translucent and the thro lower side is bearded and pleasingly with orange. The four stamens ha pollen and are in pairs of unequal le longer pair overtopping the pistil. T are remarkable, quite unlike those other member of the family; they are in pairs, nut-like, one-seeded, tipp calyx densely clothed with stiff, brown hairs.

The mass of white strigose hair ovaries and flower-stalks suggests a and together with the translucc corolla with its orange-mottled throat charming combination of extreme le It is, indeed, a most graceful, pleas floriferous hardy shrub, and the only be found with it is the uncouth gene for which neither the plant nor its in myself, can be held responsible. Or of its peculiar charm and fascinati gest as a common name for this shr Beautybush.

This monotypic plant was discove time between 1890 and 1895 in S Père J. Giraldi, on whose herbariu mens the genus was founded by (a In the summer of 1901 I found it on mountains of northern Hupeh, an autumn secured seeds for Messrs. who succeeded in raising a stock o Neither Giraldi nor I saw the wild blossom, and it was not until Ju when it flowered for the first time, flowers were known. I met with

ce, about a score of bushes growing rocks at an elevation of between 9,000 d 10,000 feet on the high range which the watershed between the Yangtsze m rivers in the Fang magistracy.

ld Arboretum. E. H. WILSON.

'he solace of garden and woodland

y GERTRUDE JEKYLL, V.M H.

a rare pleasure to find a garden ring into the realisation of the hope intention of the time, now nearly 30 go, when its site was partly rough it coppice and the rest bare ground, 90-year-old plantation of Scotch Pine t been felled. Young trees of various oon sprang up where the Pines had Oak, Mountain Ash, Birch, and Holly. grew they were encouraged or re- as seemed best towards their future g. There were already one or two Hollies and a few Oaks, and on one me Spanish Chestnuts larger than the lower coppice; also two of the es, double-trunked or otherwise un- for timber, had been left. Young lso have grown up where the old ones it, and now the bit of woodland is lly provided with well-grown trees. whole ground slopes down a little to th; the flower garden is below, the ove. The various flower borders are devoted to different seasons, so that turn may show some fairly complete nothing forced or sensational, but leasant showing of the season's best. have been the subject of much care ought, though the evidence of this ot obtrude. A sympathetic writer "The gardener is an artist who ts Nature by showing her full capa- by carrying out any beautiful es of a plant to their fullest con- ion"—and this, not with individual nly, but by means of right grouping lautiful proportion and harmonious g, for so only can one attain to the urpose of a garden, to be a place of nd restoration to mind and body, or, n has it, "the greatest refreshment pirits of man."

Sedding, in his book, "Garden Craft," published in 1891, says:—"To me a garden is the outward and visible sign of man's innate love of loveliness." . . . "A garden is Nature aglow, illuminated with new significance." . . . "Someone has observed that when wonder is excited and the sense of beauty gratified there is instant recreation, and a stimulus that lifts one out of life's ordinary routine." . . . "Some joy shall also come of the identity of the gardener with his creation." The French critic, Diderot, writing in the middle of the eighteenth century, says much the same of the charm of the old English gardens:—"They seem made to be the sanctuary of a sweet and placid pleasure; the body is there relaxed, the mind diverted, the eyes enchanted." These quotations express in better words than I could put together what the old English writers meant by "sweet solace."

Among the Sweet Chestnuts

But though the reward of good gardening may be felt among the flowers in ordered masses it is even more apparent in the woodland, where they are but few. For though here and there a little glade may be lighted up by a group of white Foxglove, or in March and April there will be drifts of Daffodils, and in May a carpeting of Lily of the Valley, yet, for the most part, the woodland gives the comfort of quiet contemplation. At every few paces some pleasant view of grouping, of light and shade, some perfect little picture of woodland beauty, with the accompanying scents of mossy ground, of last year's leaves in wholesome decay, of the heavenly fragrance of the young Birch foliage in earliest summer, or of the dying wild Strawberry in autumn; the voices of many birds and the sounds of foliage stirred by light wind; that of the Birches like the falling of gentle rain, and that of the Pines recalling the rolling of shingle on a half-mile distant sea beach. All the little quiet incidents of the wood so making a symphony of sight and scent and sound, and fostering all those satisfying mental perceptions that go to the making of the "sanctuary of a sweet and placid pleasure." One more quotation, also from a French pen, that of De Biran, at the very end of the eighteenth century:—"I have experienced, this evening, in a solitary walk, taken during the finest weather, some instantaneous flashes of ineffable enjoyment, such as I have tasted at other times and at such a season, of that pure pleasure which seems to snatch us away from all that is of earth, to give us a foretaste of Heaven."

A woodland path

Senecio greyi

Among the dwarf flowering shrubs which are hardy in our gardens the above takes a foremost place. It is a comparatively easy shrub to grow as it will flourish in almost any kind of soil that is well drained and deeply cultivated. For planting in masses in large beds or as isolated specimens it is excellent, the large, beautiful, loose panicles of flowers, which are produced freely, provide a picture of more than usual interest. Its foliage is greyish and it has large yellow flowers in clusters in early summer. It is pretty by the margins of shrubbery borders.

H. STEVENS.

Gooseberries on Walls

FINE crops of Gooseberries might be grown on walls, and all vacant places on them between the permanent trees should be filled up with them. An east wall suits them admirably, and on walls they can be better protected from birds than when growing in the usual way. By growing Gooseberries on walls two advantages are secured—first, fruit of a size suitable for tarts can be had earlier by a fortnight than on bush trees—a great gain—and the fruit when ripe will keep much longer than that produced in the ordinary way. Rain is thrown off it by the wall coping, thus keeping the ripe fruit dry, and preventing splitting and decay. It is unnecessary to cover the trees with wire netting to protect the buds from birds in spring, thereby warding off in some degree rain, which soon renders the trees liable to the attacks of red-spider. When the garden here (Hants) was made some five years ago I planted a number of Gooseberry trees of different kinds against the walls in the spaces between the permanent fruit trees. They are now 6 feet high, and every year are completely covered with fruit down to the ground. They never fail, no matter what the season may be. The young wood, which is made freely, is pruned away in summer before the fruit ripens—*i.e.*, with the exception of the leading shoots—and this assists maturation by admitting the sun's rays freely among the fruit. Gooseberries from walls, I think, too, are of better flavour than those from bushes. Keeping small birds off the buds in spring is a great advantage.

Some time before Christmas the trees are pruned, and in doing this I leave as much young wood as possible without overcrowding; other shoots I cut in quite close with the exception of leaders, from which I just remove the extreme points. The branches left are laid in quite thickly, say 4 inches apart. I then mix lime, soot, and clay to the consistency of paint; some grease or anything of the kind from the kitchen is then melted over a fire, and to this I add the other ingredients when hot. With this mixture I paint all the branches, covering them completely, buds and all. To some this may seem a troublesome matter, entailing a large amount of time where there are large numbers of trees to operate on, but the results well repay the trouble. Some recommend lime only applied with a syringe, but that does not adhere sufficiently. The frosts and rains of winter wash it off, and by adding the grease and clay this is remedied. It does not wash off before the trees are safe from the attacks of birds, and with caterpillars I am seldom troubled; if a few make their appearance a dose of hellebore powder soon settles them. I sprinkle a little powder over the parts affected in the evening, and the following morning I thoroughly wash the trees with clear water applied with the garden engine. This cleanses them for the season. The stems of the trees, too are never affected by Moss, such as one often sees on trees not treated in the way described. This I attribute to the annual painting. The bush trees are also all painted, but I do not summer-prune them, as they do not make so much wood as those growing against the walls. They bear heavy crops annually—so heavy as to require supports to keep the fruit off the ground. I dig in a small quantity of manure about the roots once in two years, as I find them crop and grow well enough without annual manuring. The Red Currants in the quarters of the kitchen garden I paint in the same way as the Gooseberries. They are trees with a clean stem of about 15 inches long; each tree consists of from six to 10 branches, which are kept closely spurred in. The branches are allowed to grow about 6 feet high; by having so few branches to each tree, and pruning the young shoots in summer when the fruit commences to colour, they get plenty of sun and air, which assists the ripening of the wood—a great point in the production of next year's crop. Under this treatment the branches become clothed very thickly from top to bottom with fruit. An advantage gained by cutting away the young growth preparatory to ripening is that the rains clear the fruit of honeydew which sometimes affects them. B. W.

Gooseberry Whitesmith

Amongst the many newer varieties, the old-fashioned, highly-flavoured varieties are apt to be forgotten; indeed, one might now often search in vain through newly-planted plots for such sorts as Warrington and Whitesmith. It is true that even some extra-sized exhibition sorts are suita dessert, but many more are thick-s almost pulpless, and of very inferior I have grown a good many differer from time to time, but still think t all-round dessert quality Whitesmith to be beaten. It is a fact that, where or two of it is growing amongst blackbirds and thrushes invariably Whitesmith, even though the rest sorts ripen simultaneously. I adm both Whinham's Industry and Keeps enormous bearers and superior to ma in flavour, but I am sure that Whites still a valuable Gooseberry for profit, judicious pruning and a sustaining r no fault can be found with the yield same remarks apply with equal force old Warrington as a red variety. (

Summer pruning

I notice advertisements in various of a book on summer pruning, known Lorette system, which claims to be thing special and to produce astonish sults. Will some reader who has ledge of the book explain in language that all may understand in way the system differs from that tised by our best fruit-growers many years. We can get plenty of spurs and blossom. The trouble climate is to so protect the blossom secure a good crop of fruit. A careful of disbudding and laying in the nes amount of young wood with some fru the right time and method of sho wood of others where fruit is grown on the spur system is part and parc gardener's education, and it takes learning when one remembers how th different sorts of all kinds of fruits var in habit of growth and in the time of ing, or rather partial ripening, of s growth. This is specially noticeable growing fruit on the cordon system, applicable alike to choice Pears and and the homely Gooseberry. There much difference in the above matters b Early Sulphur and Warrington Goose as between Jargonelle and Glou M Pears or Early Prolific and Ickwor peratrice Plums. It is when growing ber of fruits in considerable variety i proximity to each other that one no difference and takes measures accor an interesting and, as above noted, important feature in fruit-growing. book in question throws new light subject it will naturally be very welco

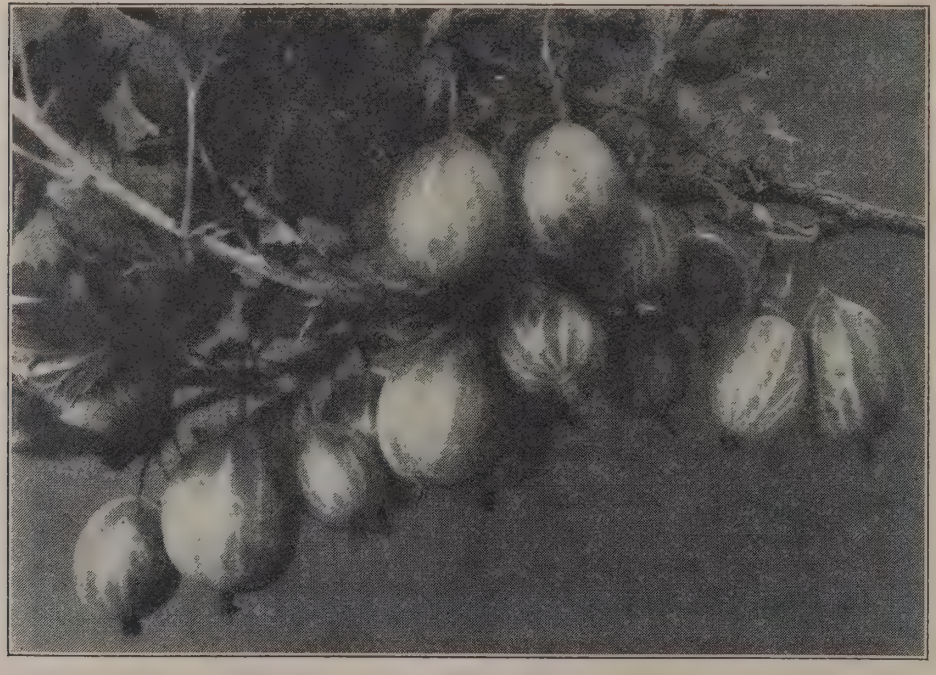
E. BURL

Gooseberry Trumpeter

THE subject of our illustration Gooseberry deserving greater att than it obtains in many quarter first-class dessert variety. Forming of spreading habit, it is very free-bear free, in fact, that this is a secondary merit, as it will stand hard thinning seasons for cooking and bottling at a before the ripening season arrives often does Trumpeter fail us, and on heavy clay soil it does as well as any we grow. For dessert the fruit is ex being of large size and of most att orange-yellow colour when fully r further appealing owing to its having fectly smooth skin without the hair fo so many other varieties. Of its flav that need be said is that, once a be been tasted, there is an immediate des more, for it is most excellent to the p

EDWIN BECKETT, V.M

Elstree, Herts.



Trumpeter, a first-class dessert Gooseberry

There are Gooseberries—and Gooseberries!

1. A large exhibition basket of Langley Gage, white
2. Double cordon Trumpeter, a very large oval, Pear shaped, yellow fruit
3. A bush of Leveller, an extraordinarily prolific yellow variety, combining good quality and great fertility

Shown in the Gold Medal collection by Mr. J. C. Allgrove on July 27th at the R.H.S. Gooseberry Show

HEAVY CROPPING GOOSEBERRIES

Renewing cordon bushes

nt gold medal exhibit of Goose- seen at Westminster is a gentle that the time for renewing es will soon be round once again. een many instances this year of collapse of Gooseberry bushes, ibt, to overcropping. Given a and favourable weather the will go on bearing heavy crops mpletely worn out. The Goose- a long-lived plant in Nature, and eady to replace old and worn-out those possessing the vigour of light soils, and especially with berries, where no particular at- een given at planting time, we ready to dismiss with a blessing which show signs of deteriora- rellis Gooseberry is grown under nditions, as the severe pruning keep it within bounds is con- nature, and extra attention is ong life and plenty of fruit are ven, then, a light, retentive soil, y the essentials to success are ation and planting, selection of ties, and mulching at the right n the ground, throwing out a tom soil if very poor, and substitute just below the top spit a little heavier soil to which has been added a liberal dose of cow manure. Plant a little deeper on lighter soil. All varieties are not suitable, as some resent the very close pruning. The shoots do not break kindly, and one gets long gaps instead of thickly-set spurs. The leading nurserymen have made a speciality of cordons, and will supply suitable varieties. A surface mulching of manure is advisable in dry seasons when the trees are carrying a heavy crop, but thoroughly good first planting is preferable, for mulching has a tendency to bring roots to the surface, and if these are not noticed the trees are bound to suffer. Cordon Gooseberries have always been an interesting feature of the fruit garden, and the planting time will soon be at hand. Now, as to the rejuvenation which has to be taken into consideration if one grows the same trees successfully for, say, close on 30 years. If at the outset the lower branches have been trained horizontally and five or six growths run up perpendicularly from the same, so soon as the old spurs are seen to be failing a bit, select stout, sturdy growths as near the base of each perpendicular as possible, and tie in to the same at the summer pruning. Shorten these back to half the length in the winter at the same time cutting clean away sufficient old spurs from the old stems to make room for the young shoot. Repeat the treatment for two successive years, by which time the young growths will be nearly at the top of the trellis, and all old stems may be cut clean away, and practically a new tree, with, of course, the exception of the stem and the two horizontal bits at the bottom, is obtained. Where bullfinches are troublesome it is advisable to throw a net right over the trellis after the winter pruning. This is easily done, and if the net is kept clear of the trees with the aid of a few benders at intervals it is an effectual preventive, much more so than all the syringings and dustings. Red-spider is very troublesome in some seasons. Keep a sharp look-out in early spring, and apply a strong dose of Quassia extract or a mixture of soft-soap and paraffin from a garden engine.

C. T. K.

Early Apples

Such varieties as Beauty of Bath, Mr. Gladstone, Irish Peach, and Lady Sudeley are greatly appreciated as dessert, and should be eaten direct from the trees, otherwise, if kept for any length of time, the flavour will be lost.

The Cultivation of Freesias

PROBABLY amongst greenhouse-flowering bulbs there are none that have been more improved than the present-day Freesias. In days gone by we were content with the old varieties of refracta alba and Leichtlini, but to-day we have a most beautiful range of colours to select from. A few good ones are Rosebud (white, tipped rose), Amethyst (soft silvery-lilac with white throat), Buttercup (pale primrose), Yellow Queen (yellow, shaded orange), Early Bird (pale mauve), Rose Prince (deep rose), and Red Indian. The bulbs should be procured during August—the earlier in the month the better—and should be potted up straight away, placing eight bulbs in a 5-inch pot or 10 in a 6-inch. The best soil for growing Freesias in is a compost of well-rotted turf of a sandy nature, three parts mellow leaf-mould, and one part silver sand. This should be mixed well together a week or so before using. The pots should be clean and well drained, as Freesias will not stand stagnation. The bulbs should not be set too deeply; I leave the tips showing. Press the compost around the bulbs and water with a fine-rosed can. Unlike Roman Hyacinths and other spring-flowering bulbs, the pots must not be buried in ashes, but stood on a cool base in a cold frame, which should be kept shaded until growth commences, when they must be brought as near the glass as possible and grown on with ample ventilation to keep the shoots sturdy, as at no time must they become lanky and drawn. Although at no time must the young plants become dry, they must not be overwatered. A careful survey should be made each day. They should be grown on under cool conditions until autumn is well advanced. When frosts are liable to occur they should be taken into a cool and airy house and kept as near the roof-glass as possible. Grow them on during the winter with just enough heat to keep away the frost, and give all the air possible. When the flower-buds appear they may be assisted with weak doses of Clay's or other reliable fertilisers, but I do not advocate animal manures in any form for these plants. A little weak soot-water helps to keep the foliage in a healthy state.

Staking must not be neglected, and should be commenced when the plants are 4 inches to 6 inches in height. The thin twigs from old besoms are useful for supporting the plants if several are placed around the edge of each pot, securing the whole with strands of bass or other soft material. When the buds are advancing they may be subjected to a little more heat, but at no time should the temperature be more than 60 degs. When in flower they should be removed to the conservatory or other cool house, where they will remain in full bloom for several weeks. As they pass out of flower they must not be neglected, but grown on in a light, airy position for several months until the foliage turns yellow, after which they should not be watered, but subjected to the sun's rays as much as possible. During the latter part of July or early August they should be shaken out of the old soil, the bulbs sorted and potted up as previously advised, setting all small bulbs thinly in boxes and growing on, when many will make flowering bulbs by the following season.

RAISING FREESIAS FROM SEED.—It is possible to raise and flower these plants as annuals from seed sown in January. I have had a wealth of bloom during August and September, but the best time to sow is in early August. Seed should be obtained from a good source. Sow the seeds in 5-inch or 6-inch pots in the same compost as advised for bulbs, and place every seed 1 inch apart and cover with fine soil not more than half an inch. A little warmth helps the seed to germinate quickly. The seedlings should appear in four weeks to six weeks, and when once they show through the soil they must be given ample air. From now on they should receive exactly the same treatment as the bulbs, and during March some flowers should appear. Seedlings should be given no stimulants whatever during the first season.

W. E. WRIGHT.

S. Wales.

Plants for covering a greenhouse wall

The following kinds of plants, all excellent in their way, are suitable for covering the back wall of a greenhouse. Lonicera, or Caprifolium sempervirens, is a beautiful climber, hardy in many parts, but well repaying the protection of a greenhouse, in which it will flower throughout the summer. There are several forms of this Honeysuckle, but that supplied by nurserymen as the scarlet Trumpet is, as a rule, a very good one. Clematis indivisa, an evergreen New Zealand species, that produces enormous quantities of pure white flowers in early spring, is one of the best of climbing plants; and another climber, a little later in blooming than the Clematis, is the Chinese Akebia quinata, a slender twining plant, with prettily-divided leaves and curious claret-coloured blossoms. The individual blooms are not large, but they are borne in sufficient profusion to be attractive. Passifloras, where liberally treated, soon cover a considerable space, and, apart from their handsome blossoms, their foliage is very ornamental. Amongst them the common Passion-flower is the hardiest and most robust in constitution; its white variety (Constance Elliott) is quite distinct. Another good greenhouse kind is P. Impératrice Eugénie. Lapagerias are greenhouse plants, but they are seen to the best advantage when trained close to the roof. A well-drained border, consisting of rough peat and sand, with some charcoal mixed with them, just suits both the red and white kinds. Berberidopsis corallina is a pretty climber; it has dark-coloured evergreen foliage and handsome, drooping, crimson blossoms. For training on the back wall of a greenhouse there are many suitable plants not strictly climbers. A few of the best are Cestrum elegans var. Newelli, whose large clusters of crimson blossoms render it one of the showiest of indoor plants. Its flowers, too, are succeeded by purplish-coloured fruits, each about the size of a small marble, and very handsome. Cestrum aurantiacum makes a good companion to this plant. Plumbago capensis, with its myriads of pale porcelain-blue flowers, is very showy in summer, and also supplies a shade of blue not often met with among greenhouse plants. The peculiar lobster-claw-shaped blossoms of Clianthus puniceus, when borne freely, are very attractive, on account of their bright colour and quaint form. Red-spider is the principal enemy to guard against in the case of this plant, as, unless kept down by liberal syringings, it quickly spreads during hot weather, and causes the foliage to assume a sickly tint. Fuchsias, trained on a greenhouse wall, flower well during summer, but in winter they would not be attractive. Thibaudia acuminata has deep green, stout foliage, and drooping, wax-like, reddish blossoms, that are admired by most people. It soon covers a wall with a mass of leaves that are very persistent, and it also flowers freely. Another plant seldom used purpose indicated is Rhododendron tissimum. In May, when studd large white highly-fragrant blosso Rhododendron is a sight to be rem Abutilons might also be used for purpose, and amongst the many sor cultivation the best is the pure wh de Neige. Lastly, what better covering have we than Camellias? very hardy, and only want glass pro keep late frosts from destroyi blossoms.

Statice profusa

Among cool greenhouse plants th high place, its pretty shade of blu being very pleasing. The plant decorative for a very long time and means difficult to manage. It is ever, just too easy to propagate, fairly young fresh shoots can be se rooting of cuttings is slow and p It is well, therefore, to reserve a yo or two for the production of cutting the cuttings off with a "heel," wh be trimmed with a sharp knife and the lower leaves removed. The roo post should consist of equal parts l mould, and clean sharp sand. Plan four cuttings very firmly round the 4-inch pot, water well, and set in gating-case, where, however, only a temperature is maintained. Keep moist, but not saturated. Even most favourable conditions several elapse before rooting takes place. does occur pot off singly into 3- grow on steadily, and when the po filled with roots transfer to the 5 using a nice fresh mixture of three turfy loam, two parts sweet leaf-m one part coarse clean sand. The a a 5½-inch potful of bone-meal an potful of Thomson's plant manu barrowload of compost will make i for this plant.

By the following spring the pla ready for another shift, this tim 7-inch size, and unless very large desired this should be the final pot plants may have gentle feeding w manure during late summer and a instead of repotting in subseque merely top-dress with fresh, rich heaped teaspoonful of the chemic named above to each plant. Th not subject to insect pests, an flowers and withered foliage be intervals little further attention is

Preston House, Linlithgow. C

Solanum capsicastru

In view of the attractions of the the greenhouse during winter it is that plants at the present time in should receive water as they ne that dryness should be avoided. of the frames will be better of coolest conditions obtainable Solanums benefit by being syring three times a week at night. Th to counteract green-fly. A little in the water occasionally will hav of making the plants more vigoro

WOODR

Keeping Geraniums

(Reviresco).—We have never he plan of burying Geraniums in the keep them during the winter, and were tried that failure would resu some cuttings now in boxes or pot them during the winter in a tem 45 degs., potting them off in the s not pinch the Wallflowers. They bushy plants if allowed plenty of r

Campanula Tymonsi

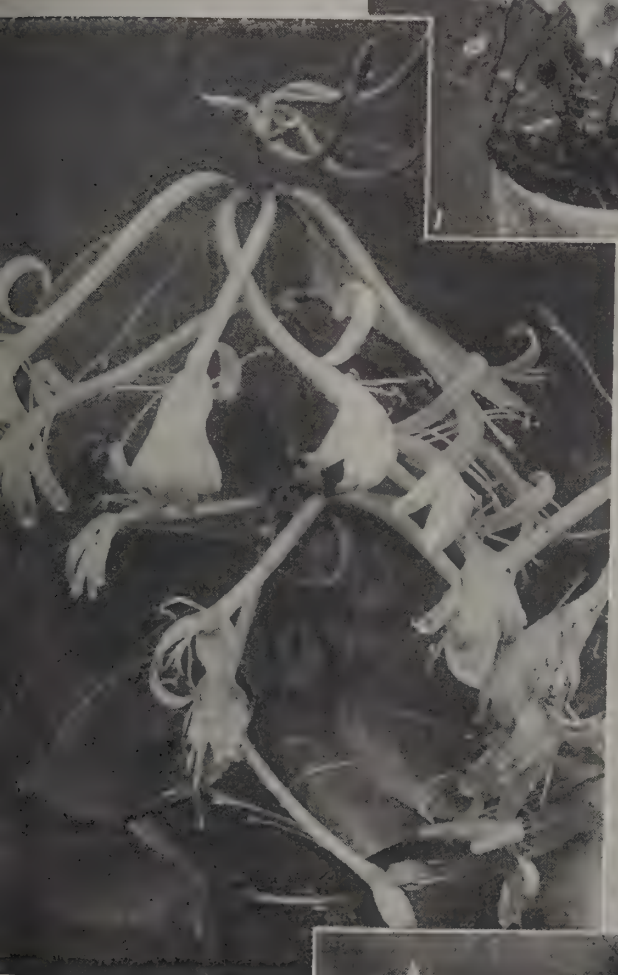
little hybrid suitable for the den. The flowers are pale blue, and borne on stems bout four inches high.

hich are scarce, were shown ots by M. Prichard and Sons

3. The new Escallonia Iveyi, which gained an Award of Merit

It is a strong growing evergreen shrub, and most effective, with large panicles of white flowers. It appears to be a hybrid between E. montevidensis and E. exoniensis. It was found growing in a Cornish garden between bushes of these two Escallonias, there being no other Escallonias in the garden

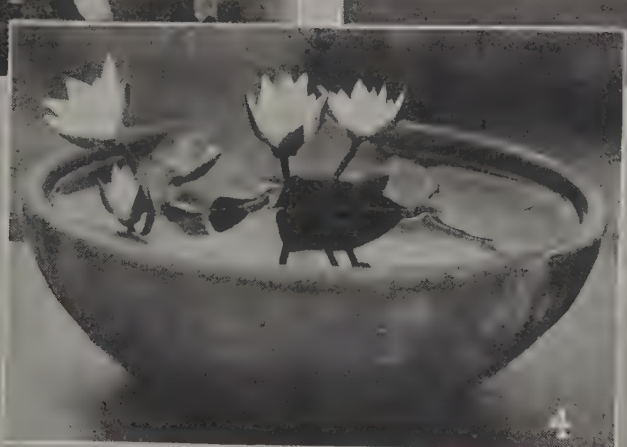
Shown by Robert Veitch and Son



cera Hildebrandti

le Honeysuckle, with golden-yellow flowers. of the flowers deepens The corolla is thick and the protruding anthers minent. Unfortunately oneysuckle is not hardy try. However, it is a ubject as a greenhouse climber

Robert Veitch and Son



4. The smallest of all Water Lilies, Nymphæa pygmæa alba

The pure white flowers are only about one inch across when fully expanded, and the bowl in which they are shown is less than one foot across. When so arranged, a bowl of tiny Water Lilies makes a delightful and unusual table decoration

Shown in Mr. Amos Perry's collection of aquatics

ESTING FLOWERING PLANTS SEEN AT VINCENT SQUARE AT THE FORTNIGHTLY MEETING, JULY 27th

The Exhibition Status of the Tomato

DOUBTLESS to many it may be thought strange that any question should arise as to the status of the Tomato. Given only plenty of Tomatoes they are eaten ripe and uncooked with the same avidity that they are partaken of cooked. Were the Tomato essentially a sweet fruit such as is the bulk of what we term dessert fruits, it is doubtful whether it would be so generally acceptable in its various cooked forms as it now is, yet the absence of that sweetness and flavour peculiar to most dessert fruits in no way detracts from its consumption in a ripe, uncooked state. Ordinarily, this beautiful, if not delicious, fruit is classed as a vegetable. It is the victim to some extent of indifferent origin and gradual development. Starting with very indifferent examples that were not at all attractive uncooked, naturally the Tomato fell into the vegetable groove or rut. It was regarded only as a sauce product or an ordinary vegetable accessory to dinners, and hence its long recognised vegetable status. Its next development might be said to have been found in its exaltation to a very pleasant salad element—for Tomatoes have been for some time identified with salading, and today form a common feature or accompaniment. Still, this latter association only helped to retain the Tomato amongst vegetables. During the past few years, however, it is obvious that these fruits have taken a higher position. The world has so far recognised their excellence in a ripe raw condition, that they are consumed largely in that condition as ordinary accompaniments to meals, and even partaken of as refreshment at odd times.

It is this development of a most interesting and beautiful garden product that has caused the question as to the exhibition status of the Tomato. It is a question much more easily raised than satisfactorily settled. Apart from their undesirability for ordinary sale, there seems to be no limit to the size to which Tomatoes may be grown for cooking, provided the fruits are firm, fresh, and of good form. But fruits of these huge dimensions are very objectionable for consumption at meals in a ripe and uncooked state. To meet this latter requirement we have produced in great abundance small-fruited sorts of various shapes and colours most of which are singularly adapted for dessert use, but would be almost useless for cooking. Naturally, even in connection with large-fruited sorts, a line is drawn when forms of consumption differ. The largest and most ungainly go to the kitchen, the small and handsome fruits to the table direct, and in this way again the status of the Tomato is clearly shown. Practically we cannot get away from the fact that, having regard to its peculiar nature, a fruit of the most perfect form and beautiful colour, allied to soft, luscious, if not richly-flavoured flesh and exceedingly thin rind, it is as much entitled to rank as a dessert fruit as any other recognised fruit is. Indeed, it is very absurd to assert that it is not or cannot be such in face of the fact that it is already so regarded and consumed by millions of people. But then there is to be remembered the fact that by common consent hitherto Tomatoes have been shown as vegetables, and such common consent cannot be ignored. To refuse to them their old position in vegetable collections would be as fatuous as it would be unwise; indeed, there is for such course no reason whatever. But then it will be said Tomatoes cannot be regarded as both fish and flesh, as both fruit and vegetable. To that it may be asked in reply, Why not? What earthly reasons are there why they might not be so regarded? Amongst vegetables on the exhibition tables they, when good, occupy a high, indeed a very prominent place. Amongst fruit, of course, they come low in position. It is so far a fact as to be undeniable that the Tomato, more than any other product we have, forms a connecting link between fruits and vegetables, whilst they have botanically as good a title to be termed fruit as anything else that is grown.

A. G.

Large *v.* small Cabbages

It takes a lot of time to beat into the heads of some persons who undertake the duty of judges at cottagers' shows what really constitutes quality in Cabbages. I was pained the other day to see at an exhibition of cottagers' produce, and generally good produce, too, the first prize awarded to huge, leafy, soft-hearted Cabbages, such as would not be fit for table for some three weeks later if left uncut, whilst really beautiful, firm-hearted, smaller ones were placed fourth. Such a blunder could not happen in the case of any good-class gardener's exhibit, for the simple reason that he would not grow large, leafy, worthless Cabbages in any case. In the course of now some 12 years of judging at rural shows in Surrey I have so far repressed coarse Cabbage culture that big, leafy ones are much less seen than formerly, and those of medium size, such as Winningstadt, Offenham, Defiance, and others of that character, are much more generally grown. Big-hearting Cabbages, as a rule, produce a great excess of outer leafage. They want a great deal of room, are long on the ground, and are extremely exhausting to the soil. Smaller Cabbages may be planted more closely together, they heart-in far more quickly, there is with them very much less of waste, they cook more readily, and always are much more pleasant to eat. It is very much to be regretted that any seedsman should offer prizes for the biggest or heaviest heads of Cabbage. The practice encourages waste. It should be their effort, as that of all judges, to encourage the production of Cabbages, as, indeed, of all other vegetables of such varieties or samples as give the very best material for table, produced in the most economical way. In all high-class vegetable competitions it is now the aim of judges to favour mere size less, and quality, and especially fitness for the table, more. The same rule should apply to cottagers' products.

C. P.

Spinach

It is a good plan to sow early in September a good breadth of Spinach, which will come in for the spring pickings earlier than any sown on the warm borders early in the year. By choosing and preparing now some ground that will not be wanted for a succeeding crop until late next spring, we can leave the wall borders for the many other things which require such positions, and still get a supply of Spinach that will come in as a good succession to the August-sown crop, which will by that time, if the demand has been constant, be getting past. We prefer Spinach to follow some crop for which the ground was well manured, as the young plants come best through the winter on ground that has not been recently manured, and as this is something in the nature of a catch crop to fill a possible gap, we do not look for the very large fleshy leaves which are produced at other seasons, and are content if those produced are of fair size and good colour. We advise that a light dressing of well-pulverised lime be given, and that where soil is heavy and the situation low, ridged beds be formed. Where Onions or Strawberries have been the previous occupants of the ground th have left the surface too hard for Spi follow without some breaking up, and plan is to mark out the site of each be to break the surface with a fork to a about 6 inches. Strew over this a sp of the lime, and then throw the soil f alleys on to the surface, making th more or less deep, according to the n the soil and position of the plot. D then drawn, the seed sown, cover again a sprinkling of lime is given. this sowing follows Potatoes or a which has had to be dug out of the gr further digging will be necessary, firm root-run being best suited to gro hardy nature.

Report on condition of hortic crops on July 28th, 192

VEGETABLES.

Beans (Kidney or French).—Poddi

Beans (Runner).—Late; now maki growth.

Beet.—Growth satisfactory in m tricts; some bolting.

Broccoli.—Making good growth; out continuing in a few districts.

Brussels Sprouts.—Plants look v mising.

Cabbage (spring-sown).—Good gro plants are hearting well.

Carrots.—Promising well in m tricts, but much damage by Carrot-fl

Cauliflower.—Good crops generally

Celery.—Plants growing well.

Cucumbers (under glass).—About age crop.

Cucumbers (outdoor).—Progressin factorily.

Kale.—Plants making good growt

Leeks.—Plants growing well.

Lettuce.—Good crop generally.

Marrows.—Plants backward, but proving.

Onions.—Fair, but improving; prevalent in many districts.

Parsnips.—Much improved and n generally.

Peas.—Main crop Peas promise w

Savoys.—Plants making excellent Early crops hearting well.

Sea Kale.—Growth good and heal

Spinach.—Late-sown Spinach well.

Tomatoes (under glass).—An crop; fruits ripening slowly.

Tomatoes (outdoor).—Backward.

Turnips.—Good crop.

FRUIT.

Apples (culinary).—Variable, bu crop is expected; Victoria, Grenad Derby, and Bismarck fairly good; Seedling and Newton Wonder poor

Apples (dessert).—Worcester James Grieve, and Ellison's Oran fair crop generally; other varieties a

Pears.—Hessle, Chalk, Confere Fertility promising; other varieties

Plums (ordinary).—Heavy crops r Kent and Cambridge; good crops cester; in other districts the crop variable, and there are few Plums parts of the south-west; Czar, good very good; Pershore, good; Mon fair.

Plums (Gages).—Fairly good bridge; good in Kent, but only a other districts.

Plums (Damsons).—Promise a in Kent, Cambridge, and Worceste low average generally; Aylesbury half-crop.

REMINDERS FOR THE WEEK

thern and Midland

tain the best results from plants n boxes and set out during spring a little attention at the present time. oil should be removed with a small pointed stick from the base of each encourage them to ripen, also any n should be removed at the same is not advisable to give any stimu- r this date, but clear water may be necessary.

Spinach

dth of the Long-standing Prickly may now be sown to get succulent winter use. Land that has been vith Potatoes or Peas may be used crop. The seed should be sown drills 2 inches deep and 15 inches hin the plants when fit to handle to apart, as failure is certain if the nain crowded together.

ms

a good time to collect material for p a fresh bed during the early part onth. Fresh horse-droppings should d and kept in an open shed until is to hand. This should be turned . Sheds and houses should be orough cleansing. If woodlice are ices these should be syringed with l.

plants

stock of cuttings should be taken next few weeks of the various ants required next season. Insert gs in boxes and stand them on a es in a shady spot for a few weeks, will soon form roots. The soil kept moist. In selecting the cut- should be taken not to disfigure

n situations where the soil is of a e seeds of various annuals may be een now and the middle of Sep- hey should be sown thinly in drills l, and need not be thinned until ng. Virginia Stock, Saponaria, Shirley Poppies, Sweet Alyssum, Collinsia, Calendula, Candytuft, reopsis, Gilia, and Erysimum are for the purpose.

lussini

oming to the fore, and where an stock is required there is no better serting the cuttings than the pre- e should be made of the young e base of the plants and inserted sandy soil. The cuttings should inches in length, and after re- e lower leaves they should be the soil at 3 inches apart. Stand a cold frame until the following ing ample air on all favourable

emums

pots need a good deal of attention n as regards watering and feed- and tying, as necessary. Where ble to obtain exhibition blooms ention in bud-taking must be

s

at were put down six weeks to ago should now be well rooted severed from the parent plants. In a week or so they will be ready for potting up into small pots. Those of 4-inch size are suitable as they will carry the young plants through the turn of the year without re-potting. Good loam, burnt earth, a little old mortar-rubble, and coarse sand form a good compost for this potting.

Cinerarias

The main batch of these is now ready for a further shift, as until the final potting has been accomplished they should not be allowed to become potbound. Three parts fibrous loam, one part leaf-mould, and one part coarse sand is a good medium, and should be made firm around the roots. Grow them on in a cold frame as hardy and sturdy as possible until autumn.

Cherries

Most varieties of Sweet Cherries by this date have been gathered, and thus an opportunity presents itself to give the trees or bushes a thorough cleansing with some good insecticide. Morellos, usually grown on north or other shady walls, will now be in a fit condition for preserving, as they handle much better when not allowed to become too ripe.

Summer pruning

This should be terminated as soon as possible after this date and a note taken of any trees that are to be replaced. A visit to a good fruit garden or nursery about this date is most interesting to amateurs who wish to choose the best and most prolific kinds.

W. E. Wright.

Tregarth Gardens, Creigiau, near Cardiff, S. Wales.

Scotland

Early Peach houses

As soon as the last fruits have been picked the syringe or, preferably, the garden engine ought to be got to work without delay, and the foliage thoroughly washed twice a day. It is more than likely that there may be traces of red-spider, and this treatment will clear off the pest and permit the leaves to ripen and fall naturally. It is wise, too, to give the border a good soaking after breaking up the hard surface, for while the roots of Peach trees certainly slack off their growth at this time they are never entirely inactive.

Muscat houses

As the earlier Muscats begin to ripen, two things are essential. These are a good brisk heat in the pipes and fairly free ventilation at all times. This combination results in the berries assuming their characteristic amber-yellow colour which, if heat and air be lacking, may be wanting. Those whose Muscat-house includes Muscat Hamburgh will be well advised to give sublateral growth a little liberty to extend, for, as in the case of Black Hamburgh, a fairly dense shade increases the colour of the berries. The latest house, which may include Lady Downe's, Mrs. Pince, and Gros Colman, should be kept at a fairly high temperature. It is better to get these late varieties well forward before the nights begin to grow colder.

Raspberry plantations

When the crop is over there is no point in retaining the canes which have borne the season's fruit, and they ought to be cut cleanly out at the earliest possible moment. At the same time an eye should be given to the current season's growths, and where these are badly placed, or where they are congested, the superfluous ones should be removed. It is better to uproot these rather than cut them over, for where the latter course is pursued the congestion may, for the time, be removed, but it will undoubtedly be accentuated at a later date from the dormant eyes of the cut-over suckers.

Strawberry beds

If it be proposed to make new Strawberry beds later in the season the ground for such can be prepared as soon as it becomes vacant. Thorough preparation is essential, and the best manure which can be procured ought to be used with a lavish hand. On deep soils it is, of course, sound practice to trench, but where the staple is of a light description it is better to double dig the quarter. Meantime see that the necessary runners are being secured from fertile plants, and be careful in respect of keeping the chosen varieties separate from each other.

Tomatoes under glass

A mulch on the surface of pots or boxes containing fruiting plants will save watering, but even with a mulch in a warm, sunny house Tomatoes will require water during bright weather. If Tomatoes are required during the winter those who have a well-heated small span with a good exposure will now be thinking about getting out their plants. Seedlings, of course, are best, although at one time I used to rely chiefly upon plants raised from cuttings which, perhaps, begin to fruit at an earlier date and nearer the soil than is the case with seedlings.

Primulas

The majority of Primulas intended for early winter flowering, and at present in cold frames, ought now to be ready for a move from 3-inch pots into 5-inch pots. These may include the sinensis forms, P. obconica, P. malacoides, P. Kewensis, and P. verticillata. The last is, I think, quite as good as P. Kewensis, of which it is one of the parents. After repotting, the plants may, for a time, be returned to the cold frames, plunged if possible, and watered very sparingly until growth is plainly visible.

Hardy fruit

Birds are particularly partial to Morello Cherries, therefore the nets ought to be got in position even before the fruits on the north wall begin to colour. Heavily-laden trees should be well mulched. If summer pruning is not yet completed an effort should be made to deal with the work, as the removal of the breastwood admits sun and light to the fruits and aids them to ripen more quickly. Young Apple trees should be somewhat severely thinned if they appear to be carrying heavy crops, and the same remark applies to young Plum trees—it is seldom necessary, in this district, to think about thinning Pears.

Kitchen garden

Early Celery, if such be required, can easily be blanched by careful earthing with dry soil or by wrapping the plants round with paper. It is a good plan (where time can be spared) to use paper even when the plants are earthed up at a later date. The paper keeps the earth out of the heart of the plants and prevents slugs disfiguring the plants. See that plenty of Endive and Lettuce is provided for autumn salads. Early-sown plants of Endive frequently bolt, but those transplanted now from a sowing made in the middle of June will be fairly safe. Allow sufficient space between each plant to permit of their being tied up to blanch when nearly full-grown. The earliest sowing of Cabbage seeds will, of course, have been made.

W. McGuffog.

Mabie Gardens, Kirkcudbrightshire.

Classification of Sweet Peas (1926)

THE Floral Committee of the National Sweet Pea Society presents the following as an up-to-date selection of varieties in alphabetical order. The Committee wishes to draw attention of members to the List of Too-much-alike Varieties before selections are made, because in some colour sections the varieties recommended may be so nearly alike that they cannot be exhibited together in the same competitive exhibit at the Society's exhibitions.

* The "asterisk" indicates the variety which the Floral Committee considers the best in each of the colour classes.
† A "dagger" indicates a variety of special value for cultivation under glass.

BICOLOR (Light).
*Bonfire
Dora (A.M., 1915)
Sparkler

BICOLOR (Dark).
Adelaide
*†Magic
Marks Tey

BLUE.
*Bluebird
Mrs. Tom Jones (A.M.)

BLUE (Light).
*Colne Valley (A.M.)
Margaret Fife (A.M., 1915)

BLUE (Dark).
*Commander Godsall
Jack Cornwell, V.C.

BLUSH (Pink).
Dainty Maid
Felicity
*†Valentine

BLUSH (Lilac).
*Elegance

CARMINE.
Mascotts Ingman
Renown

CERISE (Pale).
*Lucifer
Rosy Morn

CERISE (Deep).
Brilliant
*Charming
†Coralline

CERISE (Scarlet).
*†Grenadier
Royal Scot
Wonderful

CREAM.
Daffodil
*†Matchless

CREAM PINK (Pale).
*Fair Lady
Mary Pickford (A M., 1924)
Mrs. Arnold Hitchcock

CREAM PINK (Deep).
La France
Miss California (A.M., 1924)
*†Picture (A.M.)

CRIMSON.
*Charity (A.M.)
Crimson Glow
Marjorie Ryder

FANCY.
*†Angèle
Prince George
Skylight

FLUSHED.
Conquest
*†Faerie Queen
Mrs. J. T. Wakefield (A.M.)

IVORY.
*Ivory Picture (A.M., 1924)
Madame Sarah Grand

LAVENDER (Rosy).
Austin Frederick Improved
Diana
*†R. F. Felton (A.M., 1912, S.M., 1913)

LAVENDER (Pale).
Cynthia
Lord Lascelles (A.M., 1924)
*†Wembley (F.C.C., G.M., 1924)

LAVENDER (Lilac).
Gladys
*†Powerscourt (A.M., 1921)

LILAC.
Dorothy
*†Mascotts Helio

MARBLED AND WATERED.
*Birdbrook
May Campbell (A.M., 1911)

MAROON (Red).
Hawlmark Maroon
*Splendour

MAROON (Dark).
Ravenswing
The Sultan (A.M., 1921)
*Warrior

MAUVE.
King Mauve
*†Lady Evelyn
Shamrock

ORANGE.
Beacon
Royal Sovereign
*†Tangerine Imp.

ORANGE (Deep).
Guinea Gold (A.M., 1924)
Poppy
*†Wizard

ORANGE (Pink)
Bunty
*†Geo. Shawyer (A.M.)
King Alfred

ORANGE (Scarlet).
Glorioso (A.M., S.M., 1922)
*†Mammoth (A.M., 1924)
The President

PICOTEE EDGED (Cream Ground).
Cherub
*Jean Ireland (F.C.C., 1915)

PICOTEE EDGED (White Ground).
*Annie Ireland
Elsie Herbert (A.M., 1906)
Youth

PINK (Pale).
Daisybud (A.M.)
*†Supreme

PINK (Deep).
*†Hawlmark Salmon-Pink
Hebe

PURPLE.
Grandeur
Le Mahdi
*Purple Perfection

ROSE.
Empire
Rosabelle
*Sunset (Bolton's) (A.M., 1921)

ROSE (Old Rose).
Wild Rose

SALMON (Orange).
*†Fordhook Orange
Sunset (Stevenson's)

SCARLET.
*†Hawlmark Scarlet
Mascotts Scarlet

WHITE.
*†Edna May Imp.
Joan Ryder
Mascotts White

WHITE (Tinted)
Constance Hinton

TOO-MUCH-ALIKE VARIETIES

The following varieties have been grouped as too-much-alike. "Not more than one of the grouped varieties shall be shown on the same competitive stand at any exhibition of the National Sweet Pea Society unless otherwise stated." The names are placed in alphabetical order.

The General Committee of the N.S.P.S. has had the list of too-much-alike varieties drawn up by the Floral Committee for the guidance and convenience of exhibitors, but it must be clearly understood that the varieties grouped together are not necessarily synonymous, or of equal merit.

BLUE (Light).
Bluebird
Fordhook Blue
Mrs. T. Jones
Sapphire

BLUE (Dark).
Commander Godsall
Jack Cornwell, V.C.

BLUSH.
Dainty Maid
Felicity
Valentine

CARMINE.
Mascotts Ingman
Renown

CERISE (Pale).
Doris
Glory
Hawlmark Cerise
Hope
Lucifer
Rosy Morn

CERISE (Deep).
Brilliant
Charming
Coralline
Royal Salute

CERISE (Scarlet).
Alex. Malcolm
Grenadier
Pimpernel
Royal Scot
2 L.O.
Wonderful

CREAM.
Champagne
Daffodil
Majestic Cream
Matchless

CREAM-PINK (Pale).
Bridesmaid
Cecily
Fair Lady
Mrs. A. Hitchcock
Radiance
Ringdove
Sunshine

CREAM-PINK (Deep).
Edith Cavell
Hawlmark Gladys
La France
Picture

CRIMSON.
Charity
Crimson Glow
Crimson King
Field Marshal
Marjorie Ryder
Sunproof Crimson

FLUSHED (White Ground).
Advance
Conquest
Mrs. C. W. J. Unwin
Mrs. H. Richards

FLUSHED (Cream Ground).
Faerie Queen
Imp. Faerie Queen

IVORY.
Ivory Picture
Madame Sarah Grand

LAVENDER.
Austin Frederick Improved
Diana
Orchid
R. F. Felton

Gladys
Powerscourt

LAVENDER (Pale).
Cynthia
Hawlmark Lavender
Lavender (Unwin's)

Blue Butterfly
Wembley

MAROON (Dark).
King Manoel
Raven's Wing
Sultan
Tom Bolton
Warrior

MAROON (Red).
Hawlmark Maroon
Splendour

MAUVE (Dark).
King Mauve
Lady Eveline
Mauve Beauty
New Marquis
Pamela
Shamrock

ORANGE (Pink).
Bunty
Geo. Shawyer
King Alfred

ORANGE (Scarlet).
Gloriosa
Sensation
The President

ORANGE (Deep).
Poppy
Wizard

PICOTEE EDGED (White Ground).
Annie Ireland
Youth

PINK (Pale).
Daisybud
Edith

PINK (Deep).
Hebe
Hawlmark Pink
Hawlmark Salmon Pink
Hercules
Pink (Unwin's)
Pink Perfection

PURPLE.
Mascotts Purple
Purple Perfection
Royal Purple

SCARLET.
Hawlmark Scarlet
Mascotts Scarlet

ROSE.
Kenneth
Private Jack Smellie
Rosabelle
Sunset (Bolton's)
Verdun

WHITE.
Edna May Improved.
Joan Ryder
Mascotts White
Moneymaker
Nora Unwin
White Perfection

Streak in Sweet Peas

I shall be glad of your advice with reference to streak in Sweet Peas. I grow my Peas through the winter in cold frames and plant them out in April on the cordon system. My Peas grew well and flowered well until they were about 6 feet high, and then the whole lot is going with streak. I should be glad to know if this disease is infectious, also what you would suggest I should do to the ground to avoid it next year. The ground where these Peas are planted was well trenched and manured two years ago. Last autumn I sprinkled it with lime, and about three weeks before putting out the plants I dressed it with my mixture of superphosphate, sulphate of ammonia, sulphate of potash, and steamed bone-flour. This is all the manure it has had this year. What should I do to the ground this winter to avoid streak next year? If I have to change the plot it means that I have to give up the growing of Sweet Peas, as the plot where I grow them is the only ground available f purpose. G. W

—— I am enclosing specimens o Sweet Peas, which have been going o badly. I have three long rows, an keep getting worse every day. Do the different ground? My soil is on the side with a little chalk in it. I had trench taken out in the winter, left it few weeks, gave a little lime to it, a manure in it. I have only grown the year and this year in the same place. of them went off last year. C. O. E

—— Would you oblige by letting me what disease is in the Sweet Peas an is the best remedy? SWEET PEA FAN

[There is no doubt that streak in Peas has been aggravated this year by s dull, wet weather, and nothing you ca this date will avoid its spread. The is not infectious from plant to plant, ye from any one that is touched are to spread it under favourable con for streak is found to start from the The best thing you can do is to thor move the ground where the plants grow another season; leave it rough winter so that frosts may sweeten it. cultural methods appear to be sound plants sent had streak disease, which prevalent this season. A wet, sunless has undoubtedly aided it. The Sweet a susceptible plant, especially in matte affect its roots. No end of theories h put forward as to the cause and c streak, but as yet a practical remedy be found. It is possible that one namely, the source of the seeds, has n sufficiently exploited, and until ever has been saved from perfectly clean st trouble may be heard of more or less. ground each year pays, and, failin thorough sweetening in winter time b than once digging.]

Sweet Peas

It is when the length of stem, sc pensable nowadays, begins to fail plants of Sweet Peas, which were sen April from pots, that a sowing made latter end of the same month in th proves its value. Sown in a trenc culinary Peas, and thinned, the plas practically as high as those whic planted out, and if the blooms be not large they are, nevertheless, large enc cutting, produced in abundance, and h desired length of stem. Of recent ye stead of relying upon the seedsman ture, I have bought varieties of me mixed them myself, with most satis results. A SCOTTISH GARDE

Sweet Peas grown on the cordo system

Out of a hundred Sweet Pea plant am trying on the cordon system o dozen have succumbed, as per specim closed. The site for them was deep with plenty of manure worked in, alu first week in March. About the thi in April the trench got a dusting o ashes and superphosphate forked in, plants were planted out first week in foot apart. The Peas were sown unc second week in February. After th through the soil they were put in frame. There seems to be somethin soil that is burning the roots.

[The Sweet Pea plant sent has undo succumbed through badly-balance action. It is impossible to say the exa for there are so many circumstances separately or combined, would give t symptoms. We see nothing wrong method of soil preparation or cult

been over-feeding or over-watering, soil inclined to be badly drained? usual causes, and, of course, ad- ther conditions, cold, wet weather mmer, is another frequent cause. wn on the intensive cordon system likely to be affected than those urally.]

t of Sweet Peas

non with many of my friends, I absence of scent in the modern s, which are most beautiful in size, colour, but are not "sweet." rward to next year, I should be you can give me a list (in your to Queries") of sweet-smelling are also good in colour. I do not ch for size, as I do not want them urposes but for house and garden.

REV. A. W. CORNWALL.

h of scent in Sweet Peas varies ly. Our correspondent will be in confining his selection to the colour classes, all the varieties of strongly scented:—Rose, carmine, nson, blue, lavender, mauve, and a less extent the following colour also fairly heavily scented:— ge-cerise, orange, scarlet, picotee, flakes, cream-pink, and a few of]

Salpiglossis

s as are the varieties of hardy and annuals that produce their wonted f flowers during the summer and w, I think, will deny that the f this showy group from the rich- ir colouring alone should always place even among the choicest and , for they hold a prominent posi- the very finest of our half-hardy the present time. They not only freely, but a succession of bloom or a long time. A charming fea- garden, where there is sufficient s accommodate them, is to devote xed varieties of them; such a bed but bright, gay, and pleasing for s in succession, while for filling rs they always produce excellent their unique colours and great st at this season of the year rden is rendered attractive by he Salpiglossis, though, consider- rinsic beauty and worth, easiness and so forth, they are not grown s one might expect, a fact largely to their being too little known ity of amateur gardeners—a large ial body who would gladly avail of such good things did they but or their worth. But it may be sufficient publicity is given to through the medium of nursery- gues and by advertisements; on nd, there is little or no attraction for those who are unacquainted nt to which it refers. Still, there ay by which such things may be r, and this is by planting them public parks and gardens that be found in many of our pro- s.

al form of the flowers may be at of the Petunia, that is, funnel- campanulate, while in point of d almost every conceivable shade white through yellow, orange, son, these being beautifully inter- riped with deeply-coloured veins. us varieties in cultivation to-day ring of S. sinuata, a native of e are also many fine forms, as with large purple almost black flowers, with orange centre. S. picta is beautifully netted with yellow and purple. The finest strains of these flowers at the present time are known by the distinctive names of grandiflora and variabilis; these may be had in distinct shades as well as the most charming mixture. The plants in good soil usually attain 18 inches or 2 feet high, and are covered with short glandular or clammy hairs. Culturally they differ but little from the majority of half-hardy annuals, preferring a deep, light, sandy soil, fairly rich; while they may either be sown in the open ground early in the year and thinned out freely, or raised on a gentle hotbed and transplanted to their permanent quarters. Another capital way is to grow them singly in small pots, particularly when the plants are destined for a bed which in spring has been occupied with bulbs, placing the seedlings in cold frames till required for planting out.

A. G.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FRUIT

Grapes splitting

(J. Fleming).—The white Grape is, we think, Foster's Seedling. The black one is probably Madresfield Court Muscat. The cause of splitting in Grapes is ofttimes due to the borders being allowed to become too dry when the berries are taking what is termed the final swelling. A liberal watering such condition leads to a considerable acceleration of the sap flower, with the result that the berries become charged to repletion with juice and the skins split. The remedy in such cases is plainly obvious. With regard to Madresfield Court, this particular variety is very much given to splitting in some places, and requires to have the border kept in an equable state of moisture, the atmosphere of the house in a fairly dry and warm condition, and a chink of air left on at the top of the house the night through. The observance of these details, together with free day ventilation on all favourable occasions, and in allowing the laterals to grow unrestricted for a time to take up some of the too abundant sap, usually overcomes the trouble.

Planting fruit-trees

I propose to plant a strip of ground with Apples (bush) on Paradise Stock. The land has been out of cultivation for two years. The top spit appears to be good, dark loam. About 12 inches down is gravel, pure and simple. Would you, under these circumstances—planting, as I propose, surface-rooting trees—bastard trench?

M. P.

[You cannot do better than bastard trench the ground which has so long been out of cultivation before you plant your fruit trees. Although the subsoil is very gravelly, yet it probably contains some good material, which, if well broken up 9 inches deep with a fork, and left in the bottom of each trench, would furnish a sweet root-run, and assist the trees to find moisture in hot, dry weather. If the surface now is weedy, or has on it any coarse vegetation, pare that off and throw, face downwards, on to the broken-up bottom of each trench. Whether you will do well to add manure must depend on the condition of the soil, but, perhaps, the best course, after planting each tree rather shallow, and covering up the roots with from 3 inches to 4 inches of soil, will be to place a coat 2 inches thick round over the soil and roots, to wash in. That will help to keep root action near the surface, which is best.]

Overgrown Peach-trees

In my garden I have some Peach and Nectarine trees. They were planted six or seven years ago, and were then said to be four or five years old. The Peach trees have had a few fruit before this year, but not the Nectarines. The trees were not pruned at all. This year they bore very well, especially the Peaches. They were not pruned last July. Ought they to be pruned in January next?

O. P.

[The pruning having been omitted last winter, the trees will not only require pruning next January or February, but will have to be very carefully dealt with, as they are, doubtless, crowded with wood.]

Renovating Peach trees

(F. B.).—So long as the fruits on a Peach tree are green you may syringe with clear water as freely as you like, consistent with not over-watering the roots. But as the tree is in a house that is hardly likely to happen. Indeed, it is probable that the other trees you referred to as having been badly infested with aphis suffered from exceeding dryness at the roots. It is always wise to water the borders liberally, especially in the winter when Nature waters trees at rest so liberally outside. Too many people forget to water trees under glass then. If you will give your infested trees liberal syringings with soft-soap and Quassia chips well soaked in water, followed a day later with others of clear water, and give the roots manure in the winter and spring, they should thoroughly recover. Very likely plenty of water and feeding with manure are needed to put your trees into sound condition.

Cordon Pears

This autumn I wish to plant wall Pear trees. The wall faces south-west, but gets no sun till 3 p.m. daily. The wall is 9 feet high and 20 feet long, and the soil is good loam with light-coloured subsoil, rather sandy. I want to train them as single or double cordons. Shall I train them upright or sloping? What age trees shall I buy, and how shall I prune them as they go on from year to year?

P. C.

[The aspect is very well adapted to cordon Pears, and the soil fairly suitable. Trench the border along a distance of 3 feet from wall, and, as your soil is apt to get a bit sandy after the first spit, it would be advisable to entirely remove second spit, and substitute surface soil throughout to depth

required—*i.e.*, about 2 feet. In soils where trees grow kindly, and growth is made freely, a space of 2 feet between the trees is not too much, but as your space is limited you might try them at 18 inches, only in the latter case do not allow your spurs to be too thickly set, or back buds will not ripen properly. Plant trees in a slightly sloping position and train at an angle of 45 degs. You might either plant maidens—*i.e.*, those straight away from the bud—or one-year trained trees. The latter would be the better in your case, as observation would show how the foundation has been laid for the future covering of the wall. If you could manage to pay a visit to some good nursery, when your trees are purchased, you will see cordons in all stages of development. A little personal observation of this kind is worth many pages of paper advice. You will note that side growth has been pruned back to within one or two eyes of fruit-buds. If more than the one shoot comes away in spring remove them and allow the one to grow until, say, the beginning of July, when it can be headed back to four or five eyes, and finally cut back in early winter, as above noted. Do not summer-prune the leader, but lay in to wall carefully to prevent breaking down with wind, and shorten back in winter to a well-ripened bud. If your wall has no coping, nail a piece of board on same, to project about 6 inches, from which tiffany can be suspended in spring and autumn as a protection respectively against frost and birds. In the matter of varieties, the earliest Pears are so ephemeral in character that we should not recommend them. Doyenné d'Eté, Citron des Carmes, Jargonelle, Williams', and Beurré Giffard are no sooner in than over. Select only good-keeping varieties to extend over the season as required.]

Layering Strawberries

(B. R.).—Yes, pieces of turf, each 2 inches thick, and of such a size as to admit of their being conveniently put into 5-inch pots, if sunk in the ground just deep enough to allow them to be covered, and the runners finally pegged down firmly in the centre, will be found an expeditious mode of obtaining fine healthy plants for forcing. If the turf be dry it should be soaked in a tub of water before it is used.

Gooseberry cuttings

(R.).—The best time of the year to take Gooseberry cuttings is during October and November, as soon as the leaves have fallen off the bushes. Well-ripened shoots of medium strength and about a foot in length may be selected, and the eyes at the bottom of the shoot should all be removed, say, to half the length of it. They can then be planted in rows firmly in a border of rather sandy soil.

Transplanting old Gooseberry bushes

(N.).—Old Gooseberry bushes can be transplanted successfully, and the best time to do it is in the month of October; but, in a general sense it is much better to plant thrifty young trees of good kinds in the same month. The principal thing to attend to in the simple pruning required by the Gooseberry is to keep the main branches moderately thin, removing all cross shoots, and only topping the remaining ones slightly; the best fruits are always borne on those left nearly full length.

Quince tree not flowering

(S.).—Root-pruning is probably the best thing to be done to render the Quince fruitful. At the end of September dig a trench around it, about 2 feet or 3 feet deep and 5 feet or 6 feet distant from the stem of the tree, cutting off all roots that are found. When this is done, fill up the trench with fresh turfy soil. This will induce the formation of fibrous roots, and most probably the tree will afterwards bear good crops of fruit. All the pruning required by the Quince is to thin out some of the weakest of the shoots to prevent overcrowding and to admit light and air.

Hastening the ripening of Muscat Grapes

(B.).—The only way to hasten the ripening of Muscat Grapes is to maintain a high temperature in the vinery, and to give also free ventilation whenever possible. The bunches should also be exposed as much as possible to the light. Muscats so treated put on the fine amber tint which is the hall-mark of good culture. With regard to putting on a good bloom on the berries Nature will do that for you if the health of the Vines is first-rate and their culture has been equally so.

VEGETABLES

Tomatoes scalded

(Watson).—The yellow spots on your Tomatoes are due to what is known as scalding, which is caused when the fruits are in the morning damp with moisture, because the house has been shut up close, and the sun scalds them before they are dry. Scalding, too, may to a great extent be caused by cutting away the foliage, which one often sees. Rich food is often given in excess, and without foliage to absorb such food it is forced into the fruits, causing bad flavour, spot, and scalding. We do not denude other plants of their leaves in the same way that one often sees the Tomato treated, and it is impossible to prevent the fruits scalding when this severe cutting takes place. The smooth varieties scald much sooner than the corrugated kinds, the skin being probably more sensitive.

Failure with Peas

(Mrs. Beausus).—We fear your Pea crops have fallen a prey to destructive fungoid pest named Pea blight. We regret being unable to tell you either the cause or to name a remedy. To prevent a further spread of the disease we advise that the haulm of all affected rows of plants be pulled up and burnt forthwith. Give the ground where they have been grown a good dressing of lime next winter and avoid growing Peas on the same sites for the next season or two.

Tomatoes for examination

(C. F. T.).—The condition of the Tomato sent has every indication of it being the black spot fungus which has caused the trouble. Unfortunately, no remedy has as yet been discovered with which to combat this disease. The only thing is to pick and burn all fruits directly the disease is detected, and if the whole crop becomes infected clear out plants and soil and burn both. Then disinfect and thoroughly cleanse the house. Before starting another season use soil which has been sterilised either by fire or steam to make sure no living fungoid germs are present in it, and procure either plants or seed from a distance or a non-infected source. Seed is supposed to be the means of propagating the disease, hence the necessity for obtaining requirements from a reliable place.

Fungus on Celery

(G. E. R.).—Your Celery has been attacked by the Celery-leaf-spot fungus, which has during the past few years caused much loss to growers. The fungus causes the leaves to wither and rot away, after which the stems decay, and finally the whole of the plant disappears. As the spores of the fungus infect the soil for some time afterwards, Celery should not be grown on the same plot of ground for several years to come. [illegible] disease has but just broken out, [illegible] leaves not very badly infested with [illegible] is a possibility of arresting and [illegible] duing the attack if you spray the [illegible] leaves at once with Bordeaux mixture [illegible] the whole of the leaves are in the [illegible] dition as those of the sample sent [illegible] will be of no avail. After the Celery [illegible] dug give the soil a good dressing [illegible] lime, or disinfect it with one of the [illegible] gants which are so frequently [illegible] the pages of this journal. If next [illegible] see any signs of the fungus spray [illegible] Bordeaux mixture, which any [illegible] sundriesman will supply you with.

TREES AND SHRUBS

Wistaria failing

(H. B.).—We fear the soil is [illegible] and the drainage is also very [illegible] fault. We would advise you to [illegible] Wistaria. Take out a hole 3 feet [illegible] 3 feet square, filling this with good [illegible] and leaf-mould, after having [illegible] as yours is put in about [illegible] broken bricks to form drainage.

Trees and shrubs

(T. B.).—Privet, Hawthorn, [illegible] and other hedges may now be [illegible] the knife. Evergreen shrubs and [illegible] Conifers may be cut into shape [illegible] now if required. From [illegible] Magnolias, Azaleas, and other [illegible] the beauty of which is over, the [illegible] should be removed, and where [illegible] spared the seed-pods should be [illegible]

Making a Holly hedge

(M. G.).—Prepare the site during [illegible] trenching, and add some old [illegible] land is very poor. In April or [illegible] obtain plants which have been [illegible] transplanted, and which are from [illegible] 18 inches high and well furnished [illegible] branches, and plant so that the [illegible] branches pretty well meet, or are [illegible] 12 inches to 15 inches apart. The [illegible] require water till the roots have [illegible] established, and weeds must be [illegible] always. In selecting Hollies for [illegible] ing have them all as nearly as possible [illegible] same size and strength.

Olearia Haasti

(M. W.).—This is the name of the [illegible] specimens of which you send. It is [illegible] most parts of England, and we have [illegible] plants of it as far north as Aberdeen [illegible] more favoured localities it grows [illegible] size, and if planted in large groups [illegible] effect when covered with its masses [illegible] like flowers. Even when not in [illegible] very effective. In New Zealand it is [illegible] found at an altitude of 4,000 feet [illegible] low shrubby bush. It usually [illegible] August, and remains in perfection [illegible] weeks. It is not particular as [illegible] sandy loam answering as well as [illegible]

ROSES

Transplanting Roses

(R. W.).—The last week in Sept[illegible] not be too early to transplant [illegible] bushes. Lift them with all the [illegible] so as to preserve the roots, and [illegible] once. Do not prune at all until [illegible] week in April next, by which [illegible] bushes should have become [illegible] When you do the pruning be [illegible] on the roots with one foot, so that [illegible] be not disturbed by the [illegible] In your northern district it would [illegible] plan to place a top-dressing of [illegible] about the plants to help [illegible] respect to your soil, which seem[illegible]

and is tenacious, also containing on, we strongly advise you to open where the Roses are to be planted at with a trench 2 feet wide, throw out d top soil, then remove and wheel inches of the bottom or poor sub- place that with the top soil, throw to the trench the road grit, old efuse, and any other good top soil can get or spare. Mix it all well, will then have a depth of from 18 20 inches of good soil for the Roses. ould be done, if possible, before you elled to lift your Roses. If it can- o done, then when you remove the y them in by the roots in the new temporarily until the new bed is r them. You will probably find it ut the wood back rather hard in the

der on Roses

).—Your Roses have been attacked ider, due to dryness at the roots. good soaking of water and mulch ith rotten manure. Frequent ap- of water are necessary. You must me time syringe freely.

ooted Briers and budding them

w Maza).—We hardly understand y. Rooted Briers could be lifted in or any time up till March, then and budded the next August, after- nting them out. But it would be o lift a Brier now, bud it, then re- sides, we do not see the necessity crape away the soil until you get roots, insert the bud in the stem an vo above the latter, tie it in tightly, rn the soil. Such budded Briers ifted early in October and replanted nal position. Do not cut away any ntil next February, when all may d as far as the inserted bud.

FLOWER GARDEN

Asters

.—Yes, the Asters are attacked by as per reply issue July 24th, page or which there is no known remedy. v too late to apply the possible medy.

atment with Sweet Peas

d be very much obliged if your a expert could advise me how to the following difficulty and disap- in the successful growth of this 1) For the past two years I have bled with birds destroying the buds. ne almost as soon as the buds are Can you tell me if this is done a mischievous spirit, or are the hing for some insect in the buds? I overcome this difficulty best and is destruction of the buds? It is ng experience, as for the past two ve been unable to pick a bunch of et Peas, as even the stems which d to flower are all mis-shapen and the birds' depredations. (2) Buds off. What is the usual cause of t due to some blight, or is it caused wrong treatment of the growing sow my Sweet Peas in the autumn pot them up in February into ts, and plant them out, when the ermits me to do this, about the in April. The ground in which planted is good, sound loam, in a e kitchen garden which has been om the adjoining pasture field four It was well prepared, but not with manure. Since planting the e had two light dressings of arti- ure. I cannot understand the ny failure to grow them these last two years, as up to then I had grown them with success and had taken many prizes with them at the local shows; but now I cannot get a decent flower-stem. Those spared by the birds drop their buds and are useless for anything, as the stems have only a single flower left to open, and occasionally two; and these often drop off as one picks them.

G. T. W.

[With reference to birds destroying the buds, our experience is that they never do this in a mischievous spirit, but only when they are in search of green-fly. The remedy is to destroy the latter by spraying with Abol or another safe insecticide, using a fine mist nozzle, following the makers' directions carefully, syringing with the insecticide in the evening, and the next morning syringing with pure soft water to wash the plants clean. Should the birds still persist you should stretch strands of black cotton above the buds from twig to twig, which will frighten them, or an alternative method would be to hang up pieces of suet to attract them. With regard to bud dropping, the usual cause is too much moisture in the soil, combined with cool or cold weather. It may be aggravated through the Sweet Peas being planted in partial shade, over-watering or over-feeding, or what is a rather common cause, badly drained soil. One cannot help weather conditions, but it is possible, by throwing stones, garden refuse, etc., in the bottom of one's ground when trenching, to assist drainage and to forego watering and feeding. Bud dropping is not a complaint or a disease, and in the majority of cases is a phase which quickly passes. After carefully reading the methods adopted by our reader, we cannot find anything wrong with the cultivation.]

Sweet Peas turning yellow

(Mrs. T. S. P.).—The season of Sweet Peas is usually short, and your plants have probably run their course. To provide a comparatively long innings growers sow the seeds in autumn under glass and thus have strong plants for open ground in March and April. Such growers go beyond ordinary digging and manuring, they stir the earth in some instances a yard deep. This deep cultivation ensures ample roots, and plants so grown have been known to blossom from the end of May to the end of August without the necessity of watering in an average summer.

MISCELLANEOUS

Hollow places in lawn

(T. M.).—Lift the turf in the hollow places, break up the bottom, and add some good soil. Make this firm and then relay the turf, well soaking it if dry. The best top-dressing for your lawn will be a mixture of rotten manure, loamy soil, with some wood-ashes. Put this on in the autumn so as to allow the rains to wash it down among the roots of the grass.

Taking up a smallholding

Being desirous to obtain a smallholding, could you, please, give me any advice on the subject? To whom should I apply, and do County Councils advance a loan to ex-soldiers?

F. Cross.

[County Councils and the Councils of County Boroughs are the statutory authorities for the provision of small holdings in England and Wales. The holdings, which do not exceed 50 acres in area, are let at fair rents; in addition, the tenant has to pay the local rates and, on entering, the tenant-right valuation or sum due to the outgoing tenant. An applicant for a smallholding must possess sufficient capital and agricultural experience to work it with a reasonable prospect of success. You should write to the County Land Agent, Leicestershire County Council, 10, New Street, Leicester, to find out if the Council are prepared at the present time to entertain an application from you for a small holding of the size and type required. It should be explained, however, that most Councils have a waiting list of approved applicants, and that the number of holdings falling vacant on their existing estates is, as a general rule, very limited. Some time may, therefore, elapse before the Leicestershire County Council will be in a position to consider new applications. A new Small Holdings Scheme is, however, under consideration, and a Bill dealing with this subject is now before Parliament. An announcement will be made when the proposed new scheme is launched. There are no funds at the disposal of the Ministry of Agriculture from which assistance could be given to our correspondent for the purpose he has in view, and his question on the subject of a loan from the County Council should be addressed to the County Land Agent.]

Night soil

Will you kindly tell me a disinfectant suitable for deodorising an earth closet such as would not impair the value of the night soil for use on the land. I presume any of the carbolic powders or fluids would be poisonous to plant life.

N. L.

[We should consider that if you used plenty of fine dry garden soil for your earth closet it would answer your purpose. The night soil could then be added fresh to your garden. Chloride of lime might be used in and around the closet, but at the same time keeping the disinfectant out of the night soil. Dry soil is, of course, a very efficient deodoriser if enough of it is used. If you could compost the night soil for a year we do not think any of the disinfectants in common use would hurt, especially if the compost-heap was used in the autumn.]

Destruction of tree stumps

Can you, please, give me a recipe for killing large tree stumps? I have cut down seven very large Poplar trees, but the stumps grow. Arsenic difficult to get. Petrol and washing soda have been all recommended to me.

J. Brook Bray.

[A good recipe for the destruction of large tree stumps is as follows:—During the month of October a hole 2 inches in diameter and 18 inches deep should be bored in the centre of the stump. Into the hole place 2 ozs. of potassium nitrate and then fill up the hole with water. The hole should then be plugged up as tight as possible and left for the winter. In March or April the plug should be removed and a pint of paraffin oil placed into the hole made in the autumn. Light the paraffin and the stump should burn away very slowly right down to the roots. If you do not care to do this it would, perhaps, be best for you to consult an expert, who would remove the stumps with explosives.]

SHORT REPLIES

G. A. Hopkins.—We should say the roots of the Cedar tree have got into an old drain, or, if near a walk, they may have been touched with weed-killer.

A. Shagett.—See article in coming issue as to sowing annuals in autumn.

Lowther Bridger.—See reply to W. H. Pechey in our issue of July 3rd, p. 398.

M. B., Middlesbrough.—The Sweet Peas are attacked by the streak disease, which is very prevalent this year. See article, page 494.

W. C. Irvine.—The Sweet Peas are attacked by the streak disease. See article, page 494.

R. H.—The yellow spots on the Tomatoes are due to what is known as scalding. This is generally due to too moist an atmosphere,

and in your case doubtless to over-feeding. See reply to Watson, page 496. From your account we feel sure that rich food has been given to excess.

NAMES OF PLANTS

Scot.—1, Polygonum Brinonis; 2, Sidalcea Listeri; 3, Sidalcea Rosy Gem.

R. B. C., Fort Augustus.—Anthemis tinctoria Buxton's Variety.

Avonvale.—1, Ceanothus floribundus; 2, Ceanothus thyrsiflorus.

B. P.—1, Diplacus glutinosus; 2, Campanula isophylla alba; 3, Campanula fragilis; 4, Statice latifolia.

W. S.—1, The Wig plant (Rhus cotinus); 2, Galega officinalis; 3, Hieracium aurantiacum; 4, Tradescantia virginica.

B. B.—1, Spiræa canescens; 2, Trachelium cœruleum; 3, Streptosolen Jamesoni; 4, Cyrtomium falcatum.

W. D.—1, Lysimachia vulgaris; 2, Lychnis chalcedonica.

M. L. R. W.—The Holly a leaf of which you send is probably I. Hendersoni. The other two specimens you refer to it is impossible to name without seeing them. Your only way is to ask the Superintendent, who, no doubt, knows the plants you refer to and will be pleased to help you.

P. F. Cranleigh.—1, Rhus cotinus (the Smoke Tree); 2, Euphorbia cyparissias; 3, Cephalanthera pallens, White Helleborine, Native Orchid; 4, Rhamnus frangola, Alder Buckthorn, native shrub or small tree.

R. Clark.—1, Saponaria officinalis fl.-pl. Bouncing Pet; 2, Veratrum album; 3, Pyracantha species, send again with ripe fruit later; (4) Artemisia lactiflora.

G. H. W.—Lychnis coronaria syn. Agrostemma coronaria, native of Southern Europe.

Catmint.—1, Photinia variabilis; 2, Sparaxis (Dierama) pulcherrima (the Wand Flower); 3, Sidalcea oregana; 4, Poterium canadense.

G. C., Cheshire.—Allium macranthum.

Horticultural Societies' News

Reduced prices for the Southport Show for tickets purchased in advance

The following individual tickets may be purchased in advance not later than Monday, August 23rd, at the reduced rates indicated:—First day, 5s. ticket for 4s.; 2s. 6d. for 2s. Second day, 2s. 6d. ticket for 2s.; 1s. 6d. for 1s. 3d. Third day, 2s. ticket for 1s. 6d. There are still further reductions in the case of organised excursion parties of not less than 20 persons if the tickets are bought not later than August 23rd. Applications for tickets and for reserved seats on the grand stand should be made to the Borough Treasurer, Town Hall (Rates Office), Southport, where a plan of the grand stand may be seen. There will be excursion bookings in operation from numerous railway stations to Southport on each day of the show, and special trains on certain days from many stations.

Lewis's Flower Shows

Mr. Morter, late Superintendent of the Parks in Birmingham, writes:—"Lewis's, Ltd., held horticultural shows recently in Liverpool, Manchester, and Birmingham. I have visited all three exhibitions and I consider this firm are doing a tremendous lot for the amateur cottage gardener and allotment holder of the country. To my surprise I found these shows are filled with good exhibits, and generally much better than are to be seen at the usual country shows. The Liverpool Show was started in 1924, Manchester in 1925, and Birmingham has been included this year. The prize money for all shows, amounting to £1,500, and all the organisation connected therewith, has been found by Lewis's and Allied Newspapers, Ltd., and for the practical advice they have, Mr. Guttridge (General Superintendent of Parks, Liverpool), Mr. Pettigrew (General Superintendent of Parks, Manchester), and Mr. Morter (late General Superintendent of Parks, Birmingham). Every convenience is provided for the exhibitor, and all entries are free."

Northampton Municipal Horticultural Society

Northampton's Municipal Horticultural Show was held recently in Abington Park in delightful weather. The season has been a good one for vegetables and herbaceous plants, and this was reflected in the exhibits, which were as numerous as last year, though a little lower than in the record year of 1924. A pleasing feature was the increase in trade exhibits.

Choice Gladioli

Messrs. James Carter and Co. were awarded a gold medal and special Award of Merit for a magnificent collection of their choice Gladiolus at the recent Bakewell Farmers' Club Horticultural Show.

LATE NOTES

A Jubilee Rose Show

The National Rose Society are celebrating their Jubilee this year and have accepted Southport's invitation to hold a special Jubilee Show in conjunction with the great Southport Show on August 25th, 26th, and 27th. Leading growers of Roses from Scotland, Ireland, the North and South of England, and the Midlands will exhibit. The huge marquee used last year will be still further increased in size, and will occupy nearly 1½ acres of ground.

Grapes from the largest Vine in the world

Of special interest at the Southport Show will be an exhibit of Grapes from the large Vine which is growing at Kippen, Stirlingshire. This Vine occupies no less than four greenhouses and covers over 4,000 square feet of roof. The girth of the stem exceeds 40 inches, and the Vine is so vigorous and prolific this year that it promises to surpass its last year's record crop of 2,163 bunches. The Vine is the Gros Colmar variety, and is said to be the largest in the world.

LATE REPLIES

Brown rot of Apples

(E. J. M.).—The Apple you have sent in to us is affected with a fungus called Monilia fructigena, Pers., which causes brown rot of Apples. The soft patches of decay commence as very small spots, which gradually increase in size until the whole Apple is killed. Spores are produced on the soft portions of the fruit, which in turn infect healthy fruits. After the whole Apple becomes affected with the disease the fruit begins to shrink, and eventually becomes a "mummified fruit." Such fruits sometimes fall off the tree, but more often they remain hanging on the tree throughout the winter. During the following season these mummied fruits give rise to a fresh lot of spores, which causes infection to the new crop of Apples. On some varieties of Apples the disease not only attacks the fruit, but it extends through the stalk of the affected Apple into the spurs; cankers are sometimes produced in the branches. As far as is at present known all spur and branch infection takes place through primary infection of the Brown rot also causes a good deal of with Apples in the fruit-room. If s affected Apples are stored with health the disease is spread by contact. should always be used when storing to make sure that all the Apples are and if brown rot is known to be prese quent examination of the stored would prevent loss. We should advi to remove at once all fruits showi slightest sign of brown rot. Any port the Apples not affected might be us cooking purposes, but the portions utilised should be carefully burned. fected spurs should be cut out and Again, this work would be best done a because the dead and dying spurs can very readily at this time of the ye winter they are easily overlooked. W the leaves are off the trees go over t again and make sure that there mummied fruits left on. The control disease depends absolutely on the th ness of the removal of the affected fr spurs. Spraying seems to give ver control. If the removal of infected is persisted in you should be able to clean crops of Apples. There is, of no connection between American bli brown rot, except that the insects m to spread the spores about.

Sixteen climbing plants

(M. T. Butler).—*For facing north* gest Vitis striata (the evergreen Vi Ampelopsis sempervirens), Clematis grandiflora, Clematis Jackmanni, japonica var. cardinalis, Berberidopsi lina, and Forsythia spectabilis. *For east.* — Trachelospermum dinar Abutilon nitifolium, Wistaria multiju Pyracantha angustifolia, Rubus baml or Azara microphylla, and Clemat ginosa. *For facing south.*—Choisya Vitis Coignettiæ, Escallonia Lang Lardizabala luternata, Lonicera gigantea, Wistaria sinensis, or G Armandi.

Dwarf Lavender

(M. T. Butler).—The best dwarf L is that known as Lavendula nana co It grows a foot in height, 18 inches bloom, and has the darkest-coloured of them all. It is an ideal plant for pose you mention. If clipped back ately after blooming each year it w for several seasons.

Pampas Grass unsatisfactory

(G. A. Hopkins).—There are two open to you in dealing with this, which must be carried out during (1) Set fire to the plant on a dry day courage it to burn the centre clean the leaves will obviously be destroy any which have not been entirely bur may be cut away with shears to ensu job. Clean the centre out thorough your plant will rejuvenate itself. Juc the size you give it might be adv divide it up and transplant should quire more, as it can be moved quite that season. The resulting plu always much more handsome from plants. (2) In the same month cut hard back with shears and clean th out by hand. Lift and divide by dri digging forks down through the cent to back, and levering outwards.

CATALOGUES RECEIVED

Amos Perry, Enfield.—Hardy pl the water garden.

John Waterer, Sons, and Crisp, Berks.—Rhododendrons, Azaleas, etc and fruit trees; bulbs, etc.

ARDENING ILLUSTRATED

76—Vol. XLVIII. AUGUST 21, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

enryi ... 500
ns: Au-
ng 506
ding and 510
ngton, in 501
Hampton lens" ... 501
nting ... 506
ring, sow- 501
ssickii ... 506
a Rad- 500
"spot" in 511
CAMPANULA TYMONSII 504
Chrysanthemums: summer notes 504
CLEMATISES, PAST AND PRESENT ... 499
Cotoneaster thymifolia 500
Crocus, the winter ... 502
Dendrobium Dearei... 509
DENDROBIUM THYRSIFLORUM... 509
Dianthus hybridus Edni 502
Dogwood, a new... ... 503
Epilobium macropus 504
Epiphyllums 505
Ferns, seedling 505
Fleabanes (Inula) ... 506
Fringe Tree (Chionanthus virginica), the 500
Garden, a municipal educational 511
Garden, scented leaves in the—I. 502
Gladioli, awards for 511
Grapes, mildew on ... 510
Helichrysum bracteatum 500
Iris seed 511
Iris Wilsoni... 500
Lapageria failing ... 511
Lilies and manure ... 502
Lily, the blue African (Agapanthus umbellatus) 505
Linum flavum 504
Lonicera Hildebrandiana 501
Magnolia hypoleuca 503
Nierembergia rivularis (White Cup) ... 504
Peach trees after fruiting... 510
Pea, the Mummy, and seed germination ... 500
Pelargoniums, propagating bedding ... 505
Phygelius capensis coccinea 501
PLANTS OF SPECIAL INTEREST 507
Potatoes, immune varieties of 506
Potatoes, seed, certification of 506
Raoulia australis ... 500
R.H.S. Amateur Vegetable Show, the forthcoming 506
Rose Caroline Testout 500
Roses at Coldoch, Blair Drummond 501
Roses, some old 500
Sedum spathulifolium purpureum 500
Senecio greyi 501
Stocks, winter and spring flowering ... 506
Strawberries, forcing 510
Styrax Hemsleyanum 503
Summer on the Riviera 502
Sweet Peas, the scent of 501
Trachelium cœruleum 500
Trees, wall, watering 510
Vegetable garden, vacant ground in ... 506
Vincas, growing... ... 511
YUCCA GLORIOSA 503

Clematises Past and Present

Can it be said that the hardy Clematis has been improved in recent years? The frequent presence of the old Clematis Jackmanni in large and small gardens proves its popularity and suitability for our climate

not raisers of these fine hardy s in a general way working in a direction? The great aim now e to produce large-flowered kinds, ne some of these are, but as they e much of the lanuginosa type in are too tender to become favoured ion. They require too much cul- of any great service as outdoor and many of ot flower well umstances in h a typical ntinuous- orm as Jack- es eminently . C. Jack- a perfect what an out- atis should f its colour other variety, not see how r can be surpass, or tter of that There are varieties of anni, viz., ite counter- erba (dark), and the esser known eautiful red the same s floriferous . This new s not an en- departure in the con- ave in Viti- grandiflora ly shade in one would the hybrid- would soon become intensified. how rarely one sees this showy stinct Clematis; it is one of the at can be planted for outdoor o hardy and free-flowering is it. ely think that its good qualities ken into account by those who d the Clematis probably on ac- comparatively small size of the really what has size of bloom ffectiveness? Very little, as we y see in the flower garden. Can much more brilliant than a bed and yet, as compared with many things, the individual blooms are small indeed. It is just the same with the Clematis we want in the open air. We want masses of effective colour, and this is just as well furnished by flowers 4 inches across as by those double that size. Indoors it is rather different; there we are more apt to look to size and beauty of form in individual flowers, and even the tenderest of kinds will thrive well with but little trouble under glass. The proper way would be to make

The old favourite Clematis Jackmanni is a perfect model of what an outdoor Clematis should be

Two distinct classes, the one really hardy, vigorous, continuous, free-flowering, and thoroughly trustworthy for outdoor culture; the other suitable only for indoors. Then purchasers would know what to select, which they do not at present, unless they have some knowledge of the kinds, for very hardy and tender varieties are all catalogued together, though this is not always the case, the types being well defined in Messrs. Jackman's catalogue. Considering what a fine break was obtained in Jackmanni, and how long that fine kind has been in cultivation, it is really a matter for surprise that so very few thoroughly reliable varieties should have been obtained. As a fact, out of the large number of varieties in cultivation, the outdoor popular ones may be said to be represented by less than a dozen kinds:—Jackmanni, Nellie Moser (light mauve), Lady Bovill, Lady Northcliffe (deep lavender), rubella, rubro-cœrulea, and violacea about comprise the list. The last two are hardly wanted if you have the first three, and this is the trio of Clematises which, as near as can be, represents the worth of this flower for open-air culture, and of these, one, Lady Bovill, is confessedly somewhat tender. It wants growing—which the others do not, for they will hold their own amongst a rather rampant vegetation, and in ordinarily favourable circumstances they will increase in beauty from year to year. This is the ideal Clematis, and until other colours are worked up to this standard comparatively little has been done to render the Clematis a popular garden flower. It may be said that many of these

Fine kinds of Clematises may be seen doing well in not a few places in the open. We are aware of that, but they can only do well out-of-doors under exceptionally favourable circumstances either as regards climate or skilful attention. Can anyone say that such kinds as lanuginosa candida, Lady Londesborough, Lady Caroline Neville, Otto Froebel, etc., are often seen in good condition in villa gardens? And it is only the frequent presence of any plant in good health in small gardens which really proves its popularity and suitability for our climate. By the way, mildew is very prevalent now. Is there any means of stopping it?

C. T. K.

NOTES OF THE WEEK

Cotoneaster thymifolia

SEVERAL of the Cotoneasters are extremely suitable for the rock garden, but C. thymifolia, which has been grown for many years, appears to have suffered from the desire for novelty, and to have largely given way to C. adpressa, C. congesta, C. horizontalis, and others. Yet it does not deserve neglect, especially from those who have rock gardens and who wish to have a few dwarf shrubs which will not become too large for the place. My first acquaintance with C. thymifolia was made close on 40 years ago in the rock garden of a friend who had an exceptionally good collection of alpines for that time. He grew C. thymifolia near the top of a rock garden mainly planned with flat terraces, and on one of these he had planted the Cotoneaster, so that it might hang over the stones. From its situation it was necessary to keep it small, so every autumn it was cut back to the desired size, treatment which it never appeared to resent. It may be called a miniature C. microphylla, with smaller, tiny leaves all quite glossy. S. ARNOTT.

Actinidia Henryi

This rare and very attractive climber has this year flowered for the first time. The fleshy leaves, each 5 inches long, are pretty in themselves, and the flowers, which are produced in the axils of the leaves, are ¾ inch across and of a lovely clear salmon-pink, and therefore quite unique in this choice genus, stamens yellow. There is a tender look about this climber, but as it passed safely through the late winter unprotected I have little doubt of its being hardy when trained to a wall. It is a native of the mountain forests of Yunnan, where it was discovered by Henry at an altitude of 5,000 feet. W. J. Bean, in his "Trees and Shrubs Hardy in the British Isles," speaks of the flowers as being white, but in the plant above referred to the colour is as stated. E. M.

Helichrysum bracteatum

This is now flowering here on a raised and well-drained border devoted to alpine plants. Unlike many of its genus this forms compact tufts of leaves, and the flowers, each 2 inches across and like a large, lemon-yellow Daisy, are borne singly on wiry stems each 9 inches high. E. M.

Sussex.

Campanula Raddeana

With slender and almost hair-like stems, rising 9 inches above the dense tufts of leaves and each carrying from six to a dozen violet-purple flowers, this is noteworthy at the present time. Even in this large family it is distinct and charming for the rock garden. E. M.

Sedum spathulifolium purpureum

This is a pretty Sedum with tiny clusters of yellow flowers abundant on dwarf tufts of leaves in summer. In winter the foliage takes on a delightful hue. It grows freely on mossy rocks and develops a nice colour when the plant is fully exposed to the sunshine. It is delightful when planted on old walls. H. STEVENS.

The Fringe Tree (Chionanthus virginica)

This is a very ornamental shrub during June and July, when carrying its panicles of pure white, fragrant flowers. These panicles are each from 6 inches to 8 inches long, and, unlike those of the Chinese Fringe Tree (C. retusa), are borne from the upper joints of the previous season's wood. Such a fine hardy shrub deserves to be more generally grown, for if it does not bloom so profusely as in its own country it is, nevertheless, a very distinct and worthy shrub. A good, moist, loamy soil and a sunny position it enjoys, and those who treat it thus may look forward to an annual display of bloom. E. M.

Iris Wilsoni

If not a showy species, this is a very pretty and graceful one, and an Iris one becomes fonder of each year. It blooms in June. The falls are beautifully dotted and lined with reddish-brown upon a yellow g The flowers are borne on 2 feet stems pale green tufts of slender leaves r the more refined kinds of Iris sibiri the growth of the plant is very similar me it grows very freely in a cool bo ordinary soil, where it receives the mi of attention and appears to require about every five years. It is both pre distinct as a cut flower, making graceful arrangement for light rooms. E. MAR

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Some old Roses

I AM interested in Dr. F. A. Hampton's article about "Some old Roses," because I am longing to get hold of some I used to know years ago, and cannot find in any catalogue I have. As a child in Northumberland I remember large bushes of what we called "York and Lancaster" Roses (white and bright crimson striped), and a little later I had Céline Forestier (pale yellow with a deep yellow centre and most deliciously scented). I am also longing for another M. Isaac Periere—not much scent as I remember, but masses of great big rich deep rose-coloured blooms which went on till the end of autumn. I get rather tired of the new Roses, lovely as they are, but all of the salmony colour and rather yearn for the old real rose-coloured Roses. There was John Hopper, too. Such a free bloomer, and good deep pink colour. There were beds of it in Yorkshire 40 years ago—near a manufacturing town—where no others thrived. I wonder if any of your readers who may still have either of these would be so kind as to send me a cutting or two? I should be really grateful—and especially for M. Isaac Periere and Céline Forestier. La France de '89, which has been mentioned lately, I had a cutting of 30 years ago, and still have the remains of the bush; but it has had several moves, and suffered badly this spring from a sudden gale which ripped off several fine new shoots I had been encouraging to make a fresh cutting from. If anyone would give me one of that, too, it would be a great boon.

M. A. PILKINGTON.

The Homestead, Pencraig, Ross-on-Wye.

[There must, I think, be many people who are a little tired of the shades of apricot, shrimp, prawn-pink, mousse de jambon, etc., which are so popular in modern Roses, but the old Rose colours are not being neglected by the raisers, and many fine Roses in crimson, white, and pure pink have been introduced within the last few years. There seems, indeed, to be a reaction in this country in favour of the simpler, purer colours. I hope that Mr. Pilkington will find the old Roses for which he is seeking, but I do not remember to have seen them in any catalogue. Céline Forestier (Noisette, Trouillard, 1852), John Hopper (H.P., Ward, 1862), and La France de 1889 (climbing H.T. Mor. Rob., 1889) appear, with the notes given, in "Les Roses Cultivées à l'Haye," compiled by M. Jules Gravereaux in 1902.—F. A. HAMPTON.]

Raoulia australis

I visited a garden the other day where this plant—which some growers find difficult to establish—was growing in great sheets over sandstone rocks and slabs without a particle of soil, so far as I could see, the great flat masses apparently finding all the sustenance necessary for their welfare from the air and face of the sandstone, which jutted o the soil in all directions and in m stances of immense proportions. natural rock garden, and the owne wisely planted it with subjects whi evidently found a most congenial hon

Rose Caroline Testout

I am exceedingly obliged to Mr. B to Mr. Wright for further additiona ledge concerning this fine old Rose France. Old favourites are, alas, too discarded in favour of novelties, and that Mr. Blair's bed of "Caroline prosper for many years to come. Rose indeed. I assumed (wrongl would appear) that Mrs. W. J. Gran American origin. My assumption w on the fact that, in 1907, I shared division of a large batch of plants variety which had been importe America. It is a fact that, to m ledge, most of these imported sp died, but better results were obtain grafting was done on strong Briar Concerning La France de '89, the was always, in my opinion, handica its name. It was, of course, in no nected with La France, and misle planters at the time. It was, ho magnificent Rose and did well on roots. On Manetti it was unrelia one occasion I budded it on De la and had, I think, the best specime variety which I have seen. I have of it for a number of years.

A SCOTTISH GAR

Trachelium cœruleum

It is interesting to learn that Throatwort is included among th plants at Wisley. I can imagi grown in the open and under fa climatic conditions, its light panicle highly effective. In our latitude, it is customary to grow T. cœrule greenhouse plant, and for this purp exceedingly useful in autumn. See in March give fine plants in 5-inch a pots round about the present time, aid in making the conservatory gay earlier Chrysanthemums come i reading Mr. Findlay's note I feel ir give the Throatwort a trial out-of the course of another season. I w for the guidance of Galloway gard would tell us whether he tried it in at Logan or at Lochinch—both, ac favoured above most of the garde Province in respect of climate? W

Mabie.

The Mummy Pea and seed geri

Some while ago "W. McG." w enough to furnish certain particula gard to the vitality of certain seeds, I was most grateful. At the same inquired if, perchance, someone else

ticulars about our old friend the y" Pea, taken direct from the hand khamen! The idea of seeds retain- powers of germination for thousands is ridiculous.

ummy Pea is Pisum elatius, or Glory s culture is simple. This Pea is n some parts of the country, but I so far been able to ascertain from leading seedsmen included) where to be obtained. I merely reiterate dity of supposing that seeds obtained Egyptian mummy, thousands of , could possibly be expected to re- powers of germination over so long The idea is a purely legendary ot only legendary; the idea has been y unscrupulous merchants who had sell of the so-called Mummy Pea.—

l here express my thanks to other rs to these columns for the infor- pplied by them in regard to Melon the vitality of various flower seeds, ch has been carefully noted.

CAPTAIN E. A. SAUNDERS.

owing Spring Cabbage

ntences under "Reminders for the n the issue for August 7th, have set ing. Mr. Wright says of sowing bbage seed, "During the next 10 n important time to ensure a crop y Cabbage for next spring." Mr. 's sentence is, "Do not omit the Cabbage seeds at the proper time." s of these two writers are so far it seems to me that one is either eds too early or the other too late. e, on the above date, seedlings are l as to be in their first natural leaf. e sown on July 14th, which is the re always sown seeds for this dis- rkshire.

not writing this in a spirit of but merely for information. I e a more detailed opinion from rs as to how the plants do, seeing re sown nearly a month later than ne 15 years ago I used to sow early but was so dissatisfied with the of the plants during winter and I altered the date and found it to tisfactory in every way. At some I should like to give in detail my r changing from August to July

P. CLAPHAM.

near Huddersfield.

gelius capensis coccinea

lways been surprising to me that igwort has not become more popu- arden plant, but since the intro- the improved form, coccinea, ived the R.H.S. Award of Merit meeting, the plant should cer- a prominent place in gardens.

s capensis may be grown either ceous plant in the border, where p 3 feet to 4 feet flower-spikes each d then dies right down like any aceous plant in the winter, or it own as a wall climber. The first th should be tied in to the wall, comes hard and woody with the eat the wall gives, and remains y through the winter. Next spring shoots start again and go higher nt growing on the south wall of use is now 12 feet to 14 feet high, hrough over 30 degs. of frost last e unharmed. The flower panicles ly handsome, being 18 inches to carrying countless tubular flowers Pentstemon blossoms. In the old these flowers are brick-red, and le, but in the coccinea form they are a splendid vermilion-scarlet and golden-yellow inside. The plant is a vigorous grower and absolutely hardy. In some soils it is inclined to run and sucker underground, but I have found no difficulty in pulling these out when they appear in inconvenient places.

Some of the finest plants I have ever seen are on the outskirts of the rock garden in the Public Gardens at Shrewsbury. Last year some of the growths must have been 5 feet or 6 feet high, and they made a very effective show in August. CLARENCE ELLIOTT.

Stevenage.

Roses at Coldoch, Blair Drummond

Roses have been exceptionally fine in the garden of Mr. W. M'Nair Snadden at Coldoch, Blair Drummond, a hurried run through the garden revealing many beautiful blooms at the end of July. Most of the best H.T. Roses were to be seen, and climbers adorned many places where they would show to advantage. The garden at Coldoch has a soil of exceptional quality, and the liberal addition of manure has made it almost ideal for Roses and also for hardy plants, of which there is a good collection.

VISITOR.

Lonicera Hildebrandiana

The specific name of the plant to which you refer in last week's issue is as above and not Hildebrandti. It is a mistake to say that "unfortunately this grand Honeysuckle is not hardy in this country," as it is quite hardy, at any rate in South Devon and Cornwall, and is found in many gardens. It would probably succeed in any sheltered garden in the south of England if protected until hard wood is formed. Here the plant grows rampantly up to the roof and throws out shoots of 8 feet or more long every summer. I have just measured a flowering shoot, which is 5 feet long, and the individual flowers, borne in pairs on opposite sides of the shoots in the axils of the leaves, are 6 inches long. The foliage is leathery in texture and of a dark shining green and evergreen, the leaves are oval-lanceolate and about 6 inches long and 3½ inches broad. Last winter we had 4 degs. of frost here on one night, which did no harm, and in the Shan States, in Upper Burma, where there is frost in winter, one often sees it in the jungle growing up trees 40 feet or more high.

Salcombe, S. Devon. C. M.

Wellington Apple in August

Mr. Thackeray Turner has kept his promise and proved his challenge to me on the keeping and other qualities of the Apple Wellington by the letter and footnote by the Editor that appear in the issue of GARDENING ILLUSTRATED dated the 14th inst. Unfortunately, I am not in a position to send two Sturmer Pippins to the Editor to compare with the Wellingtons sent by Mr. Turner, and I do not hesitate to congratulate him on his success with this Apple. He must have gathered and stored them under ideal conditions to have attained such qualities for so long a period. The Editor mentions Annie Elizabeth as being a rival to Wellington at this date. I must confess that I have had no experience with either of these Apples after the latter part of May. There is, in my experience, a far greater demand for Irish Peach or Beauty of Bath gathered direct from the tree than there is for those that have been stored for so great a length of time. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff, S. Wales.

The scent of Sweet Peas

Under the above heading in GARDENING ILLUSTRATED dated August 14th appears a question from the Rev. A. W. Cornwall, asking for a list of scented varieties. Like many other amateurs who love and grow flowers for their fragrance, the Rev. A. W. Cornwall has found that the modern Sweet Pea is deficient of scent and cannot be compared with the old grandiflora type, which was noted for its fragrance. Take Dorothy Eckford, for instance, the old-fashioned white, but still retained by many. To my idea there is no Sweet Pea with such distinct perfume as this old favourite. Others of the same sweet fragrance that can still be obtained are:—Lady Grisel Hamilton (lavender), Lord Nelson (deep navy blue), Black Knight (maroon), Mrs. W. Wright (mauve), America (scarlet on cream ground), Queen Alexandra (scarlet), Janet Scott (salmon-pink on cream ground), Hon. Mrs. Kenyon (cream), Apple Blossom (rosy standards on blush wings), Miss Willmott (salmon-pink), Countess of Radnor (blue), and Helen Pierce (marbled blue on white ground). My advice to Rev. A. W. Cornwall and others who require flowers for decoration and fragrance alone is to grow these old varieties and grow them well. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Senecio Greyi

The note on the above plant by H. Stevens interested me very much, and I can vouch for all he has to say on this beautiful grey-foliaged shrub with its panicles of conspicuous flowers. This shrub seems to be at home either in shade or sunshine. We have an excellent specimen in these gardens growing well between two Scot's Pine trees in very shallow soil overlying limestone, and by all appearances it has been one mass of bloom. The position in which it is growing is bleak and wind-swept, which gives it an appearance of being a thoroughly hardy shrub to plant where many others fail. An excellent companion to it is Olearia Haastii, of which we have many specimens ranging from 2 feet to 6 feet in height and growing freely in various positions, and at the present a mass of pure white Daisy-like flowers practically smothering the beautiful dark box-like foliage. Both these shrubs are worthy of inclusion in any shrubbery, and can be recommended for town gardens that are partly shaded. W. E. WRIGHT.

Tregarth Gardens, Creigiau.

BOOKS

"Hampton Court Gardens"*

This edition is an enlargement of the other books on Hampton Court Gardens by the same author. It is illustrated with 55 views, plates, and plans, which include reproductions from old prints and drawings, as well as photographs of the gardens in the present day. The book is a historical survey, descriptive and horticulfural, including the layout, the full schemes of all the bedding in the herbaceous and mixed borders, and the flower-beds, and showing the position of every notable plant and shrub in the gardens. In the list of plants English names are given first in preference to the botanical names. The designs and descriptions of the various gardens are very interesting, including a few facts and figures about them. A close study of this work reveals the fact that William III. and Queen Mary were great gardeners, and although Hampton Court Gardens have at different periods undergone many changes, they always retain their distinctive charm which is peculiar to them.

*"Hampton Court Gardens: Old and New." By Ernest Law, C.B., C.V.O. (London: G. Bell & Son, Ltd.; price, 3s. 6d. net.)

Scented Leaves in the Garden—I.

By F. A. HAMPTON

NEARLY every garden has a plant or two of Rosemary, Lavender, Sweet Briar, Thyme, and Bay, with which most people will be well content, for it would be hard to find any more fragrant. But some gardeners appreciate variety in scent as well as colour, and for them there is a fair range of plants from which to choose, though their good qualities do not, as a rule, receive much public notice and are liable to be overlooked.

Among the plants which are "fast of their scent" are several commendable Thymes, of which, perhaps, the sweetest is a variety of Thymus vulgaris found by Messrs. Thompson and Morgan in an old cottage garden and published by them under the name var. fragrantissimus. This is a trailer with grey leaves and a soft, lemony scent that contains a suggestion of Rose-Geranium. It is quite distinct from Th. odoratissimus from South Russia, which is a large form of the wild Thyme, of which it has the characteristic scent. Th. Herba Barona (it would be interesting to know why Loiseleur gave it this curious name) smells like Carraway seeds, but more spicily; Th. azoricus has a distinct scent of Tangerine Oranges mixed with Thyme, and may be the "Orange Thyme" of old still-room recipes; Th. micans has a fruity scent that vaguely recalls Pineapple. These last two Thymes sometimes change names in catalogues, but the plant grown in the herbaceous beds at Kew as Th. azoricus is the close, rather turfy carpeter with the Tangerine scent, and Th. Serpyllum var. micans, the little flat-topped bush with light yellow leaf-buds that make the plant seem to sparkle in the sunshine. The name "azoricus" appears to rest only upon a vague figure with no botanical description in Loddige's illustrated catalogue, and the plant does not seem to be mentioned in any of the Flora of the Azores, while it is remarkably hardy for a plant from that part of the world.

The Mints give us Mentha aquatica var. citrata, which is better called the Bergamot Mint, for its scent is very like Monarda and the Bergamot Orange, though more pungent and refreshing, the softly hairy Apple Mint (Mentha rotundifolia), which smells of Mint and Apples, and is usually grown in its variegated form, and the Black Peppermint, whose scent is much more aromatic in the leaf than in the extracted oil, and will recall to some of us the warm fragrance that used to fill the air on September evenings where the plant was spread out to wilt before being carted to the still in the village not far from London, where Peppermint was cultivated on a large scale till a few years before the war. Mentha gentilis and Mentha gracilis cardiaca are said to be pleasantly scented, but do not seem procurable. Mentha Requieni is a neat little carpeter, but to the writer it smells more of rubber solution than of crême de Menthe, with which it is usually compared.

Still among the Labiates we find two curiosities in Micromeria corsica and M. Chamissonis (syn. Douglasii). The smell of the first has been likened to Lemon juice and oysters, that of the second to Old Brown Windsor soap—two very exact descriptions that we owe to Mr. Clarence Elliott. The Corsican is well known to rock gardeners, and would be more often seen—for it is an elegant little grey-leaved bush—were it not so passionately appreciated by cats, which claw the plant to pieces and roll voluptuously on the debris. The oyster smell without the Lemon scent occurs also in Phlomis umbrosa and, I believe, in our native Mertensia maritima; in Micromeria corsica it is combined with a curiously powerful pungency which, after a short latent period, usually provokes an attack of sneezing. The scent of Micromeria Chamissonis is very like an inferior brand of Windsor soap, and might be analysed into Menthol, Aniseed, and oil of Wintergreen. It is very different from M. corsica in appearance as well as smell, for it is a trailer whose broad, dark green leaves suggest its preference for damp and shady places. It comes from British Columbia and Vancouver.

A pleasanter and more ordinary scent belongs to the Sweet Flag, which smells like a Cox's Orange Pippin. It was once cultivated as a "strewing plant" for stone floors, and in some places, notably on the banks of the Thames near Pangbourne, it has escaped and become naturalised. There is a pretty garden form known as Acorus japonicus fol. var. in which the leaves have a narrow margin of ivory-white.

The Lemon-scented Verbena is too well known to need description, but it is perhaps worth mentioning that it came through last winter here, in Buckinghamshire, with the protection of a few handfuls of Bracken, and might therefore be more often grown in the open, for its leaves have far more scent than the old "Balm," and one or two give to a jug of lemonade or a lemon ice the sharp fragrance of fresh Limes. The Verbena-scented Edelweiss (Leontopodium aloysiodorum), which Farrer introduced from Thibet, has a very pleasant, brisk scent, which is rather more like ripe Lemons than Verbena, and it should be a valuable rock garden plant if it is at all easily satisfied.

The Winter Crocus

Crocus hyemalis is a real winter-flowering Crocus. It produces its flowers from November until January, and it almost goes without saying that it must have some protection if we are to enjoy its pretty flowers. These are small, and are white, washed with yellow at the throat and veined with purple at the base of the exterior. There is also a lovely variety called Foxii, which has black anthers and has its outer segments flushed and veined with purple. The flowers are of very thin texture, and stand rain badly, so that in the open air, should the season not be very dry, they are soon reduced to pulp. The want of sun in our climate is a great bar to the enjoyment of this Crocus, which only opens when the rays fall upon it, and to preserve it as long as possible and to obtain the full enjoyment possible the Crocus should be covered with a bell-glass or handlight, or, better still, grown in the alpine-house or a cool greenhouse, where its beauty may be preserved. C. hyemalis, which comes from Syria and Palestine, should be planted as early as possible in light soil and in a sunny, sheltered situation, at a depth of about 2 inches.

CROCUS CANCELLATUS.—I do not consider the charming autumnal Crocus, C. cancellatus, so satisfactory in a wet district as in a dry one. I have lost it several times, due, I believe, to excessive winter rains, even in a dry soil. Still, it is such a decidedly ornamental species that it should be secured for the rock garden or front of the border by those who have never grown it. It is not very expensive, and a small group of half-a-dozen corms will make a good beginning. The flowers vary from white to pale purple, sometimes feathered with purple. They are about 4 inches long and appear from September to November, and are highly pleasing when in a sunny place, where they may catch all the sun's rays possible. A light, well-drained soil is indispensable. Of the varieties, s which are sold separately by some there are cilicicus, lilac, veined mazziaricus, white, throat yellow; li striped lilac. Corms should be plante 2 inches to 3 inches deep as soon as ob from the dealers. S. Ar

Summer on the Riviera

By MAURICE MAETERLINCK.

One might think that the true actor admirable fairy scene had waited for parture of some unruly and unapp spectators before appearing on the st their fleeting audience they only playe of prologue, slow-moving and pall somewhat diffident and shy. But length the earth teems with joy and t lyrical manifestations break forth.

The sky unfolds its prospects to the limits of the azure, and all the flowe the gardens, the rocks and the plains, eagerness to reach the high heaven that seems to draw them from afar. six whole weeks the Anthemis proffer invisible brides great round posies t like shields of blushing snow. The cloak of the Bougainvilleas floats houses whose dazzled casements bli the flames. Yellow Roses clothe t with saffron-tinted veils; pink Rose date the valleys with the fair and hue of maiden modesty, as if the fountains of the dawn, wherein is fa the glorified flesh of virgins and of had been poured forth on the earth. flowers climb the trees, twine ro columns, creep over the facades porticoes, lift high their heads, an only to rise again. The clusters thr another in Bacchanalian frenzy; each of petals is fraught with silent passi

And how various and unmistakable manifold perfumes that flow throu ocean of joy like streams that mi their waters! So distinct are they every breath we can name the source, whether it be the cold green of the Geranium Rose, or the Clove-f ripple of the Carnation, or the c guileless course of the Lavender, resinous ebullition of the Pineda, or it be the Orange-blossom's broad a quil stream that floods the land with penetrating essence, beneath a blue is itself a vast expanse of perfume.

Dianthus hybridus Ed

I have grown this for about two y appreciate it very highly. I have n of its parentage, but it appears to m take of the "blood" of Dianthus d the Maiden Pink, but it is more t habit and has exceedingly brilliant flowers of moderate size above dar foliage. It forms an ideal rock plan habit of growth is so neat and compa its stature is not more than 6 in makes plenty of foliage and may be i by means of cuttings. I am grow glowing crimson Pink in moderate soil and in a sunny place. It does pear to exhaust itself by flowering habit of some hybrid Pinks. S. A

Lilies and manure

The dangers from the use of m growing Lilies have been demonst several gardens this season, particul the Regal Lily and the Golden Raye Japan (Lilium auratum). In most where disease has been reported it very obvious that over-doses of man responsible. All Lilies are impa manure, and this fact should be kept by amateurs who purpose plant Madonna Lily.—*Horticulture.*

a gloriosa now flowering in a West Surrey garden

Yucca gloriosa, Phormium tenax in the foreground

YUCCA GLORIOSA

HIS splendid plant well deserves its specific name of "glorious," for there is nothing in our gardens to compare with it for importance and nobility of aspect. Nothing be finer for any high or salient point in the garden land-. In any case, it is thankful for a raised position, for it t bear anything like wet at the root. The subjects of the ations are grown on mounds, supported by two or three es of dry walling. In carefully designed garden planning are often places at the ends of terraces where flights of steps cut through flower borders just below the terrace wall. Where this occurs, by building up some kind of rectangular box on either side of the steps and up to the terrace level, a perfect place may be provided for these giant Yuccas. One Yucca gloriosa in the centre and a plant of the smaller growing Y. filamentosa in each angle, will in a few years grow into a grand clump, and, by its monumental aspect, be in perfect accord with the symmetrical masonry, and form the best possible garden ornament.

G. J.

A new Dogwood

to the recent flower show held in ral Hall, Boston, were afforded an y of seeing flowering branches of ficent new plant (Cornus Kousa to which the judges awarded a Certificate of Merit. In a season ned the flowers of the native Dogwood in the neighbourhood of is Chinese plant has blossomed isely. The original plant in the oretum was long laden with many of cream-white flowers.

ver-heads of this tree, on long nd well above the foliage, and om 4 inches to nearly 5 inches in From the time the bracts first ssume colour until they fall is well ith, making a long decorative sea- fruits, which look like Strawberries, are freely produced and afford an easy means of propagation.

This year the typical Cornus Kousa, which is a native of Japan, has been unusually fine, also, and is well worth a place in every garden. Both the Chinese and the Japanese Flowering Dogwoods seem to be perfectly hardy in this part of the world, where they thrive in ordinary garden soil. Good judges consider them among the finest exotic flowering trees that Asia has giyen us.—*Horticulture.*

Styrax Hemsleyanum

This has large, downy leaves and young shoots, the former often 5 inches to 6 inches long. Its pure white flowers are produced in June on branched panicles 5 inches long. It is one of Wilson's introductions from W. China. It is a pity such a distinct and beautiful tree has not received more attention on the part of growers, for even to-day it is rare to find a good specimen.

E. M.

Magnolia hypoleuca

The number of Magnolias which flower late is so small that such as do bloom at that time are of special interest, the above particularly by reason of its great stature. Its huge, handsome, leathery leaves may be 18 inches in length and half as wide, glaucous-green above and bluish beneath. The thick-petalled, strongly-scented flowers are each 8 inches across, creamy-white, with a large central cluster of purplish-red stamens. It is a striking and beautiful tree, rather open and loose of habit. It is a native of Japan and China, and although introduced as far back as 1884 it flowered for the first time in this country in 1905. Such a noble tree should be more frequently met with in our gardens than is the case to-day.

G. M.

Campanula Tymonsii

ALPINES

Campanula Tymonsii

LATE flowering, of a good clear colour, not rampant in habit, and a thrifty plant with no pronounced fads, this Campanula should be found in every collection of hardy plants. The origin of this plant appears to be somewhat of a mystery, and the text-books know it not. It is probably a garden hybrid in the neighbourhood of C. x Profusion and C. x haylodgensis, but distinct from either.

Well-drained soil and partial shade seem to suit it well, the plant is perennial, and any experience to the contrary is generally due to the profuse attention of slugs, which appear to have a special liking for all the choicer Campanulas. C. Tymonsii has for three or four years occupied a limestone moraine, with a gentle slope to the north, and is now (August 16th) at a height of about 4 inches, freely displaying on short stiffly-branched stems, wide-mouthed, rather shallow bells of a delightful china blue, and new stems and buds to carry on the display are developing between the flowering stems.

The young shoots, when 1 inch long, provide cuttings that strike readily in a cold frame, and it is always wise to grow on a few reserve plants in case of accidents to established specimens.

Nierembergia rivularis (White Cup)

At a time when flowers in the rock garden are none too plentiful this charming little plant is seen at its best, the white cupped flowers with a yellow centre, borne singly on 2-inch stems and each about 2 inches across, appearing in profusion and standing just clear of the dense carpet of green leaves, producing a choice and very pretty effect all through the month of August and onwards. This is the only really hardy Nierembergia. In very heavy soil it does not spread freely, but, given a free sandy loam, it increases rapidly, covering a space of considerable size in a season. It is a charming subject for either large or small gardens. E. M.

Epilobium macropus

This charming creeping plant, from New Zealand, I am growing for the first time this year. It forms mats of pretty bronze-green leaves close to the ground from which rise numbers of little buds, and later pure white flowers, each ½ inch or so across on stems not more than 2 inches high. It is, apparently, useful for the rock garden, where it might be used alone or to carpet some of the slender-growing Linums or similar plants.

G. M. S.

Linum flavum

This is a small semi-shrubby plant of neat habit. Its large yellow flowers are arranged in loose clusters on leafy stems spreading from the base of the plant. They are produced in great abundance, and, combined with the dwarf and compact habit of the plant, it has charms sufficient to render it worthy of cultivation. It is a plant of easy culture, adapting itself to any soil or position provided it is well drained. A sunny position suits it best, and when planted on the level so as to form masses the plant has a charming effect. It may also be grown on the face of a dry wall by first carefully pac plant into a chink and fixing it firm soil and small stones. It is excell embellishing some arid part of the ro den. H. Ste

CHRYSANTHEMU

Summer notes

TRAINING.—For the culture c blooms the stems of each plant sh limited to three. These are select a considerable number which spring f upper part of the original stem, and by the growth of a bud known as break. All excepting the very late so reached this condition. Many varieti indeed, arrived at another stage, pushing flower-buds at the points retained stems. These are called crow It is much too early to allow such to on the plants to develop blossoms. were retained, in most instances the r blooms would be wanting in colo character. The proper thing to do, to pick out the flower-buds as well of the little growths which are cluste them. Leave two growths on the po stem for a few days, then take away promising of these, and train in an direction that which remains. Th various modes of tying the shoots o anthemums. Some growers use thre to each pot, and train the shoots fan I use one stick only, and tie th stems loosely to it. One has to be that the tying material is strong; th is little danger of the stems being

:he plants are stood in rows, as they e, it is necessary to fix stout posts at d, and to these to fasten wires, to e sticks may be tied. Bush-trained not need such care in fastening be- y do not grow tall, but, whether for e of flowers or a few huge blooms, sable to allow the plants

OF ROOM TO GROW.—Satisfactory cannot be obtained if the leaves and w soft. Do not attempt, therefore, te a hundred plants in a space not ugh to accommodate half the num- erly. If the plants are trained to ms only, each pot should be about from its neighbour, and the rows han 4 feet apart. This space makes of watering, thinning, and so on and conveniently done. One must t in destroying insect pests. Green s black aphis are easily killed by e same with Tobacco-powder. This r method than syringing with mix- are sometimes used too strong. A uld be kept for earwigs. The leaf- naggot again is troublesome; its y be followed on the leaves and the . This spreads rapidly if left alone. NG is, perhaps, the most important culture now. It must never be ssly applied, but during bright sum- the roots are in constant need of A fatal mistake, however, is made plants water when the soil in the eady moist. The Chrysanthemum, taking great quantities when the h is abundant, is easily thrown into by an overdose. When the potting lone properly—that is, the soil made in the pots—a large quantity of soil comparatively small compass, and e moist a considerable time must fore the roots can use the same. find at this time of the year, how- the weather, that a plant requires once watering in a day. But what mportant, every plant does not re- t the same time. This necessitates one examination and makes water- what laborious. Go through the in the morning, and if the day pro- e hot give a thorough watering to t approaching dryness; this condi- e found by tapping the pot with the f there be a doubt. When the ball ere is generally a ringing sound. n at midday water those plants not any in the morning, and in the third look through is given; but at ot water any plant unless the leaves flag through drought. Compara- soil is best through the night; this weeten the soil which is soured if tantly in a moist condition. The should be warm and soft. Rain- sed in preference to any other; but pes, tubs are filled and the water ntil it has stood some hours.

THE PLANTS.—I do not favour f stimulants until well on in the liquid-manures are not needed if are of good colour, and the growth satisfactory. It is not advisable stems and leaves of extra size and y pushing them on with a lot of These aids are employed later to lants in health when the virtues are n the soil by a mass of roots, and blooms to their utmost capacity. er, the leaves become yellow and ted, it is advisable to assist the n now. Soot is invaluable to give tone to the leaves. Put a peck or in a bag; place this in the water- ill soon just colour the water, and ar state it may be used regularly. es be syringed with this it will have effect. A GROWER.

INDOOR PLANTS

Propagating bedding Pelargoniums

IN defiance of criticism during the past few years as to their value in the flower garden, whether on a big or small scale, these still hold their own and are likely to remain so by all who devote space to a display of summer flowers. The old method of rooting them in the open ground has given place to pots and boxes, but it is doubtful which carries the most advantages in the long run. The former can claim a saving of time at this busy season, and if beds a yard wide are prepared by digging in a dressing of half-decayed leaf-soil made very firm with an even surface to take ½ inch of fine sand no further treading on the bed will be necessary. Select firm shoots whenever possible (sappy ones are prone to decay), about 6 inches in length; cutting to a leaf joint, inserting them 2½ inches asunder, and making very firm, finishing off with a thorough watering. If sprinkled early morning and late in the afternoon in the absence of rain the bed should not require a heavy watering for a couple of weeks. It will be found a high percentage has taken root. Decaying foliage must be removed without any loosening of the cutting and all flower-spikes pinched out in the early stage.

Toward the end of September the plants should be carefully lifted and placed in 3-inch pots (singly), using the ordinary soil for such subjects, potting firmly, and placing on shelves or staging where they can be kept somewhat close for a few days until the roots get hold of the compost, when the usual ventilation should be given. If a good watering be given a few days after potting they ought to be all right for a week or 10 days. The one great secret in keeping Pelargoniums through the winter is not to over-water. Frequently the plants are not potted off until spring, and sometimes very late on account of so many pressing jobs, and then given a little extra heat to push them along, with the result that the plants get more or less drawn, presenting a weakly appearance compared with those that were dealt with in the autumn. J. M.

Epiphyllums

For winter blooming there are few plants so useful as the Epiphyllums, particularly E. truncatum. It is, like others of the family, rather inclined to droop. To overcome this drawback it is customary to graft it upon one of the stronger-growing Cacti. For this purpose one of the Pereskias is usually chosen, this being of a more upright growth than the Epiphyllum, while the union is easily made and at almost any time of the year. The stock usually preferred is P. Bleo, more especially when tall plants are desired. Where height is not a desideratum P. aculeata may be used, but, given ordinary care, grafts upon either will quickly become established. W. McG.

The blue African Lily (Agapanthus umbellatus)

This is one of the old-fashioned greenhouse plants well worth taking more care of. In the south of England it may be safely left out-of-doors all the winter, but is usually placed under cover during the most inclement months. It appears to enjoy a great popularity in the Isle of Wight with amateur and villa gardeners, and at this time of year visitors are struck with the beautiful effect produced by large specimens of this plant, with the tall spikes of pale blue flowers rising to a height of 3 feet or 4 feet, and the effect of a good mass of this somewhat scarce colour amongst other more brilliant hues is very pleasing. To get good-sized specimens in a short time the best plan is to take three or four young plants and place them in a pot 10 inches or 12 inches in diameter, using rather a stiff soil such as is generally called an adhesive loam, with a little manure and sand. In this the plant will make fine healthy foliage that is very ornamental, and the year after potting they will send up fine spikes of bloom, and with copious supplies of water they may be kept in the same pots several years; large saucers or pans filled with liquid-manure are a great help to such gross-feeding plants as this, as they render unnecessary such constant watering as is otherwise required in dry seasons. A. G.

FERNS

Seedling Ferns

SEEDLING Ferns will now be cropping up here and there, in the pots of other plants and upon the surface soil between them. These seedlings will make most useful plants for potting up, as not being, as a rule, overcrowded, they make a close growth, and are excellent for transferring to small pots, in which they will have time to become established before the winter comes on. Oftentimes a goodly amount of soil is removed with the seedlings. It is not a good plan, however, to transfer them to over-large pots, 3-inch being large enough except for extra strong ones. If room is scarce, a cold frame or pit will suit these young plants very well, moisture and shade for a few days being the chief things required for all except those which delight in a tropical temperature. There are many kinds which can be obtained in this manner, the Maidenhair (Adiantum cuneatum) and the Ribbon Fern (Pteris serrulata) being two of the most prominent, but others, such as Pteris tremula, P. longifolia, and P. argyrea with the British Maidenhair, frequently come up in quantity. I have in this way often secured a good stock of Asplenium cicutarium, not one of the easiest Ferns to raise when even special attention is bestowed upon it. Small plants of the scarcer kinds should be carefully looked after. Where fertile fronds are observed upon a plant of which additional stock is required, it is a very good plan to place a sod of peat under the plant with some sand shaken upon the peat. Such a surface is apparently more congenial to the development of many seedlings than the best prepared soil and other accessories, in the shape of bell-glasses, etc., can be made to be. But what is more curious still is the fact that a seedling will crop up at a long distance from where the old plant of that particular kind is growing; this will at times occur in Orchid pots and sundry other places. My attention was lately directed to a fine lot of seedling Maidenhairs which were coming up thickly between the pots of a large number of Gleichenias. The plants of the Maidenhair were grown upon a side bed, the Gleichenias occupying the central one of a span-roofed house. At the first glance it would appear somewhat strange that this should occur; one would rather surmise that the seedlings would have appeared underneath the pots of Maidenhair themselves, but hardly any were to be seen there. The only solution which I could give was that the soil between these plants was too moist, and, therefore, probably too cool for the germination of the seedlings, or for the development of the spores. The soil between the Gleichenias would, as a matter of course, be drier than that of the others, their special needs being fully understood. Here the seedling Maidenhairs came up in profusion, the soil being neither too moist nor too dry.

VEGETABLES

The forthcoming R.H.S. Amateur Vegetable Show

GREAT interest is now taken in the vegetable show to be held on September 7th in the Royal Horticultural Hall, Vincent Square, Westminster, S.W. 1. Last year the show was not a success, and an effort is now being made to produce a vegetable show that will be worthy of the traditions of the leading Horticultural Society. For the benefit of intending exhibitors we take this opportunity of drawing attention to the principal differences between last year's show and this.

(*a*) The entries are required only seven days before the show, and not 14 as heretofore.

(*b*) Regulations have been made regarding the collections in order to encourage exhibits from the smaller gardens, *e.g.*, hitherto a single-handed gardener had no guarantee that his collection might not have to compete with one from a garden with a staff of 20.

(*c*) Previously there were only three classes for collections. Now there are four.

(*d*) In order to encourage exhibitors who live a long way from London, third-class single fare from the competitor's nearest station to London will be added to each of the prizes in Classes 1, 2, 3, and 4.

(*e*) In order to encourage the staging of collections those who exhibit collections will be eligible to show in *all* the single-dish classes.

(*f*) In 12 of the single-dish classes the prize money has been increased from 10s., 7s. 6d., and 5s., to 15s., 10s., and 7s. 6d.

(*g*) Classes 24, 25, and 26 have been substituted for Class 24.

These changes are all for the good, and we feel sure that they will meet with general approval. For some reason the vegetable classes at Vincent Square have not been well contested. Possibly the prize money has not been sufficiently tempting. H. C.

Vacant ground in vegetable garden

As ground becomes vacant in the vegetable garden opportunity may be taken to utilise it by transferring what winter greens may be left in the beds, such as Kale, dwarf Savoys, late-raised Leeks, or a sowing can be made at once of Turnips and Winter Spinach. A batch of Spring Cabbage plants ought to be got in on ground recently occupied without any more manuring.

MIDLANDER.

Planting Broccoli

Though early planting ensures the finest plants and largest heads, the time of sowing or planting does not materially affect them as regards the time they come into use. If the planting be done in June or July, from 2½ feet to 3 feet must be allowed between the plants; if deferred till August they need not be allowed so much room. If the weather be dry, the seed-bed or that from which the plants are taken should be watered well the night before, to soften the soil. The holes to receive the plants should always be made sufficiently large to admit of their being easily put in without breaking their roots. "Buttoned" and stunted plants are in many cases caused by bad planting. They are put in with broken and mutilated roots, and those that have a tap-root often have it bent double in getting it into the hole, and, instead of the point being at the bottom of the hole, it will be sticking up above the surface. No one should wait a very long time for wet weather in which to plant Broccoli; it is better to get the planting done and water well once or twice, and the plants will then do till rain comes. When the plants are fairly established, and have grown a little, they must be earthed up, and this will prevent the wind from swishing them about and disturbing the young roots.

Certification of seed Potatoes

Most Potato growers by this time realise the importance of planting only true stocks of Potatoes in order to avoid the disappointment and loss which often result from the growing of impure seeds. The demand for seed Potatoes from true stocks is consequently steadily increasing, and Potato growers are beginning to realise the advantage of obtaining certificates of purity for any crops which they may intend to sell for seed. The Ministry of Agriculture is now making arrangements for the inspection of growing crops with a view to the issue of these certificates. Definite identification of Potato varieties is only possible by means of a careful examination of the plants during a certain period of growth, and cannot be undertaken if the crop has died down. Growers who apply for inspection late in the season thus run the risk that their crops will be past the stage when identification is possible.

Immune varieties of Potatoes

The National Institute of Agricultural Botany has invited farmers, Potato growers and merchants, and agricultural advisory and administrative officers to visit the Potato Testing Station, Ormskirk, on August 19th, 20th, or 21st, 1926. Visitors will see the official trials of some hundreds of new varieties of Potatoes for immunity from wart disease, which are carried out at Ormskirk for the Ministry of Agriculture and Fisheries. We hope to report more fully on these trials in an early issue.

The other trials open to inspection include the Lord Derby Gold Medal Trials and Yield and Maturity Trials of the leading immune main crop Potatoes. There is also a large number of demonstration plots of the chief varieties of British and foreign Potatoes, together with those certified by the Ministry as immune in 1924 and 1925.

THE FLOWER GARDEN

Winter and spring flowering Stocks

AS plants of real decorative value, Stocks are held in high esteem, and there is scarcely a garden in which they are not represented. The fortunate owner of a cold or cool greenhouse can obtain a fine display of these beautiful flowers in early spring with very little trouble. They are useful for cutting, as pot plants for house decoration, and also for filling the greenhouse with bloom. The winter-flowering section of Stocks should be chosen, and the fine white variety known as All the Year Round. Other delightful forms are old rose, mauve, pink, crimson, and salmon-pink, all belonging to the winter-flowering group. Seeds should be sown in August and September, and they will germinate in a cold frame. Directly they are large enough transfer them to small pots and return to the cold frame. When they have comfortably filled these receptacles with roots each plant should be given a well-drained pot 5 inches or 6 inches in diameter, and it will be found the former will be best for the majority. Never allow them to lo starved in the small or 60-sized pots rarely fully recover if kept for pot although if planted out in the open they pull through and produce a usefu early flowers.

The rooting medium for Stocks con good fibrous loam with a sprinkling o sand and finely-sifted mortar-rubble. loam is heavy add one-third swee mould, and should it be poor in qu little partly-decayed manure or a 5-in ful of bone-meal to every bushel of t ture will be an advantage. Wi approach of winter remove the plan light, airy shelf in the greenhouse, a afford water when the roots really They are rarely troubled with insect pe are easily grown when provided w ordinary garden fare. T. V

Antirrhinums: Autumn so

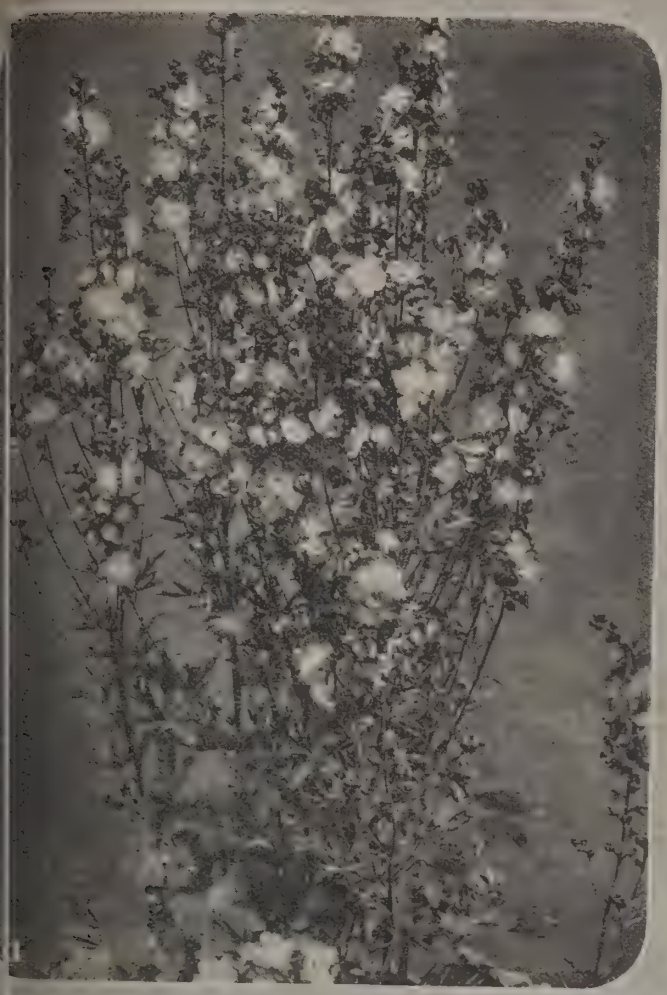
I am afraid that most people wh Antirrhinums look upon them so annuals to be sown in heat in sprin the attendant pricking out, growing subsequent hardening, before they car into their final quarters. Are we no sight of the fact that seed can be sowi open ground during August, and prie there and left for the winter, planting places they are to occupy in spring? so. I was in a country garden in Jun a bed of Snapdragons, as the owner pl to call them, was in bloom and has be tinuously since. The plants were t come of a packet of seed sown in Sepr 1925, and, notwithstanding the rat favourable winter, had been quite tected. No one could have desired a of plants or better flowers. TOWNS

Camassia Cusickii

Camassia Cusickii is one of the e of the Quamashes, and is, moreover, factory plant in a dry border of the It has been in my garden for sever and has bloomed quite freely every This year it first opened early in May will be some time before it is over, a (May 28th) it is giving every promise tinued flowering. A native of t Mountains of Oregon and Californ perfectly hardy and increases well roots. I have never saved seeds, alth produces and ripens these. It grow or so high and has greyish-green le racemes of delicate blue flowers with segments than those of C. esculent Leichtlinii. It is a pity that it appea sary to support the stems as it is les stand against winds than such speci Leichtlinii. It is my favourite am Quamashes, which might be more employed in many gardens than th The tunicated bulbs should not be out of the ground after being recei the growers. I plant them about deep as soon as the bulbs are procu

Fleabanes (Inula)

Possibly among the Inulas none popular than I. glandulosa, its oran flowers showing up well for someth three months. The one in question Daisy-like blooms fully 3 inches Inulas will thrive in any moderat garden soil and delight in a sunny Propagation is usually by root although they are easily raised fr sown in spring. Where division of undertaken it is best done in March and it needs to be done every two years as the plants grow with great once established. TOWN



Plants of special interest at the Royal Horticultural Society's Meeting on August 10th

New Sidalcea Hiawatha.—The Sidalceas are now very order flowers, and were shown in great variety. One of the picuous is Hiawatha, crimson with white eye, which gained an Merit last year. The plant grows 2½ feet high and is very free Shown by Messrs. Stark and Son, Ltd.

diolus Mrs. Swainson.—Messrs. Kelway and Son had a ng exhibit of Gladioli, including the new "Langprim" hybrids, the variety Mrs. Swainson was one of the very best. The flowers are sulphur coloured with deeper yellow centre. It had previously gained an Award of Merit.

3. **Stokesia cyanea delicata.**—A very beautiful and distinct pale blue form with silvery white centre. Shown by Mr. Amos Perry.

4. **Cherry Plum Myrobalan laden with red fruits.**—This culinary Plum is fruiting well in many gardens, and we have received specimens for identification from readers. This is the Prunus cerasifera of botanists, and is known as Roblets in the Midlands. Shown by Messrs. George Bunyard and Co.

REMINDERS FOR THE WEEK

Southern and Midland

Beetroot

Where the seeds were sown in March and early April the roots keep their flavour, and are best if lifted and stored in a cool cellar or outhouse now. Remove the soil without breaking the roots and place in layers, covering each with sand. The later-sown batch should be encouraged by keeping the soil stirred with the hoe and the beds free from weeds.

Marrows

To ensure a continuous crop the plants should have liberal supplies of water during the next few weeks. Thin the growth to prevent overcrowding and cut all fruits before they ripen. Plants that are becoming exhausted will quickly revive if given 1 oz. of sulphate of ammonia in each gallon of water twice a week. Liquid-manure should also be given to encourage productiveness.

Endive

The resultant plants from a previous sowing should now be in a fit condition for transplanting to a bed that has been well dug and enriched with manure. Set the plants out in lines 18 inches apart, allowing a distance of 1 foot from plant to plant. Endive requires ample supplies of water during the young stages of growth, and the soil should be kept loose by continually hoeing. For planting later in frames a further pinch of seed may still be sown.

Pentstemons

Although of a perennial nature these beautiful free-flowering plants are always best when increased annually. Now is a good time to commence taking cuttings where young shoots are available. These should be strong and taken about 3 inches in length, removing several of the lower leaves. Insert firmly in beds of prepared sandy soil either in a cold frame or under hand-lights. These should be kept close until roots are formed.

Herbaceous borders

All spent blooms should be kept removed, and the plants that have finished blooming may be cut down. Keep the surface free from weeds and use the hoe amongst the plants to keep an open tilth. Stake and tie the autumn-flowering plants. Those that form roots near the surface should receive water when necessary.

Bulbs

There are many varieties of bulbs that may be planted during the next few weeks, and all varieties that were forced and lifted from the beds may be attended to first. It must not be expected that Hyacinths, Tulips, or Daffodils will flower freely immediately after forcing, and it is advisable to plant these in the shrubbery, grass, or reserve border.

Arum Lilies

Where not already done, no time should be lost in getting these repotted. Where the pots have been laid on their sides and kept dry during the last few weeks they should now be stood upright and given a thorough soaking of water. Three parts loam, one each of leaf-mould and rotten cow manure mixed together with a good supply of coarse sand form an excellent compost for these plants. Firm potting is also essential.

Schizanthus

For an early show of bloom a few seeds may now be sown in a pan of light soil and germinated in a shady part of the greenhouse. When the seedlings are fit to handle they should be pricked off into shallow boxes, afterwards potting them up into 3-inch pots, in which they will remain during the winter. A shelf near the glass in the cool house is ideal for the plants during the dull months. There are many beautiful kinds, but I find Dr. Badger's strain hard to surpass.

Cyclamen

Old plants that have been resting are now starting into fresh growth, and should be turned out of the pots. Remove as much of the old soil as possible without damaging the roots; repot into clean pots of the same size or one size larger if necessary, in a compost of good fibrous loam, sweet leaf-mould, and well-rotted cow dung, with the addition of a little crushed mortar-rubble to keep the whole porous. Careful watering is necessary until the plants have become well established. A cold frame is the best place to keep the plants for the time being.

Peaches and Nectarines

All but the latest crops have by this date been gathered, and attention must be paid to the cleansing of the trees and the encouragement of fruit-buds for next season. Trees in pots that need repotting or top-dressing should be taken in hand now. Keep the foliage healthy by constant syringing with clear water, and houses in which trees are planted should have all doors and ventilators thrown open day and night.

W. E. Wright.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Roses

The first flush of Roses is now almost over, and in order to encourage the H.T. varieties they ought to receive a little stimulant of some sort. Nothing, of course, is better than weak liquid-manure, but when such cannot be given, some good fertiliser in solution may be administered. Hoe the beds or borders at frequent intervals should there be a spell of dry weather. Roses on walls at this time may develop aphis. Fortunately, this is easily dealt with if the pest be caught in its incipient stages. The shoots of Ramblers must be regularly tied in. There is, however, nothing wrong in cutting out weakly shoots if there is a sufficient number of vigorous ones to form the basis of next season's display. This is the time at which mildew may be expected to give trouble. When symptoms of the fungus are observed the usual remedy should be used.

Herbaceous borders

These, from now onward and until the frost comes, ought to be very bright. Well-furnished borders now call for very little attention in the way of weeding or cleaning. The principal work consists in the removal of spent blooms and of seed-pods, and in making the plants—and especially the taller ones—secure against damage from wind or rain. There are some good forms of Sidalcea which, at the moment, are showy, S. Murrayana, S. Rev. Page Roberts, and S. Oregon to name a few. Phloxes are always bright; the Rudbeckias, Chrysanthemum maximum, Monardas, Scabiosa caucasica, and the Heleniums, among other things, give variety. The more robust Michaelmas Daisies and the September-flowering Tritomas will appreciate a light mulch of some description.

Hardy fruit

Wasps appear to be more than ord numerous, and in order to minimise tacks of these dangerous insects every tunity should be taken of hunting o destroying their nests. A little cyan potassium in solution poured into t trance to the nest will kill the wasps, h necessary afterwards to dig out and the grubs, which are not affected cyanide and which, if not disposed o afterwards hatch out and give trouble clearing away of the exhausted ca Raspberries and of Loganberries sho be delayed. If nets are not yet in posi the walls they should be fixed at Summer pruning ought, by this time completed or to be approaching comp

Seeds and seedlings

At times it becomes necessary to sow or to transplant seedlings, when the dry, owing to a lack of rain. In the seed-sowing under such conditions ground be thoroughly soaked the even fore drilling and sowing are done, an in some rough-and-ready manner un mination takes place. Under such tr all good seeds will show a high percen germination. Seedlings treated in a way will, as a rule, give a good acc themselves. By the way, during dry I have found it helpful to puddle the Wallflowers, when transplanting the similar manner to that practised in t of Brassicas.

Early Peach house

Continue the syringing twice daily ing the water with the greatest possib Open both top and bottom ventilators full extent, and, if it can be done, doors also remain open night and day is nothing like exposure for assisti the ripening of the wood. The bord should be frequently watered. If th age is known to be in good order it possible to overwater a Peach bordera the drainage is known to be faulty it be attended to and put right before season.

Plant houses

Watering is now less insistent, plants should be regularly examined once every day. Maidenhair an Ferns which have to supply fronds for during the autumn and winter sh present, be well ventilated, freely and not too heavily shaded. By su ment the fronds will be hardened, will last in a cut state for some ti old Fig-Marigold (Mesembryanthem almost disappeared, but I was rem its value as a well-flowered, droopi by seeing a good specimen at a villa It is one of those things which does cool house at this time of the year plants as yet will do quite well with ficial heat.

Kitchen garden

Sow Lettuces freely—it is better too many than too few. Another s Endive, too, can be made. A final s French Beans may be got out, using which is known to be an early on particular garden. Winter Spinac Spinach substitute should now be so a full sowing of Turnips for winter be made without delay. Many prefe during the winter, but others find th teristic flavour of the garden Tur enticing.

W. McG

Mabie Gardens, Kirkcudbrightshi

A group of Dendrobium thyrsiflorum at The Hill, Witley, Surrey

Dendrobium thyrsiflorum

GST the many species of Den-um none is more beautiful and y than Dendrobium thyrsiflorum. ll grown the plants produce, in May, fine drooping racemes of wers with a golden-orange lip. e a charming effect when grouped r Orchids, and are always greatly

ndsome species, a native of Moul-lia, is a very suitable one for the o grow, as it lends itself to easy

d plants can be had at various cheaply. When such are received and foliage should be thoroughly fore potting.

table-sized pots or pans for each l crock same for drainage to one-th, using for compost chopped fibre and Sphagnum Moss. Work ost firmly about the base and up to f pot-rim.

otted place the plants in an inter-emperature and keep sprayed with ntil growth commences, when more y be applied to the roots. As lvances plenty of moisture is re-til growth is completed, then give only to maintain pseudo-bulbs in dition.

During the winter months the plants are rested in the Odontoglossum-house, where they remain until showing for flower.

D. densiflorum is another fine species, in habit similar to D. thyrsiflorum, also from India, where it is found in the Nepal district. It produces compact stout stems a foot or so high; these eventually produce dense racemes of flower. The sepals and petals are of a rich bright yellow and the broad lip of a bright orange colour.

The same treatment should be given this species as mentioned above.

J. Mackay.

The Gardens, The Hill,
Witley, Surrey.

Dendrobium Dearei

This Dendrobium, a native of Mindanao, one of the Philippine group, has erect, clustered, leafy, stem-like pseudo-bulbs, which when strong attain a height of 3 feet, but I have also seen it flower profusely upon growths not more than half that size. The leaves are somewhat crowded, especially towards the top, and the lower ones usually fall away during the resting season; the racemes are numerous, produced both from the top of the stem, as well as from the axils of the upper leaves, and I have seen eight racemes of bloom upon a single bulb bearing upon an aggregate 85 blossoms, and in some cases a greater number of flowers has been produced. The flowers, of an exceedingly pure and delicate white, saving a small stain of pale green on the disc, measure some 3 inches across. What other quality does it want to recommend it to those who cater for the wants of the public by growing for market? Some may say it lacks perfume; and this is true, or it is so faint I have never been able to perceive it, but I do not look upon this as a direct disqualification. Those who succeed with it find it succeed best as a pot plant grown in rough peat from which all the fine particles have been well beaten. The peat should be mixed with some chopped living Sphagnum, and the whole firmly pressed down. It also requires thorough drainage. The plant enjoys full exposure to the sun and light (saving through the hottest part of the day), and during its season of growth an abundant supply of water, but when the bulbs are finished up it requires a decided season of rest, which, however, must not be carried to excess, or the bulbs will shrivel and become impoverished and fail to flower. I have also seen this plant grown in a basket, but the length of its erect growths when the plants become strong renders it a somewhat inconvenient plant for this system of culture. It usually flowers in spring and early summer.

G.

FRUIT GARDEN

Peach trees after fruiting

THE crop having been gathered from the early and second early Peach-houses does not imply that the work in them is over for the season. Many growers, though they may have watched with regret the first appearance of red-spider when the fruit was ripening, will allow this pest to make as much headway as it likes directly the fruit is over and throw open the house to take its chance. In cases where this troublesome insect has obtained a footing, the first thing to do is to see that the borders are thoroughly moist, well soaking every bit of soil in them if they appear to be on the dry side. Then with a garden engine or syringe thoroughly moisten the foliage all over, using a fair amount of force and not sparing the water. This will make the insects uneasy, and before applying any insecticide, whatever pruning is necessary should be done. This in most cases will consist principally of wood that has fruited and any chance bit of new growth that there is not room for. This latter in all cases is best left either its full length or else cut right out, as there is a danger of shoots that are stopped after this date not starting from the upper buds. Indeed, if the trees have been properly attended to with regard to tying and stopping during the season of growth, all that now remains to be done is a little pinching of sublaterals and the removal of foreright shoots that are not needed when the fruiting wood is cut out.

A good home-made remedy for red-spider is an emulsion of soft-soap and water with a tablespoonful of sulphur added to every gallon. Mix it to the consistency of paint to sink the sulphur, then add a pint of the mixture to a large pail of water and thoroughly wet every part of the tree with it. With patience it is quite possible to clear the trees even when badly attacked. Fumigation, too, will lessen the number of insects in bad cases, but the best and surest means of keeping the trees clean is to be always at them with the syringe when the weather is bright. The idea that it prevents the wood maturing is quite wrong, for it helps rather than hinders this end by keeping the foliage clean and healthy to the last, and allowing it to carry on its function of sap-elaboration and bud-development.

Air in plenty is an important factor in the due development of the wood and fruit-buds, giving both vigour and strength, that stand them in good stead should the weather prove dull and cold when starting the trees. For this reason both top and bottom ventilation should be left full on night and day as long as the weather is warm, and the cool night temperature will conduce to perfect rest later on. Under such conditions as these over-ripened wood, as it is termed, is almost impossible. It is when the wood is starved from want of root moisture, the atmosphere arid, and the sun pouring down on enfeebled foliage that the trees give way, and bud-dropping and other evils are caused.

Grading and packing of Apples

In a reply given by the Minister of Agriculture recently to a question in the House of Commons he stated that Local Authorities had been asked to undertake instruction in the grading and packing of fruit and that numerous demonstrations had in consequence been given. The Minister added that in 1923 the Ministry imported a Cutler grading machine from America the use of which was demonstrated to growers in various districts in co-operation with Local Authorities and Growers' Associations. In 1924 the Ministry equipped an Apple grading and packing station at Cottenham, Cambridgeshire, at which instruction was given to officers of Local Authorities and to growers in the methods of grading and packing and in the management of the station. The station has since been acquired by the local growers who formed a co-operative society for the purpose, which received a loan under the Ministry's scheme of advances to co-operative marketing undertakings. The working of the large fruit-packing stations in Canada and U.S.A., and the methods of grading and packing employed in marketing Broccoli in France had been investigated. Demonstrations had also been given at Penzance, the centre of the Cornish Broccoli industry, and efforts were being made to secure the establishment of a Broccoli-packing station in Cornwall. The general subject would also receive consideration in the Report on Fruit Marketing which is being prepared as one of the Ministry's Economic Series of publications.

Forcing Strawberries

The "good old days" are brought vividly back to our memory by the price of Strawberries during the reign of Henry VIII.—fourpence a bushel—although there is evidence that such Strawberries were the wild variety. In any case this delicious fruit is well worthy of careful cultivation, and it assuredly pays for forcing; and it is with the object of encouraging the early cultivation of the Strawberry that this brief article has been written.

A specially-constructed greenhouse is by no means essential, for Strawberries may be admirably forced on shelves in vineries or other houses.

Plants, or rather runners, to be set aside for forcing should be taken from the earliest rooted, for these have the longest growing period naturally. They must be the product of healthy plants, grown in the open, treated most regularly and correctly, and in age not more than two years.

A number of 3-inch pots should be at hand, which, when well provided with crocks, should be filled with rich loamy compost and firmly pressed down, but not rammed. These insert in the ground by means of a trowel in the vicinity of the runners. Place the runner on the pot in each case, pegging down by means of a hooked twig until rooted, a state soon accomplished if the pot is kept moist. Other runners from the same original plant should be stopped so that it has only one branch to feed.

Shift in to larger pots, preferably 5-inch, using a compost of turfy loam, leaf-mould, and rotten cow dung. It is a good plan to have this compost by you for some months to ensure its being in a good rotted state.

Transfer the plants and shade them until established, then stand out in batches either upon ashes or concrete, in both cases using lime for the surface to keep slugs and worms at bay. At the fall of the leaf place the plants on shelves near the glass of a warm greenhouse—warm enough only to prevent the admission of frost. Give plenty of air on all possible occasions. After a time remove the top soil and substitute rich soil as a dressing. Mildew may be prevented by dipping the plants in sulphur and water. About November 15th is a good time to commence forcing, the temperature not exceeding 45 degs. at the start and 50 degs. later, plenty of fresh air being always available. The main point of utmost importance is to ensure *slow* forcing, even on the appearance of the flower-buds, 55 degs. being the limit then.

After the fruit is set the temperature may be gradually raised to 60 degs., 65 degs., and during sunshine even 70 degs. The application then of weak liquid-manure is very beneficial, but this should be given only once a week. Never allow the plants to become unduly dry, and avoid over-watering. Sovereign is, without doubt, the best Strawberries for forcing, and a good is Sir Joseph Paxton. BRUCE HEW

Mildew on Grapes

(REPLY TO "J. R.")

Many who cultivate Grapes scarcely what mildew is; on the other hand, th some whose Grapes are every year at more or less, and they may not kn Most frequently it attacks the berries a the leaves, coating these over with a flour-like down, which eats into and spoils the appearance and colour bunches.

There are many specifics for dealin mildew, most of them acting well, they do not always stamp out the dis quickly as could be wished. The principally in solution, and have to plied with a syringe. This practice which, however careful the operator is sure to damage the bloom on the though in a bad case of mildew the pr tion of bloom is outside the question. F of sulphur is the one great remedy th for ages been a mildew specific, and w these days has a deal of value for th pose. One of the secrets is to begin u in good time, continuing at frequent vals to apply it to the berries or leav dry state. The berries in particular be dry, for if wet at the time of applic adheres to the skins, and is not eas moved. Used quite dry, the bunc gently plunged into a pail of clear wat come out quite clean and free from Another practice is to coat the pipe sulphur first mixed with milk to a pa consistence. If the pipes are made h a day the spores of the mildew will be to dry up, and the progress of the consequently checked. Only by pe ance, however, can the trouble be Sulphate of iron is a good aid someti warding off mildew in Vines. This spread over the Vine border at the ½ oz. to the square yard, and wate There may be two applications of th phate at an interval of a month or so spring should mildew appear, and in a further application may be given w border is attended to in its necessa dressing. The iron sulphate is said into the Vine channels through the ro presence fortifying them against partially or wholly as the case may be.

The causes of mildew are many, a include faulty ventilation, unsuitable or the roots working deeply into clay soils. These are the most common but extremes of moisture or drought conducive to mildew. There are reasons that cannot easily be defin when all that is apparently necessary vided and the daily details duly atten even then mildew sometimes makes sence felt. I advise sulphur to be ap the bunches as soon as the first mildew is seen, applying it at i through the growing season.

Watering wall trees

In the tropical heat of July, whe watering had to be done, some of t trees and plants to show signs of exh were fruit trees and climbers plante up to walls. As a matter of fact, rain benefits other things in a garden, d always do for all plants what it does f away from walls and fences, so that in of drought they suffer sooner. N measures should be permitted, and th soakings ought to be the rule. Fru in bearing on walls should be well s with water. MIDLA

Awards for Gladioli

llowing is a list of varieties granted the National Gladiolus Show, Burton- by the British Gladiolus Society on 12. Unless otherwise stated, the is the raiser.

OS OF MERIT granted to the follow-

iety.	Section.	Name of Raiser.	Exhibited by
on ..	Large-flowered ..	Lemoine ..	Hewitt and Co.
ke			
..	" ..		.. Lowe and Gibson
n ..	Primulinus ..		.. Do.
ner..	" ..		.. Do.
pe			
..	Large-flowered ..		.. Kelway and Son
..	" ..		.. H. Prins
mph	"	.. Pfitzer	.. Konynenburg and Mark
..	" ..	"	.. Do.
te ..	" ..	"	.. Do.
ue ..	" ..	"	.. Do.
..	" ..	"	.. Do.
ny.			
..	" ..	"	.. Do.
e ..	" ..		.. K. Velthuys and Co.
s ..	Primulinus ..	Salbach ..	Do.
..	Large-flowered ..	Coblentz (?)	Do.
n ..	" ..	Lemoine ..	W. J. Unwin
nnett	" ..	Diener ..	Do.
..	" ..		.. G. Mair and Son
..	" ..		.. Do.
..	" ..		.. Do.

OF COMMENDATION (preliminary.

iety.	Section.	Exhibited by
..	Primulinus ..	A. E. Amos
..	" ..	W. J. Unwin
..	Large-flowered ..	Do.
os..	" ..	G. Mair and Son
..	" ..	Do.
..	Medio-Primulinus..	Major G. Churcher
..	" " ..	Do.
..	Primulinus ..	Lowe and Gibson

Gladiolus Society's Silver Challenge Cup for new varieties:—1st, Messrs. G. Mair and Son, d (Silver Medal), Messrs. Konynenburg and nd; 3rd (Bronze Medal). Kelway and Son,

Challenge Trophy:—Won by Watkin Samuel, am; B.G.S. Silver medal, Ivor Thomas, Esq., B G.S. Bronze Medal, Major G. Churcher,

Challenge Trophy.—Won by A. Amos, Esq.,

Gladiolus Society's Silver Medal for amateur gest number of points in Section "D":—Major Sussex; runner-up, Ivor Thomas, Esq.
NG ILLUSTRATED" Bronze Medal for largest oints in Section "C":—A. Amos, Esq., Colner-up, S. J. Gregg, Esq., London.
pecial First Prize:—Won by A. Amos, Esq.
t. by 4 ft. (First Prize £20 cash):—Winners, o., Ltd., Solihull; 2nd, W. J. Unwin, Histon; burg and Mark, Holland.
Primulinus, 9 ft. by 4 ft.:—1st, W. J. Unwin; uys, Holland; 3rd, H. Prins, Holland.
Medal to Mr. W. J. Unwin for finest group of

ls to the following for groups:—Lowe and rley Down (seedlings); Kelway and Son, Lang-Bath, Ltd., Wisbech; Konynenburg and Mark, Prins, Holland; K. Velthuys and Co., Holland. al for Group:—Mr. W. Glen, Chippenham,

exhibitors in the Open Trade Classes in-Mair and Son, Ayrshire (14 firsts, 2 seconds, hfth). Hewitt and Co., Solihull (2 firsts, 5 hirds). W. Glen. Chippenham; D. Prior and Colchester; Konynenburg and Mark, and K. Co., Holland.
g. Amateur exhibitors included: Ivor Thomas, ol (5 firsts, 2 seconds, 3 thirds, 2 fifths). S. J. London (1 first, 3 seconds, 1 third, 3 fourths. jor G. Churcher, Lindfield (3 firsts, 6 seconds, ourths). A. Amos, Esq., Colchester (twelve ing 7 firsts). Watkin Samuel, Esq., Wrexham s, including 3 firsts, 5 seconds).

icipal Educational Garden

wn Council of Swansea has re-de an interesting innovation by in-nongst the other attractions of its rden of economic plants and a col-the wild plants of the British Isles. omic collection numbers some 430 d includes a large number of the ortant commercial plants, together s of minor value. The old kitchen the Singleton Abbey estate, now Park, has been developed for the the glasshouses being used for tender subjects, and the open ground for hardier plants. The British plant collection has been formed in the same park, and an idea of its scope may be gathered from the fact that it already includes 1,500 species, provision being made for water, bog, rock, dry land, and other plants. An index of the economic plants has been published for the guidance of those who use the garden. It gives the scientific and common name of each plant, the part used, and the object for which it is used. There is also a shelter for the use of students, who wish to study the collections. The Council are to be congratulated on their initiative in making this innovation. Too often the activities of those who are in charge of public parks are limited to the production of playing grounds and gaudy displays of summer bedding plants, and it is refreshing to find a body of Town Councillors turning their attention to the scientific and educational side of horticulture. They are fortunate to have in Mr. D. Bliss a Parks' Superintendent capable of carrying out their wishes to such a remarkable extent. There can be little doubt but that the innovation will have far-reaching effects. It is understood that the Parks' Superintendent will distribute seeds of many of these plants as they become available.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

GREENHOUSE

Lapageria failing

(A. C.).—It is not to be wondered at if your Lapageria fails to do well, as it is quite overrun with insects, including thrips and mealy bug. You will have to thoroughly clean the plant before it will do any good. It has been kept too dry both at the roots and in the growths, this also having much to do with its failure. This plant, if the drainage is good, must have plenty of water, and be grown in a mixture of rough peat, broken crocks, and clinkers smashed up, using sand freely in the compost.

"Spot" in Carnations

(W. Gray).—Your Carnations have evidently been attacked by the disease known as "spot." The conclusion of most growers is that it is due to a damp or stagnant atmosphere, to an unsuitable soil, or to overcrowding. Hitherto no cure has been found for it. If your plants are in the open they must take their chance. You should cut off all the diseased leaves, etc., and burn them. Growing the plants for two years in one place is also a mistake. Carnations ought to have fresh quarters every year, or, at all events, the soil be renewed before replanting. This disease is always worst in a wet, cold season.

Growing Vincas

(R.).—Presuming that the Vincas inquired about are Vinca alba and rosea, they should be grown in a cool part of the stove, or, at least, in an intermediate temperature. In winter, the structure in which they are growing should not fall below 50 degs., with a corresponding rise as the season advances. The plants, when young, should be pinched occasionally in order to ensure a bushy habit of growth, and they do well in a mixture of loam, leaf-mould, and sand. A good light position is necessary to their well-doing. If the hardy Vincas—that is, the Periwinkles—are intended, they may be planted out either in a sunny or partially shaded spot.

Iris seed

(A. M. X.).—Sow the seeds at the end of September in very sandy loam. The best plan will be to use a large pot that the seeds may be thinly placed. Place 2 inches of crocks for drainage, over this some rough turf, and then 4 inches of the above soil. Scatter the seeds on this, having first made the surface level and firm, and cover them ½ inch deep or less, certainly not more. So arrange the soil that a cavity an inch deep remains at the top when the seeds are covered in. You can then place a piece of glass over the pot for protection. When the seedlings appear pot them singly into small pots, and finally plant out in the garden.

Heating a greenhouse in exposed position

(H. G.).—Under the circumstances named we should doubt whether the 24 feet of 4-inch piping could be depended upon. Why not put the boiler in the north-east corner against the dwelling-house and carry the pipes round the north end and west side and back again? Taking the mean height of your house at a guess of 8 feet it would give about 1,500 cubic feet of air to be heated, which would require at the very least 60-feet run of 4-inch hot-water pipes to keep out frost in such a position—the heat of the water in the pipes to be maintained at 200 degs. Fahr. The flue would act very well carried up as proposed, but it should be kept at least 3 inches away from any woodwork. There is no danger of fire from a hot-water apparatus other than from the flues.

FLOWER GARDEN

Diseased Chrysanthemum leaves

(R.S.).—Your leaves arrived in a very dried-up condition, and it is impossible for us to say what is the matter with the plants. If you will send us in some more specimens packed in a small tin box we will do our best to help you. Meanwhile we should advise you to isolate the affected plants, because if the trouble is eelworm, or fungoid, as appears likely, it is liable to spread to the clean plants.

Young Wallflowers, etc.

(F. B.).—If your Wallflower and Snapdragon plants are so small that they are but just above the ground, then you sowed the seed very late. Wallflowers to bloom next spring should now be fairly strong plants, dibbled out where to flower or be fit to do so. When the seedlings are only just through the ground they will be fit to plant out about the

middle of September, and that is late. It is very doubtful whether they will bloom next year. Snapdragons may be either left in the same bed, the smallest especially, the strongest being planted out where wanted if they are 4 inches in height. All those, if they stand the winter, will bloom finely next summer.

Annuals and perennials

(J. G.).—Will you state your requirements more clearly? "Annuals" are obviously of annual duration only, and must be grown from seeds, while perennials are obtained either from seeds or by dividing up the root clumps into smaller portions. "Perennials" do not produce "cuttings," as this term is usually understood. The stem growth of perennials is of annual duration, and when flowering is done the stems perish.

The Cape pond weed (Aponogeton distachyon)

(E. C.).—In the midland and cold districts it is necessary to grow this plant in water that does not freeze, but in mild and southern districts this is not needed. It may also be flowered in an inverted glass bowl in a room. Failures often follow from putting this in too shallow water.

Plants for a north border

I should be glad if you could tell me what to plant on a border 15 feet by 5 feet 6 inches for plenty of bloom. The ground is in a poor state; it is also exposed to the north and a paling fence at the back.

Essex. L. SEARLE.

[The aspect is unfavourable to many of our best hardy plants, but a selection from the following should suit your purpose:—Campanula latifolia, Artemisia lactiflora, Sidalcea Rose Queen, Lythrum Salicaria roseum, Delphinium Rev. Lascelles, Galega Hartlandi, Lychnis chalcedonica, Chrysanthemum maximum King Edward VII., Acanthus Candelabrum, Anemone japonica Queen Charlotte, Hemerocallis aurantiaca major, Gypsophila paniculata, Morina longifolia, Œnothera Lamarckiana, Iris sibirica Bleu Cœleste, Iris sibirica Emperor, Astilbe Davidii, Phlox Selma, Saxifraga Megasea Peach Blossom, Funkia Sieboldi, Geranium Endressi, Agapanthus Mooreanus minor, Trollius Lemon Queen, Caltha polypetala, Campanula muralis, C. carpatica pallida, Lily of the Valley Fortin's var. Dicentra spectabilis, Mertensia sibirica, Œnothera missouriensis, Geum Mrs. Bradshaw, Gypsophila muralis, and Sedum spectabile.]

Hollyhocks not opening freely

I shall be obliged if you will kindly advise me as to why the flowers of some of my Hollyhocks do not seem fully to open before they fade. Some of the plants, not more healthy, to all appearance, than the others, are perfectly normal and satisfactory; others, of possibly the same colour, open unsatisfactorily. In the affected ones this is the case all up the plants, and the flowers never attain their full beauty. G. H. W.

[The affected spikes are mostly attacked by red-spider or thrips, which damage the buds even before they commence to open. Your best course would be to syringe the affected plants and, whilst still wet, dust them over freely with Tobacco powder, paying special attention to the undersides of the leaves and flowers. Apply plenty of water to their roots during hot weather.]

FRUIT

Rivers' Early Peach unsatisfactory

Admiral Sir H. L. Heath would be much obliged if the Editor could advise him as to the best treatment for a Rivers' Early (outdoor) Peach which, year after year, produces good crops of early Peaches, but which, unfortunately, do not "stone"; the skin cracks and earwigs make a habitation of where the kernel should be. The tree is on Plum stock on a brick wall facing south. Other Peach trees on the same wall do well. The ground has been well limed and the roots have plenty of building rubble round them. The tree has been planted some 12 years.

[The trouble is due to improper fertilisation, which is common among early Peaches, even when growing under glass. The only remedy—and this a partial one—is to carefully fertilise the flowers by hand each year, using a camel's-hair brush or a rabbit's tail. Rivers' Early Peach is very susceptible to stone-splitting.]

Peaches falling and Apples to name

(E. G.).—The leaves accompanying the fruit are absolutely alive with thrip, red-spider, and scale, and this is the probable cause of their falling. The fruits have fallen off through bad fertilisation (see reply to Admiral Heath above). Apply a good soaking of water, syringe the trees each day, and once a week with paraffin soap at the rate of a wineglassful to 2 gallons of water.

MISCELLANEOUS

Book on modern gardening

(E. S. M.).—The work that would answer your requirements is the latest edition of "The Gardener's Assistant," edited by the late William Watson, Curator, Royal Botanic Gardens, Kew. This work, which contains chapters on all the subjects you mention, viz., the fruit and vegetable garden, medicinal plants, plant enemies, propagation, and stove and greenhouse plants, is published in six volumes by The Gresham Publishing Company, Ltd., 66, Chandos Street, Covent Garden, London.

Preparing ground for spring planting

I have a hitherto unplanted garden and wish to get the soil into good condition ready for planting in the spring. I can obtain stable manure. Should this be put into the soil now or left till early spring? Also is it dug deeply into the soil or just into the surface? I wish to grow evergreen shrubs and flowers. M. CLIVE.

[As your land is required for shrubs and plants it is advisable to trench it to a depth of 2 feet 6 inches, and to accomplish this a trench of about 2 feet in width should be taken out and wheeled to the finishing point where it will be used to make good the final trench. Break up the bottom of the trench thus prepared with a fork and over this place a layer of rough grass or rubbish—free of woody matter or coarse manure—and follow this by measuring off another 2 feet wide, turning the top spit of earth—whether it is grassland or otherwise—upside down upon the manure of the first trench and any loose shovellings also. This should give you about a foot of earth, over which should be placed a thin layer of manure, and if your ground is heavy add a dusting of lime also before adding further soil. Repeat the operation, and over this spread a further layer of good rotten manure and a similar dusting of lime; dig out the remaining 6 inches of soil, placing it upon the top of the manure, break up the bottom of the trench as before, and you have one trench complete. Treat the following trenches likewise, leaving the surface as rough as possible. October is the best time for the work to be done, and by spring the surface will have become well weathered and the land settled down ready for planting in spring. Early in March give the surface a sprinkling of wood-ashes and fork it over to a depth of 8 inches; this will bring a li the manure to the surface and the s and plants will grow away freely.]

Destroying Garlic

(J. H. Lorimer).—Cutting constantl do good, but the best plan is to pull u and put all on the fire. It is a d matter to get rid of weeds in any one s as the seeds often lie a long time ground before they germinate. Noth the way of a weed-killer can be used destruction.

LATE NOTES

Catalpa japonica

An effective August-flowering tree above, and a lover of sunshine judging a nice specimen from 15 feet to 20 fee which is now blooming freely on a so slope where the soil is poor and stony tree is very healthy and laden with smelling flowers of a creamy-white dotted inside with pale violet and The large branching inflorescences bo the ends of the current year's grow from 6 inches to 8 inches long and wid decidedly handsome as they rise abo large glossy green leaves. Other C species growing in the rich low grou the waterside have made abundant and are handsome by reason of their lux foliage and great size, but these a blooming this year. E

Rhus Cotinus var. atropurpurea

Few subjects have attracted so much tion of late as a well-flowered group picturesque shrub, which, situated on ground and in full sunshine, is rema for its beautiful effect. Unlike the Venetian Sumach, its leaves are d colour and somewhat glabrous, and w the inflorescences of the type are of flesh colour, those of the above are of purple, nearly a foot long, and so freel as to almost envelop the bush in a film of colour. Clearly, this is one of th striking and attractive of our late s shrubs and one which flowers best growing in rather poor soil well expo sunshine. I find it slower in growt the type, and this is an advantage as comes adaptable for even the smalle dens, and may be planted where smal ing shrubs are desired. In large gar should be massed on rising ground. E

The Flame Flower (Tropæolum osum)

In many parts of the garden here (the soil is too stiff and heavy to admit plant growing freely, so during the w trench 1 foot wide and deep was taken the foot of a cool north wall and fille loose leafy and peaty soil and a free a of sand. The plants have done well, placing a line of Hazel boughs along th of the wall for supporting the growths there is now a rolling cur gorgeous scarlet flowers 5 feet high. C

Symphyandra Wanneri

A more graceful dwarf plant when in than this could scarcely be found. little tufts of Campanula-like leaves r 9-inch wiry stems carrying several sus tubular flowers each 2 inches long and ¾ inch across the mouth. The colou lovely soft lavender inside with a suspic purple on the outside. Slugs are its g enemy, especially during the winter, combat these a ring of sharp ashes sh placed around the collar of each plant. *Sussex.*

LATE REPLIES

ng Coleus

lost).—To winter Coleus successfully uld be well established, firm, not d plants. A light, comparatively in a house that does not fall below during the winter is a good place for)o not give more water than is neces- eep the plants in good condition.

mildewed

. Denham).—We have never seen o badly mildewed. They are quite and the only thing you can do is to all off the rods and put them on the guard against an attack next year d, when the leaves have fallen, paint side woodwork, clean the glass, and e the walls. Then dissolve ½ oz. of of potassium in a quart of water, th clay and sulphur to a thin paste, h the mixture into the bark and vice about the spurs on the rods. t fruitful cause of mildew is main- cold, damp atmosphere during a lull weather, also opening the front s when the wind is blowing from a or easterly direction. Have you ing sulphur in the vinery, as from arance of the stalks one would be ppose that such was the case. See this issue on p. 510 on " Mildew on

nums from cuttings

).—We see no reason why you il to keep the cuttings if you take n healthy plants and put them into ame, which, should the weather be re, will require covering with a mat.

ng Fuchsias

l).—Fuchsias put away in winter er from overdryness and too much , as a consequence, if they survive ng are often found to be in a de- condition. A warm temperature is sary for them during a period which be one of comparative rest, and the f packing plants under a greenhouse the back of hot-water pipes, where excess of heat, is not to be com- The best place for them is a cool shed from which frost is excluded. ll they want from the time they go wer until February, when they may it into heat, trimmed up, and, when ne move, repotted. Salvias may be the same way.

ailing

ds).—Your Celery has fallen a prey gus Septoria petroselini apii, which d rapidly during the past few years ost destructive to Celery. Spraying deaux mixture as soon as you see of the trouble may check it to a ole extent, or spraying with sulphate um may also be tried. All affected ould be dug up and burned, and he refuse from the affected plants dug in or put on the rubbish-heap. l be carefully collected and burned.

growing in winter

st).—Very many persons who find ulture under glass simple work in er get to think that, given sufficient eat, they can get fruits all through also. But even when such fruits ied the cost far exceeds the value p, and the fruits are, at their best, oor quality, being soft, pulpy, and evoid of briskness or flavour. The e to take to ensure a long season oes in the same house is to make gs, one in gentle warmth early in getting the seedling plants so soon as they show rough leaves singly into small pots in light soil, and keeping them in warmth close to the glass on a shelf. Then, a month later, shift them into 6-inch pots, in which they should become strong and 15 inches to 18 inches in height, and from these getting them into 10-inch pots singly, in which, stood in a row in the front of the house, the plants being trained up close under the roof, they will flower and fruit. The pots may be stood close to each other. To secure a good set the flowers should be fertilised, the stems being tapped two or three times a day, and pollen liberated on to a sheet of white paper may also be conveyed with a hare's-tail or fine brush to the pistils. The side shoots should be kept hard pinched out. When fruits begin to swell, some liquid-manure rather weak should be given twice a week. Plants so treated should fruit from the end of May, when the sun is warm and renders the fruits solid and good, on till the end of September. A further sowing, without heat, made at the end of June, the plants being similarly treated and got into pots, may be kept in a warm place outdoors until the others are cleared out. Then, being 3 feet in height and having two or three clusters of fruits set, they will, trained under the roof, and having ample warmth, fruit and ripen well up to the end of the year, and prove profitable. During the next four months forced Tomatoes will not pay. The growing of Tomatoes for winter is, even in the hands of practical men, a very risky business.

Raising and fruiting of Melons

(F. Frost).—A suitable bed for Melons should be 4 feet in height, and should extend a foot on all sides beyond the frames. The bed should, if possible, be composed of equal parts of stable manure and tree-leaves, and be well shaken together and left in a heap a few days to get warm, and then made into a bed with a reasonable degree of firmness so that the heat may continue as long as required. Melons will do all the better for a little warmth till the fruits begin to colour. Of course, in August there is always more or less warmth from the sun. When the bed gets cold early in the season the temperature will not permit of much feeding being done, and one has to keep a close watch for canker. Therefore, it is well to keep a little warmth in the bed—we mean, of course, beyond the natural warmth. Every degree tells. As regards watering, a good deal depends upon the warmth of the bed. Under any circumstances better not water the centre of the bed much, except in very hot, dry weather. Where there is likely to be a nice warmth in the bed the best soil for Melons is a good sound turfy loam, with a little bone-meal mixed with it, and a little soot. Liquid-manure may be given when the crop is set and swelling fast. Ventilation in proportion to needs must be given freely from the time the plants are set out till the fruits are ripe, and then no shading will be required. In ventilating a Melon-frame begin with a prop ½ inch thick at the back—if a two-light frame this may be increased as desired—and the frames damped and closed from 3 p.m. to 3.30 p.m. Of course, no ventilation will be required on cold days. As regards temperature of bed, if made as proposed above (half leaves, half manure), we need not think about figures, as the temperature of such will exceed 85 degs. at the highest, and is not likely to go below 75 degs. at the lowest.

SHORT REPLIES

M. Coningham.—A selection of four Tulips, bronze and flame:—Gesneriana major, Scarlet Emperor, Bronze Queen, and Flame.

H. J. Camden, Wantage.—The Rousham Park Onion was raised at Rousham Park, Oxfordshire, the seat of Capt. Cottrell Dormor, many years ago, by his head gardener, whose name, as far as we can recollect, was H. Wingrove.

NAMES OF PLANTS AND FRUIT

E. N., Balcombe.—Eucryphia pinnatifolia, a hardy Chilian shrub. Prefers a moist, peaty soil.

Miss V. Kenion.—Please send fully-ripe typical fruits. Impossible to name from the immature fruits you send us.

E. G.—Apples: 1, Red Joaneting; 2, Duchess of Oldenburgh.

GARDENING APPOINTMENT

Mr. Bruce Hewitt, formerly gardener at Buriton House, Buriton, Petersfield, has been appointed head gardener to Herman Andrae, Esq., Elmers Court, Lymington.

TWO POPULAR HOTELS IN CENTRAL LONDON

OPPOSITE THE BRITISH MUSEUM

THACKERAY HOTEL

GREAT RUSSELL STREET, LONDON, W.C. 1

NEAR THE BRITISH MUSEUM

KINGSLEY HOTEL

HART STREET, BLOOMSBURY SQUARE, LONDON, W.C. 1

FIRST CLASS TEMPERANCE HOTELS

200 Rooms in each Hotel — Modern Arrangements

REFINEMENT — ECONOMY

ELECTRIC RADIATORS IN ALL BEDROOMS

Bedroom, Breakfast, and Attendance

FROM 8/6 per night

Illustrated Booklet on Application

TELEGRAMS:

Thackeray Hotel: "THACKERAY, LONDON." Kingsley Hotel: "BOOKCRAFT, LONDON."

For success in your Garden USE

THOMSON'S MANURES

On the market for over 50 years, they still hold first place for QUALITY and RESULTS. They are safe, sure, and lasting. The direct result of many years' practical experience in gardening, they stand unrivalled at the present day for all Garden Crops.

Prices:—**VINE, PLANT, AND VEGETABLE MANURE**—a Perfect Food—1 cwt., **30/-**; 56 lb., **16/-**; 28 lb., **9/-**; 14 lb., **5/-**; 7 lb., **3/-**; tins, **1/3** and **9d.** **SPECIAL TOP DRESSING MANURE**—an excellent stimulant—56 lb., **17/-**; 28 lb., **9/6**; 14 lb., **5/6**; 7 lb., **3/-**; tins, **1/3.** **Carriage paid on 28 lbs.** and up.

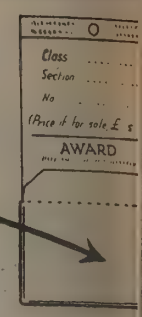
WRITE FOR OUR BOOKLET—POST FREE ON REQUEST

SOLD BY NURSERYMEN AND SEEDSMEN EVERYWHERE

Or from Sole Makers, WM. THOMSON & SONS, LTD., TWEED VINEYARDS, CLOVENFORDS, SCOTLAND

TO HORTICULTURAL SECRETARIES

NEW COMPETITION LABEL



This Flap perfectly conceals the competitor's name till after the award has been made.

The Label can be used for any Cl Competitive Exhibition.

When the Award has been made the Label opened, the Class, the Num of the Exhibit, the Award, and Exhibitor's Name are all displayed **ONE** side of the Label. No handl is therefore necessary.

FROM ALL STATIONERS AND PRINTE

Illustrated Leaflet, with Prices, on application.

GEO. WATERSTON & SONS, L

Manufacturing Stationers

WARRISTON ROAD, EDINBUR

USE IT

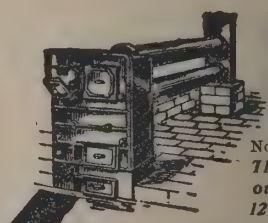
TO KILL GREEN-FLY IN

Garden & Greenhouse

RAIN means wet feet unless your Boots* have Uppers of "Beva" WATERPROOF LEATHER

*Look for the "Beva" on the looping.

PLEASE MENTION "GARDENING ILLUSTRATED" WHEN WRITING



Paying Poi about "STOURBRI Greenhouse Bo

No. 1. *They burn without attention for 12—14 hours*

Write at once for special price, sta size of house. Address, Dept. I

J&W. WOOD L Stourb

EUREKA WEED KILLER

LABOUR SAVERS. "EUREKA" LAWN SAND. SOILFUME. NICOTINE, INSECTICIDES, FUMERS, SPRAYS, AND OTHER CHEMICALS AND SUNDRIES. SEE LIST. PLEASE ASK YOUR AGENT FOR THE EUREKA ARTICLES - THEY ARE ALWAYS SATISFACTORY. IF ANY DIFFICULTY IN OBTAINING, WE SEND DIRECT, CARRIAGE PAID

Only Address: TOMLINSON & HAYWARD L.TD LINCOLN

BENTLEY'S

WEED DESTROYER

(POISON)

Stands for

Strength, Reliability, Economy

Stronger than any other. One application keeps gravel paths and drives clean for nearly two years. Commands the largest sale both at home and abroad, with a rapidly spreading popularity

Reduced Prices:

Concentrated Liquid (1 to 80)

1 gall. 6/9; 2 galls. 13/-; 3 galls. 18/9; 6 galls. 35/9; 12 galls. 69/-; 24 galls. 134/3; 40 galls. 218/3

Powder (1 to 25)

4 tins 9/3; 8 tins 17/10; 12 tins 25/6; 20 tins 40/9; 40 tins 78/-

BENTLEY'S

QUASSIA EXTRACT

(Compound Liquid)

NON-POISONOUS

Infallibly destroys Aphis in all its forms. It may be used anywhere and everywhere with absolute safety, and is the most economical of all Insecticides.

One gallon makes from 80 to 100 gallons of wash.

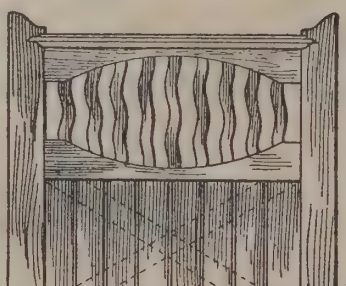
5 galls., 8/6 per gall.; 1 gall., 8/9; ½ gall., 5/-; 1 quart, 3/-; 1 pint, 1/9.

Carriage paid on 15/- orders and upwards.

Sole Manufacturers:—

JOSEPH BENTLEY, Ltd.,

Chemical Works, Barrow-on-Humber, Lincs.



Sanctuary!

The true meaning of a garden. But to keep so, there must be a gate which will close against intrusions of all kinds.

Garden gates which harmonise with th surroundings, hang true, do not creak, strong but elegant, can be seen at our W End Showroom,

55, RATHBONE PLACE,
OXFORD STREET, W.

or a postcard will bring illustrations and p ticulars from:

Woco Door Company

Dashwood House, London, E.C.2

Telephones: LONDON WALL 9902-4

Telegrams: "WOCODORS," AVE. LONDO

GARDENING ILLUSTRATED

77—Vol. XLVIII. AUGUST 28, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

PHAERO-
UM VAR.
DENS ... 523
ings 516
AUTUMN-
... ... 515
'alli 520
es, fungus
... ... 528
crophylla,
ting 528
ench, for
nd early
... ... 525
Bedding, plans for spring 520
Bulbs to plant early ... 517
Buphthalmum (Telekia) speciosum ... 518
Campanula persicifolia 519
Campanula versicolor 518
Campanula Zoysii ... 516
Ceanothus Henry Desfosse 517
Celery, earthing up ... 525
Cinerarias dying ... 528
Cinerarias, housing of 523
Cistus Silver Pink ... 516
Clematis, treatment of 527
Currants, Black 526
Cyananthus lobatus 516
Cytisus Andreanus, how to propagate ... 528
Dahlias, modern ... 518
Ferns for heated house 528
Fir trees and Thorns, propagating 528
GARDEN IN SUSSEX, A COTTAGE 520
GARDEN, IN THE SPRING 517
GARDEN, SCENTED LEAVES IN THE —II. 519
Grapes, scalding of ... 526
Gypsophila fratensis 518
Iris Black Prince ... 519
Lilies, Scarboro' ... 523
Loganberries 526
Mezereon, the 522
Mushroom season, the 525
National Dahlia Society 516
National Rose Society 516
Novel aquarium exhibition: Competitive show of aquatic plants 516
PERGOLAS 522
Plants for a hedge ... 528
Plants for potting, hardy 523
Plants for winter blooming indoors ... 523
Primula Littoniana 516
Rose Briars 528
Rose Caroline Testout 516
Rose Grus an Teplitz, pruning 528
Shrewsbury Floral Fete 527
Snowdrop tree (Halesia diptera), the 523
Statice profusa 516
Stewartia pseudo-Camellia 516
Vegetables and flowers to sow in cool greenhouse during August 528
Veratrums 516
Wood, ripened 526

Autumn-sown Annuals

Those who have not tried sowing hardy annuals in autumn should not miss the opportunity of so doing within the next few days. The first week in September is quite late enough to sow. Some readers do not succeed with hardy annuals because they delay sowing until too late a period

E who have never grown hardy ıls from autumn-sown seed have ɜt realised their worth. There is no ɔn between plants that have made vth in late spring and early summer as have gathered strength and obm root-hold by the time the genial ɔring commences to encourage root Godetias with stems as thick as the fishing-rod, Saponaria and Nemoering some 2 square feet of soil, ınd Collinsia 2 feet high and 18 rough individually, are what one autumn sowing. I know of few handsome and effective as wellınuals, grown for their appearance lual specimens as well as for the ch they produce in the mass. There plants which have no beauty of th speaking of—we value them for iancy or other good qualities—but ırdy annuals combine grace with ɔss in no small degree, although ıly perceived in the case of wellants. Many do not succeed well ly annuals, for the simple reason delay the sowing until too late a This is more especially productive of quences where the soil is of a close, ıolding, and, therefore, cold nature; g plants have no time to obtain a of the ground ere winter grips them and often fatal embrace. If they lled outright they lose that freedom ır which they must retain if they eld us the full measure of their

nore useful and beautiful flowers ıve for the filling of vases, epergnes, the annual Poppies when loosely Poppies during recent years have ɔry popular, and at the present day hem in demand. A few years ago e hardly tolerated in the garden. ɜe, within recent years, been very ɔroved, and numerous distinct and ɔolours have been added to the list. ıe most useful are the many colour the Field Poppy that have been so proved that an exquisite race has evolved which, when in flower, will most fastidious and keep up a sucr many weeks.

ɜt week in September is quite late ɔ sow, and then the position should and at the same time swept freely tumn breeze, which imparts health and that power of resistance to climatic vicissitudes during the winter which enables a plant to retain its vital powers intact. Take care that the young plants never become crowded, thin them out to 2 inches or 3 inches apart as soon as they are well in growth, and by mid-October they will have

"Blue" Shirley Poppies

The colour of this new strain is really a heliotrope-grey. The flowers are self coloured —some lighter and some darker

developed into fine sturdy little specimens. In a general way it is not practicable to sow where they are to stand, but if they are to be transplanted let it be done, if possible, quite by the second week in October, so that the roots get some hold of the ground by the winter. This is important, as it sometimes happens that hard frosts with drying winds come in November and December, and then there is not sufficient root action to keep the foliage full of sap, and the leaves then wither and untimely die away. In heavy soils early transplanting is more necessary than where the natural staple is warm and comparatively dry, though in soils which easily parch in hot weather it is best to get the plants into place as early as possible, as then they do not suffer so much when coming into bloom from heat and drought. It is often said that soil should not be rich for annuals, but if you give them room enough you will scarcely err in this respect, as the more luxuriance the finer in quality and larger in quantity will be the blooms. A word of caution is necessary—the luxuriance must be under control; there should be little signs of it before spring, as a too sappy autumn growth invites destruction. A top-dressing of some artificial or of decayed manure early in March will best answer the purpose, as the spring rains will carry the nourishment down to the roots by the time they most need it. In planting quite 6 inches should be allowed from plant to plant, and if they are to be grown in a mixed border three plants together will be the best arrangement. Although this is a mere question of taste a single well-grown specimen looks well, whilst a square yard or more of colour is most effective. Erysimum Peroffskianum, for instance, produces an extremely fine effect when massed, the bright orange tint of the flowers being almost unique; whilst such shrubby-growing, compact-habited kinds as Godetia Lady Albemarle, which clothe themselves abundantly with foliage, do not so much need to be massed in order to display their beauty. One of the finest and most useful of hardy annuals is Clarkia pulchella, and those who need cut flowers should grow it largely; the flowers last long in water and the whole appearance of the plant is light and elegant. It is also one of the hardiest kinds in cultivation. Being of much-branched habit and rather brittle, it, however, requires some support, as, when the plants are large and coming into bloom, rough winds are apt to break off large sprays. Strong Birch sprays inserted here and there so as to catch the main branches will preserve them intact; there is no need to tie, as the shoots drop into the forks as they grow and there remain. Collinsia bicolor also requires support in a similar manner, as do all that grow anything like a foot high and which branch. Bartonia aurea is an old annual, but one which has lately become rather popular; it is showy and distinct both in foliage and bloom. Nemophilas, blue and white, and Silene pen-

dula are well known, but the pretty little Leptosiphons are not much grown; they are charming little neat-habited plants with beautiful rosy-pink or golden-yellow flowers, and give satisfaction only when sown in autumn. C. P.

NOTES OF THE WEEK

National Rose Society

IN response to a widely-expressed wish it has been decided that a dinner of the National Rose Society shall be held at the Savoy Hotel, Strand, on Friday, September 10th, at 6.30 p.m. This is the first day of the autumn Rose Show, and members may bring ladies or gentlemen as their guests. Tickets are 10s. 6d., exclusive of wine. Morning dress. Application for tickets should be made early to the Secretary of the National Rose Society, Mr. Courtney Page, 28, Victoria Street, S.W. 1.

National Dahlia Society

The annual show of the National Dahlia Society, which is to be held on Wednesday, September 8th, at the Royal Horticultural Hall, Westminster, promises to be one of the finest ever seen. It will be opened by the Right Hon. Viscount Ullswater, G.C.B.

Novel aquarium exhibition: Competitive show of aquatic plants

Aquatic plants, which seldom receive the attention they deserve, will form part of the Home-Aquarium Exhibition which is to be held at the rooms of the British Sea Anglers' Society, 4, Fetter Lane, London, E.C., on the 24th, 25th, and 27th of September. It is the first show of the kind in this country. There will be nearly 200 tanks on view, tenanted by many kinds of aquarium fishes from tropical and temperate climes, as well as other forms of aquatic life, animal and vegetable. The primary object of the show is to demonstrate that, with suitable growing plants, a tank may be set up so as to be more or less self-supporting, and owing to the exchange of gases on the part of fishes and plants, independent of change of water. Species of aquatics rarely cultivated outside aquarists circles will, apart from more familiar water Lilies and various other pond plants, be shown by professional and amateur growers, and the beauty of the specimens in their placid environment should bring home to visitors the possibilities of their culture. The exhibition has been organised by the British Aquarists' Association, 14, Astonville Street, Southfields, London, S.W., from whom full particulars may be obtained.

Cyananthus lobatus

During August, when so many alpines have gone out of flower, the handsome purplish-blue blossoms of this dainty rock garden plant are especially welcome. Cyananthus lobatus is certainly more difficult to manage than many of the commoner rock garden plants, but it is a subject well worth striving with. It thrives best in a position which gets morning sunshine and shade for the remainder of the day, and it enjoys a sandy soil containing a liberal amount of leaf-mould. Good drainage seems to be an essential, and the addition of gritty material to the soil will help in this direction. Propagation may be effected by cuttings taken during the autumn and inserted under shaded hand-glasses. The plants may also be divided in spring, which is also the best season for planting. A few stones placed round about the plants will help conserve moisture during the summer. This desirable plant belongs to the same family as Polemonium cœruleum, the familiar Jacob's Ladder. H. GREAVES.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Campanula Zoysii

THE notes on Campanula Zoysii are interesting. I know of a very fine plant which has been in the same garden in this locality for at least 20, and probably more, years, and which is growing on a small mound of rockwork in loam, sand, grit, and leaf-soil. No one could desire a more healthy or free-flowering plant, and there is no special provision made for it than for other Alpines on the same mound. I knew another plant in a garden not much more than a mile away from the first place, where in the time of its late owner C. Zoysii was equally well grown under much the same conditions Personally, I have lost several plants in a garden, badly slug-infested, and illness and absence from home prevented me from doing much to counter the attacks of these pests. They are the most potent enemies of C. Zoysii, and I am disposed to agree largely with what Mr. Reginald Farrer said about C. Zoysii:—"In fact, under any good treatment in stony soil, sufficiently watered, drained, and open, C. Zoysii may always be relied upon to do its ample little best for you if trusted so to do, and not incessantly cosseted and worried with attentions it does not want." S. ARNOTT.

Dumfries.

Rose Caroline Testout

Will Mr. Taylor add to my obligation to him by stating when, where, and by whom the cross between Lady Mary Fitzwilliam and Mme. de Tartas, and which produced Caroline Testout, was made? My question is prompted solely by a desire to obtain authentic information, so that I may not again stumble—always a painful thing to do—in connection with this Rose.

A SCOTTISH GARDENER.

Alpine cuttings

Some years ago I read an article written by Sir Frank Crisp on Alpine cuttings. He recommended putting in the cuttings in sand and leaf-mould under bell glasses or small frames in full sun, no shade at all, and watering once or even twice every day. After three weeks remove all covering, and in another three weeks the plants are ready for planting out. I have tried his plan ever since, taking the cuttings early in May till the end of August. I have hardly ever had a failure and have often been given treasures and told that they were impossible to propagate. The hot sun makes the plants short, stocky, and strong.

N. S. C. GODSTONE.

Cistus Silver Pink

One of the most beautiful Cistuses, and not very well known, is Silver Pink, which name exactly describes it. It is a lovely, soft silvery-pink and grows more loosely and gracefully than C. Sunset or C. purpureus. It was a mass of flower all the summer, and it is beginning to show colour again. It roots most easily from cuttings and seems a quick grower, but it wants good soil, plenty of leaf-mould, and chips. One plant I put on a ledge of rock in rather poor soil was a complete failure. N. S. C. GODSTONE.

Statice profusa

Mr. Blair (p. 490) does not over- Statice profusa. As a pot plant it is the most effective, in its season, for house or conservatory. At one time, to specimen size, it was a favourite wi hibitors who staged collections of green plants. Mr. Blair may, possibly, rem the fine examples shown at Edinburgh late Mr. George McKinna, who wa dener to Sir John Usher at Norton, an was a specialist in S. profusa. Perha finest display of the plant which I ev was at an International Show in Lond group of plants (I think from the gard the late Hon. N. C. Rothschild at Bucks) consisted solely of S. profusa, tion Carola, and Isolepis gracilis. lightness, elegance, and effectivene "character," in short—I have never anything finer, and it was deservedly aw the leading honours at the show. W. *Mabie.*

Stewartia pseudo-Camellia

The Camellia is once again being in for, and although the plant is not alto hardy it may succeed in warm and sh places near the sea, grown against a wa protected during winter. I refer, of to Scotland, for I know that in the So England the Camellia can be grown open. Personally, I always advise th stitution of Stewartia pseudo-Camell out-of-door work in Scotland—even ne sea. It is certainly capricious, but muc so than the Camellia, and its single f are quite as attractive as those of th Camellia. The chief requirements Stewartia are shelter, warmth in sprin a deep mellow soil. Given these, s may be expected with confidence. I way, the stamens of the blooms of S. p Camellia differ from those of other va (S. virginica, for instance) in being yell stead of red. A SCOTTISH GARDE

Veratrums

I was interested in the note and the tration of Veratrum californicum whi peared in the issue of August 14. Th Countess of Selkirk was an admirer common plants, and while I was at F the Veratrums were well represented. variety mentioned by Mr. Mark Fe was not, however, one of them. V. however, like the others (V. virid V. nigrum) was not erratic in resp blooming, as it threw up spikes luxu every year. The foliage, I think, bef flower-spikes appear, is more interesting the spikes themselves, the flowers rather dingy. The white Hellebores, Veratrums are called, are supposed rather poisonous. I grew them in ra shaded position in a border, which wa deep, damp, rather peaty nature, and a pond. They are readily increased b sion. W. M

Mabie.

Primula Littoniana

This is one of the most distinct Pr in commerce. I well remember the tion it caused when exhibited by M Bees some 17 years ago. It was al hibited by the same firm at the H House Show in July, 1909, when servedly received a First-class Cer from the R.H.S. Since then it has no much in evidence until during the la years, when a giant form was stag superb condition by Messrs. Oliver Hunter at the Chelsea Show.

For some years I have tried to worl stock, but beyond a few isolated exa P. Littoniana has not been a success. fore it was with interest that I read the

by "C. M." in the issue of August e says the plant will grow "luxuri- ong stones, good friable loam, leaf- d grit, and not surrounded by water." No one would plant it in water. How many plants has ' in flower, how many years have n in their present position, and do ease in vigour as the years go by? in the north it grows luxuriantly, south and west it does not succeed

views in the spring garden

At Castleford, Chepstow, Mon., we or five plants flowering, but these d under glass, and the crowns built stood in a cold frame. They were a corner of the rock garden last it would be presumption on my logmatise as to its requirements. of the county where P. Littoniana would be welcome.

T. W. Briscoe.

rd Gardens, Chepstow, Mon.

eanothus Henri Desfosse

cretary of the Royal Horticultural rites with reference to the new shown by Messrs. R. Veitch and he R.H.S. meeting on the 27th should be grateful if you would ive publicity to the fact that Henri Desfossé is the correct he plant which received an Award t the Royal Horticultural Society's July 27th under the name of Henri Defossé."

Bulbs to plant early

the time when many small bulbs planted. Many people complain of failing, because they do not plant enough. It is not unnatural that ate to disturb their gardens whilst still comparatively bright with nevertheless they would find it re- to look ahead. Above all, be sure Anemone St. Bavo now wherever vacant space, or one becoming y soon. With me A. St. Bavo com- flower in February and continues to do so till May. Nothing brightens a garden in spring time more than this Anemone. It is quite hardy and easy to grow and does not require digging up annually and storing as so many bulbs do. All it needs is to be planted now in ordinary garden soil and a little leaf-mould in full sun and left until overcrowding compels division. What is more, it is everybody's flower owing to its cheapness (some 7s. a hundred), and seeds freely.

August 23, 1926. B. Newbury.

In the Spring Garden

When a portion of the garden is given exclusively to flowers that bloom from the end of March to May it is convenient that it should be in a rather retired place that need not be visited at other times of the year. It is never satisfactory if the spring garden has to be emptied to make room for summer flowers, for this makes it impossible to have any of the early-flowering shrubs or any of the deep-rooting perennials that are needed for large and distinct foliage, and can only, at best, give an uncomfortable impression of a want of permanence. The main border in the little spring garden, as shown in the illustrations, is at the back of a high stone wall, and has a northern exposure. The line of the wall is continued by a Yew hedge which returns forward at the end. Some bold clumps of Veratrum are at the back, with the Fern-like Myrrhis beyond. At the front of the near end some plants of broad-leaved Saxifrage (S. cordifolia) give a feeling of solidity. Then come drifts of pale yellow bunch Primroses with the lovely Tulipa retroflexa and a groundwork of Myosotis dissitiflora, with yellow Alyssum and double Arabis following in front leading on to Aubrietia. Tall late pale yellow Tulips are at the back. The colouring then changes to shades of purple and pink, dark purple Honesty at the back and purple Wallflowers, with a bold, long group of the purple-leaved Sage; then the nearly black Tulipa Noire and the useful pink Clara Butt, and at the front and running up between, a strong planting of the deep purple Viola gracilis, with the dark-leaved Ajuga. This leads to the Wallflowers of the colouring between purple and red, with red Tulips and blood-red Wallflowers, and a good between-planting of the reddish-leaved Heuchera Richardsoni. Then come strongest tints of orange Wallflowers and Tulips.

Beyond the hand-gate, where a cross path leads through the Yew hedge, is a gorgeous mass of orange; Cheiranthus Allionii and orange Tulips in front, then some deep yellow and orange Azalea mollis, with a backing of Berberis Darwinii and one of the dwarf red-leaved Japanese Maples. I feel that no excuse is needed for emphasising the importance of the non-blooming plants, the Heuchera and the purple-leaved Sage. Where there is a quantity of flower, even if it is ever so carefully considered for proportion and good colour arrangement, there can be no doubt but that its value is very greatly increased by a judicious setting of this quiet foliage.

G. J.

Modern Dahlias

THE appearance of plantations of these flowers is different in many ways from what it was in olden times on account of quite a changed style of bloom to that formerly in evidence. In the first place, the height of the plants generally is quite 3 feet lower than that we were for a long time accustomed to, and therefore in the matter of securing the branches things are made easier. Unsightly poles with flower-pots upside down filled with hay to catch earwigs are past appurtenances; so, too, are shades placed here and there to protect some opening bloom.

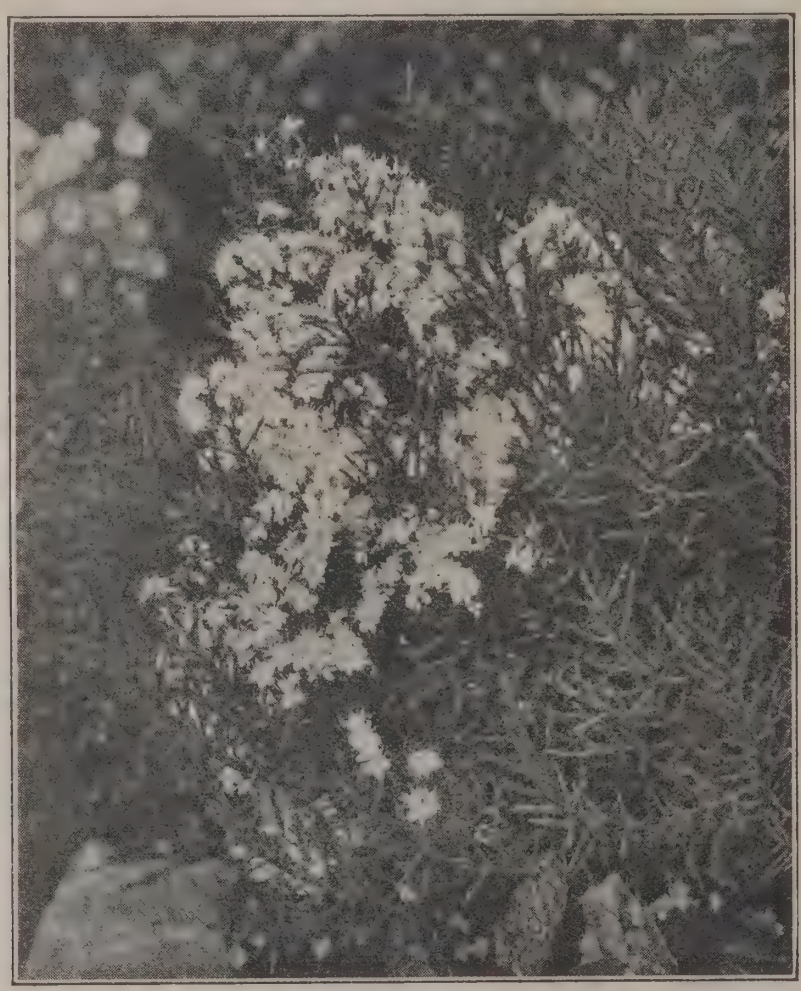
These items refer to an exhibiting period, and there are still a few growers who practise ancient methods for show purposes. Generally, however, putting up Dahlias for public show is similar to that in connection with most flowers. It is simply cutting them and placing in vases with a good length of stem. The modern type of blossom started from the time when new varieties ceased to be recognised, with wire supports to keep the bloom upright, but for years raisers, in their efforts to evolve what was once considered the perfect, or rather that which was the popular form, actually discarded seedlings as weeds, but very similar to the kinds liked at the present time.

A variety esteemed now need not have any special character as to formation. It may, of course, not be too ragged, but it must be of taking colouring, and the flower-stem must be lengthy as well as rigid to pass muster. This, again, should be free to flower, preferably opening the first blooms in August. Practically popular taste has left the handsome specimen bloom for an effective garden plant. As time goes on it is just possible that all the qualities, ancient and modern, will be rolled into one—garden plants with shapely flowers as well; that is, if one old custom be followed, referring to thinning of branches.

Public parks have become the centres where the merits of Dahlias are appraised and general fancy seems to go to a few sorts only. Coltness Gem, the dwarf-growing bedder with single red blooms, is a favourite, also Pink Pearl, with little in individual bloom to recommend it; yet the colour is attractive, and it is dwarf and free-flowering to a fault. Then Lemur, with very dark bronzy-green Fern-like leaves and near on black-coloured single blossoms; Crimson Flag, neat and striking; Our Annie, distinct in primrose and pink.

In these notes I do not intend to provide a list of names of modern sorts; this can be left till the flowering season is past or when planting time comes again. Here I am only trying to show how changed the Dahlia taste has become. The writer, perhaps, has a good opportunity of noting such, as it is some years back since the variety Edith Carter was spotted among my seedlings. I scarcely hope to rear a better, as I have evidence that this is being grown throughout the world; in some parts, in fact, judging from pictures, far finer than be cultivated at home.

The culture of modern Dahlias may, rate, be an improvement on that at on practised. We have only to put the pl ordinary earth in open positions and the roots if rains be scanty, then t branches, that is all; simplicity itse the same time, those who cultivate garden display miss a splendid item wh rest is left to chance. If at flowerin the soft growths which come so ple near and under the opening buds be re or, indeed, most of them, then the plant would benefit; besides, if left, th only take away from the effect of the fl but usually refuse to open blooms frosts set in. A natural growth sou very well, but if this can be impro cutting away the superfluous, why not



Veronica cupressoides in full bloom

For most of the year this bush imitates a small Cypress, but in early summer suddenly becomes sprinkled with pale lavender Speedwell flowers

Campanula versicolor

This handsome species is by no common, and might be considered unobservant to be merely a variety pyramidalis, but it is in every respect finer and a true perennial, although, carelessly handled, not a long liver. best increased from cuttings secured i September, but may be divided in sp due care be exercised. While it is p hardy it is always as a pot plant that grown it. If the cuttings be inserted the edges of 5-inch pots filled with very compost they may be set in a cold fra several weeks and moved to a cool house at the approach of hard fro February they should be potted off sing 3-inch pots, shifting into the 5-inch siz the little pots are filled with roots, placing them, when ready, in 7-inc using a good substantial compost. plants begin to bloom in early July, faded flowers are removed, continue tive till end of September. At one wintered the plants in a cold fran found that damp played havoc at ti now keep them constantly in a hous which frost is merely excluded, an little difficulty in preserving them t the winter. The plants do not, h throw up many cuttings, and so it is to get up a decent stock. This pl bloomed exceptionally well this year a much admired by visitors. As the na plies, the flower is of several colours, white, blue, and purple, these b beautifully and forming a very pleasi bination. C. F

Preston House, Linlithgow.

Buphthalmum (Telekia) speci

Though undoubtedly coarse, this is a striking plant in the herbaceous just at present. Of considerable stat heads of golden-yellow flowers tow above many other things, and when from a distance their value is und In small or narrow borders no one recommend this, as it would be enti of place, but where space can be afford a group of half-a-dozen or so the p worth inclusion. A SCOTTISH GARD

Gypsophila fratensis

This is a charming little plant o introduction, producing low, spreadi of silvery leaves, and not more than high; even when in bloom not mo 4 inches. It is quite distinct fr prostrata rosea, in its dwarfer, dens more silvery growth and in the brigh earlier flowers, which are borne so p that the leaves are lost in a storm bloom. I find it a most useful pl clothing small rocks and as an ed raised beds of other flowers.

cented Leaves in the Garden—II.

By F. A. Hampton

(Continued from page 502)

ıNTS which are free of their scent, so ıt you can smell them at a distance, not make a very long list in this ɔ, for it needs a fiercer sun than ours ıg the scent of Thyme, Cistus, Rose-Bay, and Myrtle into the air. The ı-leaved species of Cistus give us, now ;ain, the warm, balsamic fragrance of ıum on a really hot day, but almost me scent is given off every spring by lsam Poplars (Populus balsamifera and :hocarpa) when the sticky leaf-buds st beginning to unfold, and it spreads and wide in the woods that it is often ;ible before the tree comes in sight, one of the sweetest scents of the vside.

ıea elegans provides a very rich and ul scent of the same type. At a little :e from the plant it suggests a mixture ense and Russian leather, but if the are handled they give off a smell of Currants, which (like all the Black ıt smells) is unpleasantly like a tom it is too strong. Humea elegans as a biennial from Australia is not strictly en plant, but it may be bedded out for mmer and is well worth the trouble, true sweetness can only be appreciated open air. The leaves make a pleasant ırri for those who like a heavy ıtal" type of scent.

us odoratus is grown, though less often ts easiness and beauty merit, for the of its flowers and large decorative but it has a soft and rather subtle suggesting a mixture of Cedar and wood, which drifts about the bush on lay and comes from the sticky magenta which clothe the young shoots.

equally subtle scent, and perhaps of ne group, is given off by the leaves of ca cupressoides, especially on dewy gs or after a shower. Here a sug-ı of Violet or, rather, Orris is combined with the Cedar wood, and the effect is a cool, earthy fragrance very like that of the Indian Khus-khus. The nomenclature of some of these New Zealand Veronicas seems to be a little obscure, but the scented V. cupressoides makes a grey-green bush which, for most of the year, imitates a small Cypress, but in early summer suddenly becomes sprinkled with pale lavender Speedwell flowers.

Scents of the Violet group are rare in gardens, but we meet another in the "excellent cordial smell" of dying Strawberry leaves which Miss Jekyll has so well described. It is given off only by the wild Strawberry and its varieties among the Alpine Strawberries, and the true scent is never found in the Chilian hybrids, which are the ordinary garden Strawberries of to-day. But a clump of the double-flowered Strawberry and the old Elizabethan "Plymouth Strawberry" have been planted here in the hope that they will produce the characteristic scent as their leaves turn brown in the autumn. Cedronella triphylla, sometimes known as "Balm of Gilead," has a rough, refreshing scent of Camphor and Lemon, which it gives off freely on sunny days, especially when the heads of pale lavender flowers are just beginning to open. The petals, like those of all Labiates that have been examined, are scentless, but the essential oil in the calyces has a slightly more delicate scent than that of the leaves. The plant comes from the Canary Islands and is none too hardy, but it survived last winter under a south wall, and it is not difficult to keep, for cuttings strike easily and grow quickly.

These are just a few of the plants that are worth growing for the scent of their leaves. There are many others, yet not so many that selection is embarrassingly difficult, and there will always be room in the garden for a new plant with fragrant leaves. For some we may look to the plant collectors who are busy in remote parts of the world and have lately provided us with new dwarf Rhododendrons with scented leaves, but I think that we sometimes forget the possibility of variation in the scent of known plants. For the scent of a plant varies nearly as much as the colour of its flowers, and careful attention to its variations and sports from type may at any time reward us with the discovery of a new scented plant, such as the Bergamot Mint and Thymus fragrantissimus, both of which are abrupt departures from the type which might easily have passed unnoticed.

Cedronella triphylla, or Balm of Gilead

It has a rough, refreshing scent of Camphor and Lemon, which it gives off freely on sunny days

Veronica cupressoides

A subtle scent is given off from its leaves, especially on dewy evenings or after a shower

Campanula persicifolia

This plant is perfectly hardy. The flowers, which are blue and semi-double, are produced in abundance all up and terminating the leafy flower-stalks. These are supported on straight stems 18 inches to 2 feet in height, according to the nature of the soil. In deep loam the plant flourishes without any preparation, but where a place has to be prepared for it it is advisable to add plenty of good material. In a somewhat shaded position the plant attains the greatest size and beauty, and forms large tufts which require dividing every second year at least; in fact, every year should be the rule in some districts.

H. Stevens.

Iris Black Prince

This is a fine Iris for the border, which, by reason of its good constitution and unusually dark velvety purple falls, rarely fails to excite admiration. It grows about 30 inches high, and was, I believe, raised by Amos Perry, of Enfield, about 1900. It blooms with me about the first week in June, remaining effective throughout the month. The flowers are large and freely produced, the standards lilac-purple, falls, as stated above, of a striking rich velvety black, rendering the plant quite conspicuous among others.

E. M.

Plans for spring bedding

EVERY year one notices how general the practice is becoming of planting bulbs and other things for a spring display. No one having a garden can afford to exclude from it blossoms which come in the early year, and bring with them so much brightness and promise. Late in October, may be, will find us clearing the borders of annuals which have done duty. After the ground has been forked over then opportunity will be given to replant it. In Wallflowers alone one has a great asset. What glorious colours these possess nowadays! Vulcan, with bright crimson flowers; Orange Bedder, that will give us rich spikes of orange and apricot-yellow; Purple Queen, Faerie Queen, and Eastern Queen, in primrose and rosy-pink respectively, together with that most brilliant of all Wallflowers, Fire King, an orange-red so vivid as to rivet the attention of anyone seeing it for the first time. Beside their wondrous colourings, we have in Wallflowers perhaps the most fragrant of all our spring blossoms. I believe in planting them as liberally as space will permit, each group in their own particular spot, in order to gain the best effect. Interspersed in the borders will be groups of May-flowering Tulips selected from Darwin, Cottage, and other sections. I am particularly interested in them because some of the bulbs I shall plant this autumn are those I have "brought up" as bulblets, and they will bloom for the first time, and will be a proof that an impression which appears to find favour in some quarters that "Tulips after the second year are no good," is beside the mark. I have grown these children of the Tulip family before and have been pleased with the results, whilst admitting that it all meant labour. But this is lost sight of when from between a groundwork of Forget-me-nots of deepest blue, or the white cushions of Woodruff, there appear some May morning the stately blossoms of Mr. Farncombe Sanders, Pride of Haarlem, Harry Veitch, Clara Butt, Inglescombe Yellow, Gesneriana spathulata, John Ruskin, and the rest of these glorious spring flowers. I have little sympathy with people who say about bulbs in general they do not grow them because they want a lot of looking after. Such folk only enjoy their garden for a brief few months if they are dependent on the plants that commence their flowering period in June. Let me commend all who can plant small bulbs in positions where they can remain undisturbed for years not to overlook such attractive, well-known things as Aconites, Scillas, Snowdrops, and Chionodoxas. Have a cluster or two of Bluebells (Scilla campanulata in its white form) to bloom simultaneously with Tulips and Wallflowers. They make the garden very gay, and once planted may be left many years undisturbed and can always be relied on to flower season by season. Not many, I think, consider the Catmint (Nepeta Mussini) as a spring-blooming subject, yet if one can get in young plants this autumn they will be rewarded with flowers from May onwards. A number of cuttings I struck in the greenhouse last March started blooming in less than two months, and have been in flower the whole of the summer. Those unacquainted with this hardy plant can scarcely credit with what freedom the flowers are produced. Another blue flower well worth mentioning is the Cynoglossum, a biennial which yields blossoms similar to a Forget-me-not and is at its best in May and June. That means one may have its beauty along with Tulips and Wallflowers. It is a striking blue almost akin to the Anchusa.

How many consider in planning for spring display think of the Trolliuses—the Globe flowers—yet these commence their beauty stage from May, and last year, amongst Tulips, they provided tints of yellow and orange concurrently with them. Brompton Stocks to-day are back numbers in many gardens, but time was when they were one of the attractions in May and June along with Sweet Williams, and formed connecting links with the summer pageant.

Most people in these days plant bulbs they are worth all the joy and pleasure bring, and one may enhance their bea great deal by growing in conjunction them some of the plants I have mentio

W. F. De

A Cottage Garden in Sussex

THE stone of which the cottage was built had been quarried out, leaving an almost perpendicular drop some 20 feet in front of windows which faced due south. Here, at its steepest part, the bank was shored up, or "spiled," after the manner of the district, with rooted "bats" of Willow, much overgrown with Bramble. On the west side of the cutting the bank dipped gradually from 10 feet or 11 feet to 7 feet or thereabouts below a quick-set hedge. On the opposite side the quarry had been cut close down to the level of a tiny spring-fed stream, or "dyk," as the local people call it, apparently a Sussex intermediate form of dyke-ditch, which runs down to the infant Rother at the bottom of the hill. In the hollow, old Apple trees drooped Lichen-covered boughs almost to the level of the grass; a sight to rejoice the artist, however much it might distress the scientific fruit-grower.

Beyond the dyk rose a coppice, a remnant of the immemorial Andredsweald, that great forest belt which once extended along the north of Sussex east and west into Kent and Hampshire. A garden, as Kipling would have it, "magicked round with Oak and Ash and Thorn."

And we were novices, such limited knowledge of gardening as we possessed gained amid the restrictions and formalities of suburban gardens. Naturally we were somewhat perplexed at first, and only gradually realised what opportunities for distinctive beauty existed in the conditions that lay before us. In due course, however, we found, ready-made as it were, a natural sunk garden, lacking, however, the stiffness and formality usually incidental to that form, each part or aspect suggesting some special interest or line of development. To-day, the dyk side, which in the rear of the house deepens to what is called a gill, backed by the wooded rise, makes fittest setting for moisture-loving plants, Iris, Meconopsis, Primulas, Myosotis palustris, grass of Parnassus, Lily of the Valley, Hemerocallis, Astilbe, and Spiræa, whilst Michaelmas Daisies, Monkshood, and similar strong-growing plants make a cool covert wild garden at the back of the house. The deep bank on the west side, when the coarse weeds and grasses were dragged out, disclosed a charming tangle of wild Strawberries, Dog Violets, and other dainty vegetation, and nowhere else did Primrose and Cowslip flourish so well. Now, side by side with these, Oxlip and Polyanthus, Primulus farinosa, rosea, Juliæ, and denticulata show at their best. Herb Robert and Ragged Robin have as neighbours Geranium ibericum Pritchardi, and sanguineum album. Woodruff is matched with Crucianella stylosa, Vinca minor, and Crowsfoot with Geum rivale, Aquilegia, and Dicentra eximia, and native Ferns are partnered with those of Irish or American origin.

The beds nearest the cottage are planted with typical old English flowers, where neither the China Rose nor the Provence is wanting, nor yet the York and Lancaster, nor the climbing Souvenir de Malmaison (long-flowering, fragrant, and shapely), though the shapeliness is not of to-day's fashion. Rosemary and Lavender, Southernwood and Thyme, of course, have a place, with old garden Pinks and quaint little Heartsease, but these mostly in the flatter and more formal garden behind the house. A Honeysuckle trails over the door and briars grow near the gate. Old E Tulips, loved by artists of old beyon flower except perhaps the Rose, for grace of form and witchery of flam feather, lift their heads in spring in the border, and near them Anemone coron nó, not St. Brigid—perhaps the n favourite since these were dispossess stodgy bedders large and small.

But the greatest demand upon thoug resource was the rough, steep bank a alluded to, which cried aloud for rock not only as a support to replace the V spiles, but as a fitting home for such A as Androsaces, Onosma, and the s Erodiums, on what Mr. Farrer would c raking slopes, and at its lower levels th tians, Dryas, and Campanulas. The ning was a matter for much consider We made a small sketch model in pla of the ground as it stood, and then, c ing upon this, first decided upon a fli steps leading from a path at the highe of the rock garden. These were built the steeper side with large stones, covered by an 8-foot waterfall of Poly vaccinifolium, which, with other veget hides in plate 4 all but the lowest thre steps. Beyond these lies a stone ret wall or cliff, now the home of Thym Androsace, also nearly hidden by a stak bender-supported mass of Wichuraiana On the other side of the steps we emph the natural conformity of the ground, d ing the curve of the bank and bringing wing forward, so that, but for the wa centre pistyll, or water-skein, it resem typical Welsh cwm in miniature. F this the rock bends at a right angle, b ing a little square lawn at a higher lev the main grass plot. This gave us an tunity, first of making two bays facing which in their deeper curves shelter R dias and Haberleas; also another south facing dry wall, to the left of which further rough cape leading to a bog-g of which only some outlying Irises con the picture. In plate 6 the bay-w appears to be built on a foundation of n rock. As a matter of fact, the rock bel damp-proof course was introduced wh were altering and enlarging the cottag crevices now house Sempervivums, E and Dianthus deltoides.

One visitor, who had just returned f visit to Japan, described it as a Jap garden, but this was before the shrub flowers had grown to their present luxu Japanese taste, I believe, severely res any such abundance of plant life as wo terfere with the predominant effect of ture landscape. Our aim was to giv home the appearance of something pla a natural setting, and not the reverse, this the original conditions lent themse

F. H

Asclepias Halli

This Swallow-wort is not often me in the average herbaceous garden. It a peaty soil, in which it grows freely, increased by division in spring. It is a some border plant with grey-coloured f and deliciously fragrant flowers.

Wisley. R. Find

1. The rock garden on the site of the stone quarry
2. Cottage built of stone that had been quarried
3. Wichuraiana Roses on the south of the cottage
4. Polygonum vaccinifolium hiding the stone steps
5. The way to the "dyk"
6. The rock under the stone bay provides in its crevices a home for Sempervivums, Erinus, and Dianthus deltoides

A COTTAGE GARDEN IN SUSSEX

Pergolas

IN southern climes these structures provide a cool walk or retreat during the heat of the day. In this country we build principally to provide supports for our many beautiful climbers. But the shade is there for us to enjoy. I shall not give details as to erection, shape, or size, as this is a matter of individual taste, and the dimensions must be governed by the site. Sufficient to state that the minimum height should not be less than 6½ feet and the width should be sufficient to allow two people to walk side by side comfortably. The uprights should be about 4 inches in diameter, for when the structure is fully clothed with climbers the whole is severely tested in high winds and gales. The ends inserted in the ground I strongly recommend being treated with some wood preservative as it makes for much longer lasting. Where expense is no object they may be set in concrete, and, without doubt, it pays to do so.

Before planting takes place the soil must be well prepared, for the roots must have a free run in a good substantial medium to produce a good covering to the structure. Soil that has not been disturbed for years is not fitted to the growth of hungry plants. In such cases it must be well trenched, and if the subsoil is poor throw out the whole to about 3 feet and replace with soil like that from vegetable quarters. With the lower spit mix in a liberal quantity of manure, bone-meal, and refuse from a rubbish fire. The plants will do well for a long time in a border prepared in this way. Eventually the soil becomes exhausted and top-dressings of rich soil and applications of liquid-manure are necessary. Also fertilisers lightly forked in when the plants are making growth are invaluable.

Of all the climbing plants none are more beautiful than the Clematis. The plants always do better on their own roots, therefore bury a portion of the stem immediately above the point where the plant has been worked to encourage it to make roots. There are so many of these beautiful climbers to choose from that mention can only be made of a few. The florida and patens group bloom early on the previous year's growth, therefore require little pruning. Good varieties in the Florida section are Duchess of Edinburgh and Belle of Woking; Sir G. Wolseley and Lady Londesborough belong to the patens section. The varieties of montana bloom in May, the type having white flowers, but there is a red one named C. m. rubens.

Among the Jackmanni varieties are I. superba, I. alba, and I. rubra, three fine varieties. Good sorts among the Viticella section are Ville de Lyon and Lady Bovill. In the Lanuginosa section are Sensation, Blue Gem, Alexandra, Marcel Moser, Lady Northcliffe, and King Edward VII. Among the Roses we have a wealth of varieties suitable for the purpose. Climbing Caroline Testout, Liberty, La France, W. J. Grant, H. V. Machin, and Marquise de Sinety. *Ramblers:* Alberic Barbier, Paul Transon, Dorothy Perkins, Excelsa, Lady Godiva, Delight, Hiawatha, Goldfinch, Paul's Scarlet Climber, and many others too numerous to mention. Solanum jasminoides is a capital climber in the west and south-west, and Cydonia japonica well pays for a little trouble in training to secure its rich flowers in May.

For winter blooming, Jasminum nudiflorum, with its bright yellow flowers, is most useful. Closely following comes Forsythia suspensa, which, though not a climber, is easily trained as such. Its long, slender branches are clothed in Apri yellow bell-shaped flowers. Among suckles there are some suitable such as Lonicera Periclymenum, La Early White, and the evergreen flexu pale yellow flowers. Polygonu schuanicum is a vigorous and climber, but must be given plenty In summer it covers itself with flowers. Last, but by no means le Wistaria, the king of hardy climb the pergola it is without an equal. is more beautiful when the long r mauve or white flowers are hang the roof of the structure. Let t cover the space at disposal with then establish a method of prunin the young shoots hard back to fo A good sort is multijuga (lilac) an white form. W. m. rosea is also with a rose tint on a lilac ground.

Wistaria in a garden in Kent

The Mezereon

Even in the height of summer bushes of the Mezereon, Daphne quite attractive with the berries succeeded the flowers with w branches were wreathed in spr folks only think of the purple f Mezereum, which is considered one. It has purple flowers and There is a superior variety wi flowers, but the fruits do not di from those of the type. On the the white variety, D. M. alba, is tinct. It is charming in early s its branches are literally covered w of a good white. Then these a by yellow berries, wax-like in th and exceedingly pretty. Young these Daphnes should always be large ones do not transplant readil way of raising a stock is by berries as soon as ripe, and the

t it is well worth while to wait for s reaching flowering size, which will ·ouple of years or so. Where there blished plants self-sown seedlings v appear, either in the vicinity of the or in other parts where the berries ı carried by birds. S. ARNOTT.

Snowdrop Tree (Halesia diptera)

interesting large shrub, and some- small tree in its own country (the stern United States), is the above, ars a striking resemblance to the ved Styrax, a close ally. Unlike iful Snowdrop Tree (H. Carolina), ers are produced in pendulous ı June, long after those of the latter n. A position well exposed to the d always be chosen for it.

M. G. M.

m sphaerocephalum var. descendens

strong-growing Allium was given an d of Merit at the R.H.S. on July It is by no means a new plant, as red in the "Botanical Magazine," in 1794, and is described as a hardy ı native of Switzerland, grown in l garden in 1766. It is one of those plants very seldom seen in our gar- l produces straight, upright stalks height. It thrives in a warm, dry makes a good display with its dark olid heads towards the end of July August, just at a period when many over and colour is badly wanted baceous border.

)OOR PLANTS

or winter blooming indoors

:N the days shorten and the air ws cool in September plants that e been out of doors or in cold frames ther stage of their history, when it necessary to remove them to the e. They may have entailed con- rouble during the past few months ng and general attention, but in he flowers they furnish during the er days no effort should be spared he transference to the house when ı the best condition, and, above all, risk in leaving them outside too ost to mar them. Plants in frames of Primulas, Cinerarias, Salvias, Zonal Pelargoniums, Solanums, Boronias, Camellias, amongst the under review for removal. One finitely point to a day in the calen- ay that after that time it is unsafe ıem in frames any longer, as one guided by the weather and the sea- the same time, the greenhouse ready for their reception so that at e the shift can be made.

ıd bags will keep a deal of frost ıt, speaking generally, there is element of risk in keeping some of in frames that are unheated after middle of September, and it is move them a few days earlier, if ather than place plants in jeopardy. he plants are in the house ventila- d receive special attention, especi- e case of those transferred direct pen. On many a day it will mean ventilators will need to be open at night a certain amount of air ıdmitted. The weather, of course, factor, and at no time is it more to study the conditions than when plants which have been brought up mostly out of doors are removed under glass and a warmer temperature is the order.

It is by no means an uncommon experience for amateur gardeners to find, after some of the plants mentioned have been shifted to the greenhouse, that a change takes place with some of them. They show signs of lacking vitality, and one reason is that they miss cool conditions and become dry. When it is remembered that such plants have stood on ashes for months and enjoyed moisture about the roots it will be obvious that to place them on a greenhouse staging or shelves means a reversion of treatment almost, and more than one batch of Primulas I have seen turn yellow and flag as if all the vitality they once possessed had left them.

I always think that in transferring the subjects named to the greenhouse preparatory to their blooming period there is a deal to be said in favour of a solid stage the base of which can be covered with fine ashes or chippings in order to conserve moisture instead of staging made up of narrow strips. It is the transitory stage from garden to greenhouse where one needs to exercise great care in the matter both of ventilation and watering, especially during the early weeks after their removal. Once the weather becomes colder and plants get acclimatised to their new environment they will make progress, and one can look for blossoms after months of labour and preparation. It is the last lap, so to speak, and the manner in which the plants are handled that spells either success or indifferent results.

MIDLANDER.

Allium sphaerocephalum descendens, which recently gained an Award of Merit

Housing of Cinerarias

The altered conditions brought about by the housing of Cinerarias in autumn not infrequently is the commencement of a retrograde movement, and instead of their being the success they were expected to be, the reverse is the result. Most of the summer, plants have been kept in cold frames where shade from hot sun has been possible; in fact, in many instances the lights have been put on one side for some months, so that, virtually, their treatment has been akin to plants in the open air. September finds such plants strong, clean, and healthy, and it is only when they have been housed for a few weeks that they begin to show signs of deterioration. Cinerarias are better without much heat, as, if damp and frost can be kept out of the house, they ask for little more. The difficulty, of course, occurs in houses where other plants that need slightly warmer conditions are grown, but even in such circumstances it is possible by growing Cinerarias together and keeping an eye on ventilation of the house to have a good display. As is well known, dryness at the roots and a stuffy atmosphere should be guarded against, and with plants that have been brought up under cool conditions during the past months a continuance of those conditions as far as possible under glass should be aimed at.

LEAHURST.

Scarboro' Lilies

I have often thought that if a plebiscite could be taken amongst those who grow plants in their windows the year round it would be found that in flowering plants the Scarboro' Lily (Vallota) would head the list. Its popularity is due in a large measure to the fact that when not in bloom it makes a good plant for a window because of its foliage. Some of the best specimens I have seen were those which had been grown in a cottage window from quite young plants. Vallotas flower best when approaching the potbound stage, but they should not be allowed to go too long before being shifted into a larger size pot, as, if left, the foliage sickens and, generally, debility follows through the congested state of the roots. Vallotas need but the simplest culture to ensure success, and are best potted on as soon as the flowering season is over. Soil for them should consist of old loam, brown fibrous peat (or old leaf-soil), cow dung, and coarse silver sand. In lifting the plants out of pots some of the old and worn-out soil ought to be shaken away before repotting. Clean pots and clean crocks are advisable, and care should be taken not to overpot, one size larger than the preceding pot being sufficient. Vallotas are lovers of sun, and when in full growth and approaching the blooming season will take plenty of water. Any room from which frost is excluded in winter will meet their requirements, during which time they are best kept on the dry side until spring.

TOWNSMAN.

Hardy plants for potting

In most gardens where hardy flowering plants are grown there are to be found those which can be potted up in late autumn and in the springtime make a greenhouse quite gay apart from bulbs. For early flowering it is essential that any hardy plant should be given a long season of root growth before any attempt is made to bring it into a warmer atmosphere. Only the strongest clumps ought to be selected for the purpose, and no attempt should be made to force them, simply luring them into bloom in a slightly warm house after the plants have been quartered in cold frames under ashes for a few months. October or, in some cases, November is soon enough to lift the roots. Dielytras, like D. spectabilis, Campanulas, shrubby Spiræas, Solomon's Seal (Polygonatum), Trolliuses, and Brompton and East Lothian Stocks also should be potted up in late autumn to supply sweetness in the house in April.

WOODBASTWICK.

REMINDERS FOR THE WEEK

Southern and Midland

Spring Cabbage

Where seeds were sown during July the plants should now be in a fit state for transferring to their permanent quarters. It is advisable to plant in a sheltered part of the garden, such as an early border beneath a wall facing south or west. Eighteen inches apart each way is ample room to allow these early plants, and they should be protected from slugs by dusting the soil around them with soot or lime.

Lettuce for winter

All the Year Round is an excellent Lettuce for supplying hearts for use during winter and early spring. To ensure a crop they should have the shelter of a frame or pit during the dull days. Seed may now be sown in soil that has been well prepared, and as the plants become large enough to handle prick off 4 inches apart, and later transfer to beds made up in the frames. The remaining plants, if left in the bed and protected from slugs during winter, will form a succession to those grown in the frames.

Celery

The main crop should now be far enough advanced for earthing-up. This should be done when the foliage is dry. A soaking of weak liquid-manure may be given with advantage the day previous to earthing. All off-shoots and decaying foliage should be removed before tying the leaves loosely together with bass or other soft material. The soil should be well pulverised before placing it around the plants, taking care not to bury the hearts of the plants.

Dahlias

These must not be neglected if a succession of flowers is to be had. All dead blooms should be removed at least twice a week and the shoots protected from damage by the wind. A few Pea-stakes placed amongst the plants is excellent practice. Regular supplies of liquid-manure should be given the plants, and care taken that their roots do not suffer from want of water. Keep a sharp look-out for earwigs, which play havoc with the flower-buds.

Violas

At this season, where the plants have been well looked after, there should be abundance of basal shoots, which are ideal for cuttings. These are best 3 inches in length and inserted either in boxes or beds of fine sandy soil. The cuttings should be 3 inches apart and the soil made firm around them. Give a good sprinkling of water and keep the lights closed until rooting has taken place.

Hedges

It is essential to the general tidiness of a garden to keep all hedges trimmed. Now is a good time to give them the final trimming up for this season, after which they will present a tidy appearance during autumn and winter. Laurel, Aucuba, and other large-leaved shrubs should not be clipped with the shears. The long shoots should be cut out with the secateurs or sharp pruning-knife.

Perpetual Carnations

After this date the plants should be given some protection against autumn rains, which are apt to cause the growth to become sappy and weak, leading later to that dreaded pest rust. If the greenhouse is clean in which they are to flower, and everything is in readiness, they may be housed without delay. All ventilators and doors should be kept wide open for several weeks. All pots should be washed and drainage examined before housing the plants.

Lilium longiflorum

This is a most useful and beautiful Lily to grow in pots for flowering in spring, and the bulbs should be potted up during the next few weeks. One fair-sized bulb in a 6-inch pot I prefer, and a suitable compost consists of two-thirds good loam, one-third fibrous peat, well mixed with coarse sand and crushed charcoal. The bulbs should be placed as near the drainage as possible and the pots not more than three parts filled with compost, thus allowing room for top-dressings. After potting they should be placed in a cold frame and carefully watered until growth commences.

Late Plums

It is very desirable to maintain a supply of these as long as possible, and trees growing on north walls of such varieties as Coe's Golden Drop, Late Transparent, President, and Pond's Seedling will carry on for several weeks. These should be netted to protect them from birds, and where wasps are troublesome jars of sweetened liquor should be hung in the vicinity.

Autumn-fruiting Raspberries

Hailshamberry, November, and Abundance are three good autumn-fruiting Raspberries, and are now forming berries freely. These should be assisted with regular supplies of water if the weather is dry, and a good application of liquid-manure given each week. If necessary give a further mulch of half-decayed manure. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Late Grapes

Such varieties as Alicante and Gros Colman, which are expected to keep until after the New Year, should now be gone over rather carefully. If the bunches are at all packed the smaller berries may be cut out. Inside borders will require a good deal of moisture yet awhile, and occasional waterings with weak liquid-manure or with a solution of some good fertiliser can still be given with safety. In respect of outside borders it is better, after soaking them, to apply a mulch. It is, at times, difficult to know exactly where the roots may be, but, at all events, top-dressings or mulchings will usually attract them to the surface.

Late Melons

Canker is more common in the case of plants grown on hotbeds than it is when the plants are grown in properly-heated Melon-houses. It is safe to say that, in frames, canker is induced by the gross feeding when the roots (as they will do) penetrate into the manure. One of the best preventives of canker is to use a firm bed of good loam to which has been added a little bone-meal and some lime-rubble. The whole must be made very firm by beating or treading. In such a bed the growth is firm and short-jointed, and canker rarely attacks such plants. As has been previously recommended, should canker threaten the late Melons let the stems be surrounded with lime or with charcoal, and avoid watering close to the collar.

Peach houses

Continue the syringing of the trees from which the crop has been gathered, and see that the borders do not suffer from drought. Ventilate the houses freely by day ar If very early forcing be necessary th the leaves may be hastened by bu little sulphur in the house. No mi need be felt—I learned the practice famous Scottish fruit-grower and l lowed it many times without any Moreover, the fumes of the sulphur effectually, all insect life.

Hardy fruit garden

Crops, generally, will be heavier one time seemed likely, and if it possible young Apple and Plum tre are heavily laden ought to be watered. Some years ago I expe upon young and heavily-laden Apple giving them occasional doses of su phate and nitrate of soda in mixture solution, of course—and this gave results. The proportion was two superphosphate to one part of nitrate Of course, the mixture would be scattered over the surface of the soi using it in solution it reaches the ro quickly. Should the soil be dry it i drench it thoroughly with plain wat applying the stimulant. If a mulch conducting material can afterwards the effect will be enhanced.

Flowering shrubs

As is well known, the majority ing shrubs do not call for much attr the way of pruning, and a safe rule is to do any needful cutting imm after flowering ceases. Of course, sionally becomes needful to exci shorten an individual branch, and it perfectly safe to do so. Those afford the time will find it advanta the welfare of the plants to pick off vessels of Rhododendrons and of In most cases it is impossible to all, but young plants of new varieti be attended to. This is the season on some soils, Rhododendrons beg pear unhappy, and even if something to wait, and if the supply of water it, the bushes should be well soak

Figs

The second crop ought now to be away, and this is, at times, heavier first. A good top-dressing of su material will assist in the ripening As in other cases, plenty of vent essential at this time. Should the visibly infested with brown scale ought to be made to keep the pe bounds by scraping, or otherwise, crop has been gathered and cleani taken in earnest.

Kitchen garden

Those who yet approve—as I sound bed of autumn-sown Onions to delay the sowing. At one tin customary to use Trebons and Gi for autumn sowing, but Ailsa C Cranston's Excelsior are perfect equally as early, and superior in the older sorts. Make a further Cabbages to supplement that mad July. Turnips may still be sown variety as Early Milan will give tender little roots at a very usef Early Potatoes, if there be any left safely be lifted and stored. Those their own seed tubers should select medium size from prolific roots. as a rule, a mistaken idea that "a good enough for seed," and whic end, results in disappointment.

W. McO

Mabie Gardens, Kirkcudbrightshi

The Mushroom Season

Mushroom season has now fairly nenced, and failures there will no t be in abundance, as I daresay no other crop which has to be pro- the gardener that has caused so xiety as the Mushroom. Why there so many failures it is difficult to is not my intention to enter upon y causes of failure, but rather to some of the shoals to steer clear of, ccess may be assured. The best of s are apt to have a failure with a sionally through some unforeseen nces, but I do not see any reason re should follow after failure, that there is suitable material to work n the majority of gardens where n growing has to be carried out generally the right kind of material nd, even if only in limited quan- nose who can collect sufficient for a l bed in the course of a week have advantage over those where this tends to three or four. With these ntities there is danger of the manure too dry for the perfect growth of ns either by having much of the elements dried out or burnt out, ng of very frequent occurrence. I have had a small quantity to deal as been laid out in a layer of about thickness as it is being collected. mistaken impression that the drop- are the best for forming into beds, which is formed of quite one-half k of short litter is much to be pre- The temperature of the bulk is and it is maintained longer than the droppings are used. Another is that it can be prepared more Even where there is ample material y often spoiled in the preparation allowed to become overheated be- turned again. Manure which is become white before being turned ger of this, as when such occurs, he manurial properties is lost, and re necessary to maintain a steady the bed is made up is burnt out. turned daily after being thrown in moisture and the violent heat are disseminated and the whole mass vell divided. In the course of a o the most violent heat will have ersed, when turning will not be ite so often, but very likely on lays for a few times. A good guide a stout stick thrust into the centre, heat of the bulk could be gauged by is. When ready for making up, al should just feel warm. If made e bed before this stage is reached, rature is apt to rise very high and op too low. When a bed acts in er it is quite evident that a crop of s will not be secured. What is er the bed is made up is a steady r heat. It will also be noticed that ch has been made up before the as ready for the purpose will, if it d, be found to be quite dry on ac- e violent heat.

supply of good material it matters e the bed is made so long as the is sufficiently confined and an nperature maintained. The worst re those which are naturally dry There are, no doubt, many Mush- s of this description, and which use of many failures. The young s may appear all right, but they ow so vigorously as they ought. reason why Mushrooms generally ell in underground cellars. It is n to go by that because a Mush-room-house is elaborately fitted up, it is suitable for the growth of Mushrooms. I have a vivid recollection of the fine crops which were produced annually from a low underground shed. The bed cannot be made too firm; in fact, the firmer in reason the longer is the heat maintained. The

SPAWNING of the bed is the next consideration. It is highly important that the very best spawn be obtained, as even in these days of supposed advancement in the making of Mushroom spawn there is much that is inferior. I like fresh spawn, although some growers maintain that old spawn is equally good if it has been kept in a cool and dry place, but of this latter I am not so certain, as the most of my failures have been brought about through using old spawn. After the bed is formed and there is every likelihood of its being ready for spawning in the course of a few days, the spawn is the better for being started. This is best managed by laying the bricks on the surface of the bed. If it is good the spawn will be seen to have commenced working. As regards the most suitable temperature for spawning the bed, I have the best results when this is at about 80 degs. or 85 degs. This is not by any means a high temperature, but I take the gauge from the centre of the bed, so that the heat of the place where the spawn is placed would be a few degrees lower. As regards

SOILING OVER THE BED, so long as it is known that the spawn is good, there is no benefit whatever in deferring this. If the soil be placed on whilst in a fairly moist state it will bind quite sufficiently. The practice of adding water, and also of smearing the bed over afterwards with water and the back of a spade, is not at all a good plan. As the temperature declines in the bed an old mat or two thrown loosely over the surface will assist in maintaining an equable temperature and also prevent the bed from becoming too dry. In a close Mushroom-house or shed a light covering of old mats is much to be preferred to either hay or straw. It is a great mistake to use artificial heat too freely. If the structure could be maintained at a temperature of 55 degs. artificial heat should not be used, and when it is found necessary to use it do not allow the temperature to rise above this. I have also found it a good plan after the young Mushrooms commence to appear to remove the loose older mats from the surface, and in their place to lay a clean mat over the whole bed, keeping it from resting on the surface by strips of wood laid on bricks. This maintains a genial warmth about the surface of the bed, and is a good system to adopt in close and darkened structures. In more exposed sheds dry hay or even long litter from the stables forms the best covering. Y.

Earthing up Celery

How often do we see Celery earthed up, or rather soil put to it, long before it has completed its growth. This is the greatest mistake possible, as should the weather prove dry and artificial waterings have to be resorted to, it is almost impossible to give them without washing the earth into the crowns, although long, steady rains may wet the roots without doing harm. Rain, however, cannot be depended on to come when wanted, and the safer and better way is to leave the rows of plants as they are, and keep on watering and giving liquid-manure frequently till quite the end of September, as from now till then growth in Celery is generally most rapid. Those who happen to have Celery early, and want to blanch it, will find that they can do so by binding it round with thick brown paper, or, if near the sea-shore, by using Seaweed. The Seaweed will not only exclude light and make the Celery white, but it will keep away slugs and worms, which often do a deal of harm to the stems, as not only do they disfigure the outside, but they get into the inner leaves and heart and furrow them in like manner. A good substitute for Seaweed may be had by making hay-bands of any soft, inferior hay or dry grass, and wetting them in salt water, which will in no way hurt the Celery, but will keep away the insects referred to. My practice with regard to the plants, and it is one I can strongly recommend, is to go over the whole about this time, and run a piece of matting or raffia round each. This draws the leaves up together and greatly facilitates the work of earthing later on. Without the ties the outer leaves grow in anything but an upright direction, and it is a difficult matter to earth it. Later on the stalks become stiff and brittle, and often break at the base when drawn close by the hand. Tying prevents all this, and yet admits of full and free watering so long as growth continues, and not till that is finished is it necessary to commence blanching. S.

French Beans for autumn and early winter

When the choicer summer vegetables are scarce, anything which may be grown to form a variety in the usual run of autumn vegetables will be highly appreciated. To fill this void, French Beans are most useful, for although a little extra time will be taken up in the preparation of the pots, yet at the season when the Beans are in full growth the weather is more often than not very dull and wet, consequently watering is not a laborious operation. Useful crops may also be grown in heated pits. Of the two methods, growing the plants in pots is the better of the two, as then the pots may be removed to suitable quarters in which to finish off the crop. If the weather should remain for a time longer in its present fine and dry state the Beans will succeed best in a cold frame. The fault I find with French Beans when the pots are stood in the open—a course sometimes recommended—is that upon being placed in warmer quarters upon the approach of colder weather, the sudden change causes the leaves to fall. I have also noted that this evil is sometimes apparent if the weather should be dull and wet when the pots are in cold frames, therefore, if possible, I like to place them in a pit where a little warmth can be turned on in case such a period should ensue. This season is likely to be an exception, therefore I should not hesitate to place as many pots as possible in cold frames, these being removed into a warmer structure when the time comes for housing.

After giving some of the most approved varieties for pot culture a fair trial I have fallen back upon the old Osborn's Dwarf Forcing. Syon House and Ne Plus Ultra are also good, but for early winter work the variety named above is valuable. It is dwarf, sets freely, and, moreover, is very prolific. It may also be necessary to add that new seed is the best. Large pots are not needed for this season of the year. Moreover, with the pots well filled with roots they are in a condition to take feeding more plentifully. Half-filling the pots with soil is no gain whatever; in fact, it entails a deal of extra labour. Some good loamy compost should be used, the seeds being covered to the depth of 1½ inches. Six or seven seeds should be sown in each pot, as I find with Osborn's Bean that it may be sown thickly with advantage. Being placed in the frame the soil should be syringed overhead daily if the weather should be bright and sunny, when the plants will soon appear. No coddling

must be allowed or the plants will not prove at all satisfactory, being drawn and spindly. Ventilation must also be freely applied on fine days, and the daily sprinklings must not be neglected, that is, unless the weather should be dull, when the drier the foliage is kept the better. If the soil be kept fairly moist good plants will be provided suitable for producing a good crop of late Beans.

A.

FRUIT GARDEN

Ripened wood

THERE is no detail of greater importance in fruit culture than that of thoroughly consolidating the growth made during the summer. The more the wood of all fruit trees grown under glass is exposed to sun and air the better, but this is not the only factor. It is too much the custom to look on a fruit-house, after the crop has been gathered, as a house that needs no attention beyond throwing it open wide to every wind that blows. Peach and Nectarine trees that have been carefully tended until the fruit is finished are left to do their best with often a lot of red-spider and other insects upon them. In numerous cases that have come under my notice trees are left with the borders absolutely cracking from want of moisture, and foliage flagging owing to the ripening process that was supposed to be going on. Now, as a matter of fact, healthy trees in autumn, after the crop has been gathered and the full amount of air put on, require even more water than when the fruit was ripening. The borders are more exposed to drying influences, and, if the foliage has been well preserved, the evaporation from this is very considerable. All useless wood, *i.e.*, wood that has fruited and is not required for laying in, should be taken out immediately the crop is removed, which will allow the foliage on the remaining shoots to have full advantage of sun and air, and, by properly carrying out their function of sap-elaboration, to strengthen the buds at their bases. Many varieties are prone to crack if very moist at the root when the fruit is finishing, and this makes it the more necessary to give a thorough soaking immediately the pruning is done. Wet every portion of the border, and, on hot days, well wash the foliage with the syringe or hose at least twice. The parts of the trees nearest to the glass, or the apex of the roof in sunny corners, and over the hot-water pipes, should come in for especial attention, applying the water forcibly and not using it too cold.

Increase the air immediately the fruit is gathered, until in a few days the house may be thrown open entirely. It is the same with Vines and all tropical fruits; throwing a house open and allowing the roots to get dry, the foliage at the same time being crowded and covered with insects, is supposed in some mysterious way to act beneficially on the next season's crop, but a little thought on the part of those in charge must show that it is wrong. Much more depends upon the leaves being kept healthy until the last than is generally supposed. They fall more quickly when the proper time comes, for, of course, the loosening of the stem and fall of the leaf are just as much part of the work of the Vine or other tree as are the bursting of the buds in spring and the subsequent development of the fruit. It is the greatest mistake to substitute roasting for ripening. To develop the wood properly, and to make it capable of producing a good crop of fruit, all the natural forces of the plant must be kept going. Growth is one part of Nature's scheme, rest is another, and to try and force a Vine or other fruit tree to ripen its wood prematurely is just as wrong as undue haste in the earliest stages of forcing.

With regard to late lateral growth on Vines, a good deal of misconception exists, and this, too, has its bearing upon the point at issue. Here, as in many other details, the middle course is the safest. I like to see a little late growth, especially on young Vines. It keeps the sap moving and encourages the roots to activity. Very close stopping, or the entire removal of laterals, may possibly cause eyes to push that are better dormant, but to allow the growth to ramble away at will is wrong. Where there is room I let about four leaves form before pinching, but otherwise continue to stop at the first leaf when this is about the size of a crown piece. Respecting bud-dropping on very early Peaches, which some growers attribute to too liberal treatment after the fruit is gathered, I think this can only happen after a check of some kind.

H.

Scalding of Grapes

All kinds of Grapes are liable to scald at some time or other. That fine late-keeping Grape Lady Downe's to such an extent is apt to scald at one certain stage of development that, unless great care is exercised, hardly a decent bunch would be saved. The scalding of other varieties may happen at any time, but though liable to it, it is but seldom that it occurs. Even then the damage done is comparatively insignificant when compared with that which will occur to Lady Downe's if means are not adopted to circumvent it. Strange to say, scalding of this variety occurs only when the stoning period is entered upon, and for three or four weeks it is extremely susceptible to it. What there is in the constitution of this Grape to cause it to differ from all others in this respect I am unable to explain, but it is a fact that it then scalds badly in many places and causes gardeners no end of trouble and annoyance. The stoning period usually covers a space of four weeks, and during this time the house in which Lady Downe's Grape is grown should be accorded special treatment. This will consist in keeping the hot-water pipes warm throughout the night even if the weather is warm, drying up the evaporating troughs, dispensing with damping down first thing in the morning, and reducing it to a minimum at closing time. To make amends for this loss of moisture and to prevent the inside atmosphere becoming too dry, the floors and paths may be damped twice or thrice during the day while the ventilators are open. A chink of air should also be left on at the apex of the house all night, and the amount of ventilation increased early in the morning to prevent a sudden rise of temperature. This will allow all moisture to escape if there should be any, and if the pipes are kept warm as advised the inside air will be kept dry and buoyant, and the condensing of moisture and its precipitation on berries, foliage, and roof-glass will be prevented. Closing for the day should be delayed as long as is consistent with safety, as early closing and running the temperature up to 90 degs. or a degree or two higher—which are so conducive of good results when applied to other varieties—will bring about disaster in this case, and should therefore be studiously avoided for the time being. Although scalding will take place in the afternoon, it occurs more frequently in the morning; at least, such is the result of my experience, and it is generally more prevalent in houses where fire-heat is dispensed with, should very warm weather set in just when the Grapes are entering upon the stoning period. This causes moisture to condense through the falling of the temperature during the night, and the fact of the hot sun striking the berries when covered with minute particles of water, and their being cold also, causes them to scald very readily. As before pointed out, warm, dry air tends to check this, and any moisture wh arise will be dispelled if the ventila left slightly open. Another cause of is keeping the mulching on inside be a saturated condition. This, althou ficial at other times while the Vine full growth, is harmful during thi For the same reason, the saturation floors, or floors composed of nothing trodden earth, such as is often met old-fashioned houses, should also be Avoid early closing, not forgetting t chink of air on throughout the nig observance of these few simple rules lead to entire exemption from scaldi will go a long way towards attain end, and with care the scalding s confined to but a few berries only.

Black Currants

As a large grower of Black Cu have an opportunity of observing th teristics of the principal varieties characteristics are fairly constant f to year, consequently a review of th be accepted as reliable. The presc appropriate time to make it, as the season will soon be with us.

BOSKOOP GIANT.—I have no hes saying that this is my best varie trees crop heavily and the huge berr and finish well. Unfortunately, th has a natural tendency to contract but this pest can be kept under by s cally removing affected buds by han

SEABROOK'S BLACK.—Of this kin speak with tempered praise. Th finish of a good size and they ta excellent colour. Seabrook's mus corded as inferior to Boskoop Gia experience, because the bunches sh position to running off, and rev rather prevalent.

BALDWIN.—A type of its own, w not disposed to place on a high pe two reasons. I cannot colour t well; they ripen with a reddish tin seasons when late spring frosts prev portion of the flowers is invariably Baldwin is one of the earliest va bloom in my garden.

GOLIATH.—A reliable Black Cu only slightly susceptible to big l bush is very upright in habit, the l large and jet black in colour.

EDINA.—I have found the variety bear the test of the seasons with s fruits regularly, the crop is fai while the berries are large and of bright black in colour.

BLACK GRAPE.—An old Currant a one. The somewhat sprawling ha bushes can be controlled by prunin light soil the bunches are inclined and the leaves to revert, but these u tendencies do not appear in me heavy soils. A heavy crop is bor berries are of medium size and goo

Glamorgan. GEO. H. C

Loganberries

Essential as it is in the case of Ra to cut away all canes that have fr the least possible delay, it is doubly case of Loganberries, because the grow with such rapidity that it bec difficult to deal with the old a wood with any degree of comfor fruit which seems to be grown m year. It usually does well on grou by no means rich, and needs littl once the canes have been planted a stout sticks. It is no use planting with less room than 6 feet apart— this if possible—as, once growth h they soon cover almost any space

TON

Shrewsbury Floral Fete

Shropshire Horticultural Society has able not only to secure one of the shows out of London, but also s existence of just over 50 years to y some £20,000 for the improve- Shrewsbury and purchase the Castle sent to the town. The first prize

ON GROUP OF PLANTS was won by Kenrick (gardener, Mr. McDonald). Dracænas, and other fine-foliaged re interspersed with a rich assort- Orchids. Mr. W. A. Holmes, ld, was second with fine Croton d C. Prince of Wales, and other loured, fine-foliaged plants. The "Bridal Wreath" (Francoa) and the pretty Australian plant, exifera, with its dainty pink blos- e a light effect. Gorgeous Ixoras addition of colour. Messrs. Jas. d Sons had a display which in some as equal to the first-prize winner's. similar plants with a low ground- r which rose splendid specimens of egans, Bridal Wreath, and a pro- hoice Orchids.

At this season of the year the is good. The winners in the group ssrs. Gunn and Son, Olton, had their flowers on tall pillars, with a of Geo. Dickson as a frontispiece. obinson, Nottingham, was a good d Mr. C. Gregory third. Included roups was the free-flowering Wm. orange), Shot Silk (lemon, shot car- oile d'Holland (crimson), and that y biscuit-white Clarice Goodacre, eliciously-perfumed Angele Pernet, excelled by few others in this re- dy Roundway (a similar colour of ot-orange) was also well shown. s were also exhibited by Messrs. ing's Acre Nurseries, Ltd., Here- Edwin Murrell, Shrewsbury, where terfly, Lady Inchiquin, Columbia, Morse stood out. In some groups was good, but this Rose varies extent in one season that it may inting in the garden if its form on nt occasion were taken as a

OUS PLANTS at this show fill several square feet. Messrs. Bees, Ltd., competitive class; Messrs. Maurice Christchurch, and Messrs. Gunn vere second and third. Here were ing Delphiniums, blue, pink, and ous, and Kniphofias. A popular plant vith in gardens, the name of which n to so many, is the blue Veronica hick provides such a fine patch of ughout the summer. Probably no y of Gladioli has ever been seen this occasion. Messrs. Sutton's d the whole end of one tent, and e exhibited by a dozen firms. Red one of the good things, and Beriot th red eye) another. Messrs. Bees, n the class for these. Included in Gibson and Co.'s group of her- ants was a plant which will be d of in the future, the Lonicera ich will probably largely displace as a hedge plant, as while it grows it is more graceful, lends itself to nd does not rob the soil to such an noisture, etc.

were finely shown by several firms, g among these being a dainty d carmine variety quaintly named Mr. Woolman was first in this there were some grand non-com- oups. An old-fashioned plant of much charm is the double Hollyhock. Messrs. Jas. Vert and Sons brought a very varied selection of colours from Saffron Walden which attracted much attention.

A NEW CLASS FOR ORCHIDS was opened for competition at this show, but whether the trade growers did not like to compete with amateurs, or amateurs were shy in coming forward, only one entry came from Mr. A. M. Barber, who had a nice collection, which included the ever popular Oncidium Papilio, Cypripedium Maudiæ, and some choice Lælio Cattleya hybrids, all well-grown plants.

CARNATIONS.—Mr. C. Engelmann, Saffron Walden, led in Class 25, with Messrs. Stuart Low and Co., Enfield, first in Class 26. The former had some fine vases of Saffron, Spectrum (scarlet) and Arnos Grove (heliotrope), while the latter specialised in their own varieties, White Pearl, Eileen Low (salmon), and Sir Philip Sassoon (clove). Non-competitive groups from Messrs. Allwood Bros. and Jones Bros., Shrewsbury, were composed of perpetual varieties, Laddie (salmon), Master Michael Stoop (cerise), and Lady Northcliffe among them. Carnations at this show were good considering the season of the year.

FRUIT.—It is doubtful if any side of horticulture gives more satisfaction than that which produces luscious Peaches and Nectarines, Figs and Grapes, while the full flavour of Pears is developed more under glass than when grown outside, and the crop is, of course, much more reliable. Such fruit, grown both by amateurs and professionals is to be seen in plenty at Shrewsbury. Of Peaches, Royal George and Peregrine are the best for amateurs, while the two best Nectarines are Pine Apple and Humboldt. Williams' Pear is one of the most productive, with its subtle flavour. Two good Plums, which are dainty sweetmeats under glass, are the Transparent Gage and Jefferson. Brown Turkey Fig is the most popular, although White Ischia probably surpasses it in flavour. The blue riband in the fruit section is the champion decorated fruit table, for which prizes amounting to some £17, with a 15-guinea Coalport china tea service in addition, were offered, and this was secured by Lord Belper (gardener, Mr. J. McCartney), who had 24 dishes of fruits in nine distinct kinds on a table 12 feet by 4 feet. In addition to those already mentioned the following were included: Apples Ribston and Wealthy (the latter beautifully coloured), Plum Kirke's Blue, Pear Louise Bonne of Jersey, Apricot Moor Park, Grapes Black Hamburgh, Gros Maroc, Muscat of Alexandria, and Madresfield Court Black Muscat.

FRUIT TREES IN POTS carrying heavy crops of well-coloured fruit were sent by the King's Acre Nurseries from Hereford, and formed one of the best exhibits in the show. That delicious early mid-season Apple, James Grieve, was included with the brightly-coloured Herring's Pippin, The Queen, Cox's Orange Pippin, etc. Pear Dr. Jules Guyot, with several others, Plum Transparent and Comice, Figs Brown Turkey, Peaches Dymond, and Nectarine Humboldt were among many others.

AWARDS TO NEW PLANTS.

CERTIFICATE OF MERIT.

Rose Charming Princess (shown by Mr. Thos. Hancock), an orange sport of Queen Alexandra, the petals being tipped with vermilion.

Rose Mrs. Fred W. Howard, reminiscent of Mme. Ravary, but of better form (shown by Messrs. Dobbie & Co.).

Carnation Katja, a slate-blue shade of heliotrope (shown by Mr. C. Engelmann).

Phlox Border Gem (shown by Messrs. Fairbairn and Sons), a large flowered purple.

Gladiolus Royal Sovereign, orange yellow stippled red; Jas. Kelway, blush with red eye; Mrs. Stone, large pink stippled salmon; Primulinus Gold, almost a clear yellow (all shown by Messrs. Kelway).

AWARDS TO NON-COMPETITORS.

Taking precedence to the Large Gold Medal this year fine Coalport Sets of China were awarded to the following firms: King's Acre Nurseries, Ltd., Hereford (fruit trees in pots, Roses, etc.); Messrs. John Peed and Sons, West Norwood (stove plants, Caladiums, Streptocarpus, etc.); Sutton and Sons (Gladioli); Bakers, Codsall (floral work and water garden); Jas. Carter and Co. (display vegetables and flowers); Dobbie and Co., Edinburgh (Dahlias, Roses, etc.); Jarman and Co. (Dahlias and Gladioli); W. J. Unwin (Gladioli); Webb and Sons (vegetables and flowers).

LARGE GOLD MEDALS:—Messrs. Hewitt and Co. (choice herbaceous plants); Isaac House (Scabious); Allwood Bros. (Carnations); Toogood and Sons (flowers and vegetables); W. Taylor (rock and water garden); Edwin Murrell (Roses).

SMALL GOLD MEDALS:—Messrs. E. J. Bayley (vegetables and flowers); Blackmore and Langdon (Delphiniums); John Forbes (Phlox and Pentstemons); Amos Perry (Water Lilies and Aquatics); W. H. Simpson (Antirrhinums); J. Vert and Sons (Hollyhocks).

SILVER MEDALS:—Messrs. Daniel Bros. (vegetables and flowers); H. Clark (Larkspurs); H. N. Ellison (Ferns); E. F. Fairbairn and Sons (Phlox and Dahlias); Jeans and Trowbridge (rock plants); Jones Bros. (Gladioli); Wm. Wells, Junr. (herbaceous plants); John Jones, Wem (Violas, etc.); Kelway and Son (hardy cut flowers); L. R. Russell (Clematis); R. Waterhouse (Roses and Gladioli); G. Gibson and Co. (hardy flowers); Prichard and Sons (rock plants) F. Eames (hardy flowers).

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

TREES AND SHRUBS

Treatment of Clematis

I enclose foliage and flowers of my Clematis and should be obliged if you will advise me as to the treatment of it. I bought a young seedling about seven years ago under the name of "Mrs. Hope." I did not know anything about treatment so left it alone. It thrived and flowered well for some time, but I have lately found out I ought to have pruned it. Mine, which grows round a simple rustic arch, is now a dense mass of foliage. I should like to know:—(1) Its proper name. (2) Will it do to cut away some of the foliage, a little at a time, after flowering? (3) When is the proper time to prune and to what extent? (4) Can I propagate it by layers or cuttings in the open?

A. M. C.

[(1) Your Clematis is Mrs. Hope and belongs to the large-flowered C. lanuginosa type. (2) Nothing would be gained by doing so. (3) February or March, when the growths should be released from their supports and separated from each other, about eight of the longest and best being retained, cutting away the remainder to within three or four buds of their base and also the unripened tips of those which are to remain.

Take care not to damage the growths left when tying them out over the arch. Allow a few inches between each growth. This kind flowers on the short laterals which spring from the winter buds. (4) Yes, propagation may be done during early March in the open and, when pruning, it will be advisable to select a few of the well-ripened growths for this purpose. Choose those which have their base nearest to the ground, in order that you may bend them easily. Fill a 6-inch pot with sandy soil, and after preparing your Clematis shoot like you would a Carnation, *i.e.*, making an incision an inch beneath a bud and carrying the incision through the bud at the centre of the wood, open slightly and peg it firmly down upon the pot of soil, which must be sunk into the ground and be slightly below the average level. Only permit two eyes beyond the pot, and as soon as these commence to develop they must be kept steady by a small stake, swaying by the wind being fatal. Water during very dry weather and your pot should be full of roots by November.]

Propagating Fir trees and Thorns

(Novice).—The former, whenever possible, should be raised from seeds, for although cuttings taken from leading shoots—as distinct from lateral ones, which rarely develop a good leader—during the early part of the year with a slight heel of old wood attached, will strike root if placed in pots of sandy soil and plunged in gentle bottom heat. Seeds should be sown in boxes in February and placed in a cold frame or slightly-heated house, when germination will be found quicker and more certain, but if no such convenience exists, little beds made up of well-drained sandy soil will answer if covered with a bell-glass. Sow the seeds thinly and allow a covering of about their own depth of soil. Maintain a uniform degree of moisture, as rapid fluctuations of dryness and saturation are harmful to seeds of all kinds. Our common Hedge Thorn is Cratægus monogyna, the seeds of which should be gathered when quite ripe and mixed with earth or sand, letting them lie in a heap until the second spring following their ripening. They must, however, be turned occasionally. Towards the middle of March the seeds may be separated from the sand and sown in cold frames or in the open in light soil, where germination will quickly follow. If only a few plants are required, then boxes may be used, this practice being usually resorted to in the case of rarer sorts. Avoid dryness and overwatering until the little seedlings have made some headway.

Plants for a hedge

I shall be obliged if you will tell me how to grow most cheaply an adequate hedge to screen my garden from that of my neighbour. I have bought a newly-built house which had no garden at all, so that it is very exposed, and I want to plant a quick-growing hedge to give a little privacy, but cannot afford anything expensive. How would Beech do? Please tell me how this is propagated. Will it grow easily from cuttings? I have ordered Cupressus macrocarpa for one side, but want to find a cheaper hedge screen for another side. C. ASHWIN.

[As cost is an important factor in this instance you cannot do better than use the common Privet (Ligustrum ovalifolium), which may be obtained at about 30s. per 100. It grows rapidly and is evergreen, but the smell of its flowers is objectionable to some people. It stands clipping well. Beech (Fagus sylvatica) planted alternately with the common White Thorn (Cratægus oxyacantha) makes a pretty and effective hedge, the former retaining its rich brown leaves over the greater part of winter. Both, however, are deciduous. Both Beech and Thorn are raised from seeds, and your best course is to obtain young—if necessarily small—plants for your fence. Yew, Box, Holly, Thuya plicata, Lonicera nitida, Laurel, Berberis, and Cupressus of sorts are nice subjects for hedges, but all are more expensive than the subjects recommended.]

Transplanting Azara microphylla

(H. M. W. Bridgman).—This transplants very well, as a perfect network of roots is formed which holds a good ball of soil together. Therefore if you move your tree with care about the second or third week in October, with a good ball of earth attached, all should be well with it. After planting stake securely and give a soaking of water, which should be repeated in about 10 days, according to the weather at the time. In the meantime cut down with a spade, perpendicularly, to a depth of 18 inches, and in a circle measuring 2 feet from the centre of the plant. This may cause a few leaves to fall, but this need give you no anxiety as the severing of any outside roots will prove of great advantage when the actual transplanting is done.

How to propagate Cytisus Andreanus

(H. C.).—There are three ways in which the Brooms may be increased—namely, by seeds, cuttings, and grafting. Seeds are much to be preferred, as plants raised in this way—although a percentage will probably not come true—are more vigorous and lasting. The last method should only be resorted to when all other means have failed. The seed should be gathered when the pods have turned black and on the point of bursting, their ripening being completed by placing them on sunny shelves for about 10 days. They may be sown about the end of August, in shallow drills on a cool border in the open, and shaded from bright sunshine until germination has taken place, or kept until March of the following year, when they may be sown in boxes of sandy soil and placed in the gentle warmth of a greenhouse or frame, hardened off when 3 inches high and transferred to the open ground about the end of April, planting them in lines 1 foot apart, as seedlings grow rapidly with the approach of warmer weather. Cuttings should be taken in August, when the wood has become firm, pieces from 1½ inches to 3 inches long being used, always with a slight heel of older wood. They should be dibbled into very sandy soil under cloches, or into a frame, only uncovering when water is required. They ought to form roots by the following spring, following which they may be potted up into small pots, or in the case of vigorous kinds planted out in nursery lines as recommended for seedlings. Water should be applied with great care and the plants shaded if necessary until established. Brooms do not transplant well after they have reached a good size. It is therefore advisable to get them into their permanent places early. When grafting is resorted to, the common Laburnum, or its roots, furnishes the stocks. This method, however, is not recommended, as plants so grown are usually short lived.

Fungus on Azalea leaves

(J. R. McGugan).—Your Azalea has been attacked by a fungus known as Exobacidium japonicum. The best way to get rid of it is to pick off all the galls and burn them. The sooner you do this the better. The white powdery appearance on the galls is caused by the numerous spores of the fungus by which it spreads to other buds and leaves. The trouble was first recorded in this country on the Azalea some twenty years ago, and instances of its presence in many places have been recorded since.

ROSES

Pruning Rose Grus an Teplitz

I have a Grus an Teplitz Rose have pruned only moderately during 15 years. It is now 7 feet high a 12 feet in circumference. It has not at all well this year. Would it a vigour if I were to cut the whole of down to, say, 2 feet or 3 feet, making it almost level, or would it cut all the oldest wood out dow ground and let the remainder stru Any suggestion will be helpful. time of the year should the cutting It is still flowering a little.

[All you can do at the present tim move all the old, worn-out wood, to as near the ground as possible. tainly a very large specimen, and f account it would appear to have be poverished. In March next year cu remainder of old and weak shoots, those left in order to admit sunshin to all parts of the bush, shortening strong growths to within 3 feet of and any side growths to seven or of their base. Give an eye to the sh plant and do not attempt to cut all to one level. Remove 3 inches o from a circle 4 feet in diameter a base of the stem, and apply a dr well-rotted manure over which the s be replaced.]

Rose Briars

(T. S.).—Your Briars should h planted the previous autumn, an growth is so weak the only chan this year is to insert a couple or t in the main stem 2 inches or 3 in the top and shorten back the thi you mention to within 3 inches of The dwarfs could be budded in part of their roots just as easily growth if the latter is not strong its base. Remove the soil from t of the roots, and after making a T- raise the bark sufficiently to enabl to be inserted, and finish off by bi latter in securely with raffia.

GREENHOUSE

Ferns for heated house

Will you please give me the name a dozen pretty Ferns to grow in he to house facing west, say, minimu to 45 degs. in winter, to include Ma H. F. MA

[Adiantum Capillus veneris imbri elegantissimum, A. gracillimum, tenuifolia Veitchiana (very suitable ing baskets), Lomaria Gibba, N exaltata amperpohli, N. e. todæoi Marshalli, Pteris Childsi, P. tro Wimsetti, and P. cretica major wou able.]

Cinerarias dying

(H. C.).—Sterilize your soil and a Vaporite to the mixture before pott ing it to remain upon the pott covered over with a sack for 24 ho using it. Grow your plants on a co such as a bed of ashes, and adm not draughts—freely. A tempe 45 degs. to 55 degs. is most suitabl plants; indeed, they grow quite house or frame which is kept j freezing point.

Vegetables and flowers to so greenhouse during August

(M. H. B.).—*Vegetables:* Fre Earliest of All, Beet Early Mod French Horn, Turnip Early Snow Rabbi, Endive, Corn Salad, Let

White, and Little Gem, Cabbage ; Early Paris and Ideal, early spring , Onions, Parsley, Cress, and Green as. *Flowers (hardy)*: Primulas of all Violas, Mignonette (Reseda pyramigantea and Machet), Collinsia bicolor, Princess Alice, Mauve Beauty, and of Nice, Sweet William, Veronica Arenaria montana, Anchusa italica, es (various kinds), Linum narbe, Silene alpestris, Æthiopappus imus, Rhodanthe in variety for g in pots, Platystemon californicum, beam Poppies.

ium Gardnerianum

ou kindly give me some information is plant, which was given to me as nger plant"? Is it the plant which ginger, and will the flowering-shoot : now it has flowered? The flowers sweet-scented. Any further particube very acceptable. J. E. M.

belongs to the Gingerwort family, ere room can be found for it in the tory it should always be included. herbaceous stems are from 4 feet to igh. During August and September ty and effectiveness are enhanced by erb racemes of flowers which terthe stems. This Hedychium is the of all the species, and has in warm and near the walls of hot-houses been outside with a covering of dry litter er. To have it in perfection it is y to give it the protection of a cool with a minimum temperature of or a little lower. It should be grown oam and given plenty of water in the season. After the flowers have ater should be entirely withheld from ts. We used to plant it out regu- the garden of the R.H.S. at Chishere, during the late summer and utumn, it flowered freely and was mired. The plants were lifted on the n of frost.]

galum lacteum (Chincherinchee S. Africa)

be much obliged if you can tell me e of, and where to obtain, a South bulb much talked of a year or two t came into flower about Christmas remarkable for its lasting properties. noticed in GARDENING ILLUSTRATED a e ago. YORK.

is a very beautiful plant for the cool ase, bearing elegant racemes of hite flowers with primrose-yellow The flowers when cut remain water for many weeks; height, s. Plant the bulbs in March or April, a 4½-inch pot, in a compost of two m and one of leaf mould and sand. e pots in a cool greenhouse or frame not water until top growth appears, ey should be placed in a sunny posir the glass and carefully watered. wering, watering should cease and exposed to the sun to ripen the bulbs, may be obtained from Messrs. d Sons, Covent Garden.]

FLOWER GARDEN

g a small front garden

E.).—A border 4 feet wide should be t on all four sides as shown in plan beds in the centre which should be 3 feet in width. The whole of these e trenched to a depth of 2 feet 6 t least, working into the soil a quan- farmyard manure, especially those the borders east and west intended es. The bed suggested for Heaths no manure, but would benefit from a little leaf-soil. For the border adjoining the terrace wall we suggest herbaceous plants with climbing Roses, Vines, Clematis, and Jasminum nudiflorum on the wall itself. The following herbaceous plants may be used in the border:—Delphiniums, Achillea, Eupatorium, Acanthus Candelabrum, Gypsophila paniculata, Oreocome Candollei, Tritoma Orange Beauty, Iris aurea, I. Monnieri, I. Delavayi, Sidalcea Rose Queen, Phlox Tapis Blanc (white), P. Selma, P. Mrs. A. Campbell, P. Gen. Haig, Geranium ibericum, G. grandiflorum, Bocconia microcarpa, Romneya Coulteri, Œnothera Missouriensis, Veronica candida, Anchusa italica (Dropmore var.) Platycodon grandiflorum, Campanula latifolia, C. macrantha, C. muralis, Poterium obtusum, Cimicifuga dahurica, Epimedium sulphureum, Erigeron Asa Gray, Euphorbia polychroma, Polygonum vaccinifolium. For the east and west borders, as shown on plan, Hybrid Tea Roses with a small group of Lilacs in the S.E. corner. In the south border Lilium platyphyllum, L. monadelphum, and mollis Azaleas, colours chosen according to taste, there being a great variety of these lovely shrubs. For the centre of this same border Berberis stenophylla or B. Darwini, both evergreen, may be used. In the centre bed No. 1 plant Rose Gen. MacArthur and in No. 2 Erica lusitanica. On each side of path, which we note rises above the latter 1½ feet, a few rocks may be arranged and the spaces planted with alpine flowers, of which the dwarf Campanulas, Aubrietias, Gypsophilas, Alpine Violas, Crane's Bills (Geraniums), Helichrysums, and Lithospermums should form an important part.

Irises for the shade

(S. T.).—There is only one Iris that is likely to succeed in the dense shade under trees as described, and that is our native Gladwin, Iris fœtidissima. It is unattractive in flower, but the gaping pods of orange-scarlet berries are the source of interest about Christmas time. All other Irises are sun loving.

An unusual Sunbeam Poppy

(M. E. T.).—The sepals of the curious Poppy have become enlarged and somewhat petaloid at the expense of the true petals. We are afraid it will die out, as it is not likely to seed, and, of course, is more or less biennial.

VEGETABLES

Bath Asparagus

Could you kindly tell me the name of enclosed? It was bought with some more in a shop under the name of Green Asparagus, and when cooked, I was told, was very good. Of course, at the time it was bought the flowers were not open, but made one compact long head. B. W. J.

[The specimen sent is Ornithogalum pyrenaicum, often called Bath Asparagus, because it is gathered on the hills near Bath and sold in the market.]

Black spot on Tomatoes

(G. E. Duming).—Your Tomatoes have fallen a prey to a fungus known as Cladosporium fulvum. It germinates soonest in moisture, and in the morning any moisture that may have accumulated through vapour rising from the soil during the night and becoming condensed invariably runs down to the lowest point of the fruit. The moisture would do no harm were there no spores of the fungus in the house. These, settling on the fruits, are washed by the moisture down to the flower base or apex, and at once become fertile, penetrating the fruit through the tiny orifice left by the decaying blooms. Too commonly amateurs water Tomatoes too freely, especially doing so towards night and then shutting the house and bottling any vapour that is sure to exhale during the night. Watering, if necessary, should always be done in the morning, and then, with the house thrown open and ample ventilation given, the atmosphere is dried and there is little vapour created at night. The best cure is to dissolve 10 ozs. of sulphate of potassium in 2 quarts of boiling water, adding 2 gallons of water, and syringe the plants with this. We have assumed that the black spot is in the fruits, as this trouble does not attack the leaves. If the spots are in the leaves it is probably the ordinary Potato disease.

Tomatoes cracking

(M. J. Pennell).—The most frequent cause of nearly-ripe Tomatoes cracking is that too much water is given to the roots at that period, or if they are growing under glass the atmosphere of the house is damp and stagnant. Do not give too much water at the roots while the fruit is ripening, and if the plants are growing indoors give abundant ventilation during the day and night to the structure.

Diseased Celery

(A. C.).—We are unable at the present to inform you as to the cause of your celery failing. We are incubating the material in the hope that we can find out the actual organism at work. If only a few of the plants are affected we should advise you to take them up at once and burn, in case the disease spreads. Please see a later issue for your full reply.

Potato failing

I would be obliged if you could tell me the name and nature of the disease on enclosed Potato-stalk. This and another stalk like it came on a ridge, of which all are healthy except those two. Both these plants have withered away. Is it a new Potato disease, and is there any cure? POTATO.

[We have carefully examined the specimen of Potato-stem which you have sent in and have failed to find any fungoid disease which would account for your Potatoes failing. Judging from the specimen you have sent us we should think that something has eaten off the plant below the surface of the soil. Wireworms, leather-jackets, or surface caterpillars are all capable of doing this. If any more plants fail you should search the surrounding soil carefully. You will then be likely to find the culprits. If you fail to find any insects, send us in a complete plant. We could then help you to find out what is the cause of the failure. It appears to us that it occurred below the portion of stem you have sent in to us.]

FRUIT

Plum aphis

What is the nature of the blight on the enclosed Plum foliage, and what should be used to spray with to prevent the same?

LADY GAINFORD.

[Your Plum trees are affected with mealy Plum aphis (Hyalopterus pruni, Fab.). This aphis often causes considerable damage to Plum trees about midsummer. It attacks the leaves and young growth, and unless checked often spoils the fruit of that season, as well as reducing the vigour of the tree for the following season. Mealy Plum aphis secretes a lot of honeydew which falls on the foliage, and forms the medium for the growth of one of the sooty fungi. The growth of this sooty material is often great enough to coat the whole tree with the fungus, so that the leaves are unable to carry out their proper functions. Mealy aphis winters in the egg state on the Plum twigs. The eggs hatch in April and May into what are called "mother queens." The mother queens give rise to wingless females, and these multiply very rapidly. Winged forms are produced in June

and July, which migrate to other Plum trees and also to certain weeds. We should advise you to spray the trees with a good nicotine insecticide at once. A week later you should again spray the trees with paraffin emulsion and liver of sulphur. This is best prepared as follows:—Paraffin, 1 pint; soft soap, 1 lb.; liver of sulphur, 2 ozs.; water, 10 galls. Dissolve the soft soap in about a gallon of boiling water, and while hot add the paraffin to the mixture. Mix the paraffin and soap mixture well by syringing it back into itself with a hand syringe; then dissolve the liver of sulphur in another gallon of hot water and add this to the soap and paraffin. Finally, the insecticide should be made up to 10 gallons with clean soft water. It should be well churned up with a syringe before using. We should also advise you to spray all your Plum trees with a good tar oil wash during the coming winter. This would give you a large measure of control over the mealy aphis and also Plum-leaf curling aphis, which is very troublesome. The work of spraying fruit trees with a tar oil wash should be completed by the end of the first week in February, but it is best left as late as you can.]

—— (A Thirty Year Subscriber).—Your foliage arrived at our office in such a dried-up condition that we are in a little doubt as to whether it be Plum or Apple. We are sure, however, that it has been attacked by aphis, followed by a sooty mould. Please see reply to Lady G. If you follow the directions already given to her you should have no difficulty in controlling the pest. It would help us considerably if all specimens sent in to us were enclosed in little tin boxes.

Gooseberry mildew

(A. W.).—The specimen leaves and shoots of Gooseberry are mainly affected with American Gooseberry mildew. At this period little can be done in the way of control except tipping the young growth. If you examine the tips of the young growth you will find that some or all of them have a brown felted material on the wood. This mycelium contains numerous resting spores, which will restart the disease next season. Any shoots in the brown-felted stage should be removed down to healthy wood and burned. Many of the leaves sent are also covered with the disease, and here again resting spores are being formed. A thorough spraying with lime-sulphur would perhaps help to check the disease, but it would have given much better results earlier in the season. Spray all the Gooseberry trees next spring three times with lime-sulphur. The first spraying should be given about the first or second week of April, or as soon as the foliage begins to appear; the second spraying may be given three weeks later, and the third spraying should be applied three weeks later still. When spraying Gooseberry trees with lime-sulphur care should be taken to ensure that the fungicide is applied to both sides of the leaves. Coat both sides of the leaf with the lime-sulphur; but you should cease spraying before the fluid begins to run off the leaves. Lime-sulphur will also control European Gooseberry mildew, of which there were traces in the specimens you sent.

Dead Plum tree

(R. C.).—Your Plum tree appears to be attacked by Wither Tip of Plum (Monilia sp.). This is a fungoid disease which does a lot of damage to Plum trees and fruits. The portions which you sent in to us are certainly dead, and they should be removed and burned at once. If, as you say, the whole tree is dead, we feel certain that this fungus is not the entire cause of the death of the tree. Monilia does not, as a rule, kill entire trees, but only portions thereof. Wither Tip was the only fungus we could find on the portions sent, but it is probable that the tree has been attacked by Die Back (Cytospora sp.), a fungoid disease which often kills off young Plum trees, and Victoria is especially liable to attack. After Die Back has killed the whole tree the fungus produces spores. These spores infect other trees, usually through a wound. The wounds may be caused by wind, insects, and a host of other things. You should take up the tree and burn at once. Look over the rest of your Plum trees and cut out the dead wither-tip branches. This is work which can be done very well at this time of the year. Cutting out and burning are the only known effective remedies for Wither Tip.

MISCELLANEOUS

Beetles from Hong Kong

Nearly all my young Cucumber plants and the Rose buds have been destroyed by the little beetles of which I enclose some specimens. Can you tell me what it is, and if there be anything I can use against it?

TAIPO.

[There are two kinds of beetles enclosed. One of them, Aulacophora similis Oliv., is a well-known pest of Cucurbitaceous plants, the beetle being found on the leaves and flowers, the larvæ living in the ground and feeding on the roots. In India hand-picking and spraying are the treatments advised. The other beetle is Hoplia vestita Boh. The beetles of this genus are usually found on flowers, but though they cause a certain amount of damage by feeding on the anthers they are not usually regarded as a serious pest. The larvæ again live underground, feeding on roots, but it is very doubtful whether they would cause damage to Rose trees. These are probably those referred to as on the Rose buds, but probably by this is meant the opening blooms. I am not aware that they attack the unopened buds. Again hand-picking is probably the only way of dealing with them, as in this case a spray would probably injure the blooms. These freely-flying insects are notoriously difficult to deal with.—K. G. B.]

Manure for garden, orchard, and mushroom growing

V. M. Skipwith, Oakfield.—(1) The manure will be quite all right if used reasonably, *i.e.*, not placed too thickly about the roots of fruit trees, but in each case a free addition of lime should be made to destroy the spores of fungus which may arise. Your land being heavy clay should benefit considerably from its use, owing to its aerating the soil.

(2) Growing Mushrooms.—Your manure can scarcely be recommended for this purpose, as, being necessarily packed tightly, together with considerable heat and moisture generated from made-up beds, there would be the danger of fungus spreading, which arises from decaying wood, especially where such is enclosed in buildings. The best Mushroom-beds are those made from fresh horse-droppings from which the litter has been shaken. These should be placed in an open airy shed and turned every morning for the first eight or 10 days, placing the most heated part at the outside and the outside in the centre at each turning. After this the heat will decline, and turning every third morning will suffice, and in three weeks the material will be ready. An old shed thatched both inside and out provides an excellent home for Mushrooms if more or less airtight, and if on the north side of a wall so much the better. Make up the beds to a depth of 2 feet 6 inches, the sides being held in position by stout planks or brick walls, the latter for preference, with a 2 feet to 3 feet path between. The manure must be troc rammed firmly, and when the temper determined by a suitable ground therm —has fallen to 75 degs. or 80 degs. it ready for spawning. Milltrack is spawn, and the cakes should be brok pieces about the size of a hen's egg. found to be very dry should be soak short time in warm water. These sh placed about 3 inches deep and 9 inch all over the bed and the spawn cover manure taken from the holes. Soilin surface should be deferred for a week which time sufficient fine sweet loam be placed in the shed to become as possible of the same temperature. A first week place this all over the su the bed to a depth of 2 inches, a moistening, it should be beaten dow with the back of a spade or shovel this place a layer of fresh stable litt seasons of the year. The beds an should be damped over at least on day with tepid water, and in summe even three times each day may be ne Darkness is essential, and even be up in the open air should be cover with a good layer of stable litter. rooms may be grown in the open successfully if the instructions give are observed and the beds forme water drains freely away.

Slime-like growth on pond

(A. E. Humphrey Owen).—This objectionable Blanket Weed, which n appearance on stationary water, o through which only a sluggish passes. A very good remedy for this i sulphate. Ascertain, approximate cubic contents of water in the pond, b plying together the length, bread average depth in feet, then multiply sult by six, which will give the nu gallons of water in the pond. F 10,000 gallons put 2½ ounces of cop phate into a porous bag and pull it the water until all is dissolved. This destroy the Water Lilies nor affect but trout.

SHORT REPLIES

Logwood.—See reply to "G. August 14th, p. 496.

J. E. M.—No; the plan of rootin you refer to is impossible.

NAMES OF PLANTS

T. J. F.—1, Cephalanthera pallen Helleborine), flowers much withe Calycanthus floridus.

Thistle, Aberdeen.—Morina longif

S. H., Ledbury.—Rhus typhina S horn Sumach).

W. R. J.—1, Sneezewort (Achill mica); 2, Mentha Pulegium (Pennyr Wild Basil (Calamintha clinopodiun three are British wildings; 4, onc hybrid hardy Fuchsias, very near Riccartoni.

A. E. Humphrey Owen.—1, Cletla folia; 2, probably Clethra tomentosa 3 næa borealis.

Griffith Roberts.—1, Plagianth linus; 2, Eucryphia pinnatifolia; 3, fera Gerardiana.

M. E. Tokington.—Rose Reinhar ker, known as the Yellow Druschki.

W. R. J.—The sketch is probably a small flower of Hymenocallis calathi

H. Ross and Son.—Dodder (Cus parasite.

GARDENING APPOINTM

FRANK BUTLER, gardener to J. P. Ho Esq., "Park Hall," Mansfield, N gardener to S. E. CHESTERMA Whatton Manor, Nottingham.

GARDENING ILLUSTRATED

2478—Vol. XLVIII. SEPTEMBER 4, 1926 [Prepaid Annual Subscription to any part of the World, 15/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in CAPITALS

t, the man-
t of an 540
early cook-
... ... 539
s, growing... 540
scarlet ... 543
seeds, dates
ing... 532
sowing
... ... 533
seased... ... 544
and moist-
... ... 539
hemums: The
led early ... 535
Cottagers' classes ... 544
Currants failing ... 544
Dahlias, the newest... 542
Daphne blagayana ... 532
Eccremocarpus scaber (syn. Calampelis scabra) 532
Flower pots clean, keeping 544
Gazania, the 532
Gladioli, hybrid... ... 533
Gladiolus, the 532
Golden oriole, the ... 533
Grapes cracking, the cause of 539
Herbaceous plants, classes for... 533
Hollyhock disease (Puccinia malvacearum) 543
Hydrangea paniculata 538
Hydrangeas, blue ... 533
Lilium auratum after blooming 543
Meconopsis, Chinese... 543
Mesembryanthemum lilacina 538
Mushrooms (Agaricus campestris) 540
National Dahlia Society 532
Nectarine trees, scale on 543
Pear scab 544
Peas, Sweet, failing 543
PENTSTEMONS ... 531
Perovskia atriplicifolia 532
Phlomis fruticosa ... 532
Raspberry Lloyd George... 532
Rose leaf-cutting bee, the... 544
Rose Mrs. Wemyss Quinn 534
ROSES AND BORDERS OF ROSES... 534
Rose, the Macartney (Rosa bracteata) ... 534
Shrubs for forcing ... 538
SOPHOCLES IN A WIMBLEDON GARDEN 537
Southport Flower Show, the 542
Strawberries, layering... 339
Sweet Peas, training 533
Tacsonia, treatment of 543
Tomatoes, defoliating 540
Trachelium cœruleum in the open air in Guernsey 533
Trachelium cœruleum in the open air in Scotland 533
Valeriana sitchensis 533
Vegetables, exhibition v. general utility in 532
Viola Ardwell Gem ... 532
Watering hints for dry weather 531

Watering Hints for Dry Weather

RE are very few summers that do not spells of weather so dry as to cause rtain amount of apprehension and the gardener, especially the amateur. fessional knows how to ameliorate s somewhat, while the novice knows the watering can and hose, and not he best way of using them. Possibly arise from the subject appearing to simple, but really being an acutely one. The professional gardener his knowledge from long and varied e, which the amateur does not get, ely to obtain.

ttle more of the of the matter tter understood in watering less frequent. oposed here to efly with this the subject in mple language, readers of this t least will be ormed. In the e, it must be that plants do their supply of from near the Many plants ell established down to any e depth for t is the young nature things in doing this h accordingly. is water neces- plant life, but e roots. Here lost sight of people, so a s of informa- be useful on before going The air supply pots is regulated by the water in The higher the water rises in the e less air there is. It is expelled sture and only returns as the water e soil sinks lower. That is why ish—some sooner than others—in ed soil; it is not the water that is t fault as the absence of air.

e fact must be assimilated and then et on with the watering in an nner. Rain-water as it falls from contains much free ammonia. The ries according to the purity of the any case it is always of a higher than can be found in an ordinary ly. This ammonia is very necessary for plant life and so rain is the most desirable means of watering a garden. How little there is of ammonia in collected water is shown by the following list:—

Surface water stored in tanks ..	No ammonia
Spring water	·001 part per 100,000
Deep wells	·012 " " "
Shallow wells	None
Rivers, flowing waters, etc. ..	·001 part per 100,000

It will be seen from the above that the ammonia supplied by ordinary water even from the best source is infinitesimal. This teaches the lesson that watering is always a regrettable necessity and should never be done until absolutely necessary to save plant life. This is accentuated by the further fact that water supplied from the top tends to cause the fibres of roots to turn upwards to the surface to meet the moisture. It will perhaps be said that all water is supplied from the top, naturally and otherwise, but it must not be forgotten, as shown before, that in normally moist ground the fibres of the roots always seek it below. Only when the surface is made wetter than the ground beneath do the fibres turn up, and suffer the risk of becoming parched up when the top soil is allowed to become dry later.

Having grasped these few but essential facts, what then is necessary for successful watering in hot, dry weather? First, hoeing loosely the top soil to permit aeration of the soil is preferable to watering. A mulch of old litter, leaf-mould, etc., saves the necessity for watering by keeping the ground shaded from the sun. When nothing else is available I gather all weeds, grass, etc., that have not seeded and lay them near the plants until such time as rain falls, when they are raked away and taken to the rubbish heap. Before mulching, the top surface of the dry soil should be broken up by the hoe. By such means the necessity for watering is reduced to a minimum. However, if unable to stave off the evil any longer the next lesson the above facts teach us is to water thoroughly. Having loosened the top soil somewhat let the watering be long and liberal. After the first watering has soaked well in give another after a few hours' interval equally plentiful, and add ½ ounce of sulphate of ammonia to every 4 gallons of water (but not to that used previously—this is important), or mix some soot with this water some time before applying. Do no more watering for a week, then repeat the procedure. This is how to do the job scientifically and properly, leaving no bad after effects.

THE WATERMAN.

Pentstemons in the flower garden

NOTES OF THE WEEK

Pentstemons

PENTSTEMONS are among the most beautiful of our summer flowers, and are well worth the most careful attention. It is always a question whether it is best to get the young plants on so that they stand the winter not yet bloomed, or whether to plant young stuff in spring from autumn cuttings for display in the late summer. It may be well to do both, the former way securing a mass of bloom in June and the latter for the later summer. The illustration shows a bed of the pretty kind called Pink Beauty, with

flowers not of the largest size, but forming a well-filled spike of a charming tender pink colour. The garden Pentstemons are mostly hybrids of two American species, natives of Texas and Mexico. This accounts for their doing best in a sunny place in a warm, well-drained soil. The old small-flowered red kind and its one or two recent varieties are hardier and longer lived. The modern, improved kinds, with larger flowers, are best treated as biennials, though their lives may be prolonged if they are given a very warm, well-sheltered position. G. J.

Raspberry Lloyd George

The summer-fruiting Raspberry season is practically over in this district. The above-named variety has proved the best cropper among the numerous varieties on trial. On the light sandy soil of the experimental fruit farm at Wisley it has made strong and numerous canes for next year's fruiting. While gardening in the North, with a rainfall about double what we have here (Wisley), I found this the most reliable variety I could grow. It is useful late in the autumn for dessert where this fruit is in demand for that purpose, and is excellent for bottling. R. FINDLAY.

Wisley.

Eccremocarpus scaber (syn. Calampelis scabra)

This graceful climber is not generally considered hardy except in favoured gardens near the sea, but sometimes one meets with it in a place where it ought to be tender according to tradition, but where it has proved hardy for some years. In the end of July I came upon a fine plant growing on the front of the gamekeeper's cottage at Argaty, Doune, Perthshire. It had grown above the lower storey of the house and was clambering above a window and giving a number of its orange-scarlet flowers. On inquiry I learned that it had been there for three or four years and had not suffered from frost. The fact that it is against a warm wall may have favoured its endurance, but possibly, also, the other climbers and plants at the base of the wall may have helped.

S. ARNOTT.

Primula helodoxa

Groups containing a hundred plants or more, each plant carrying several handsome spikes of soft yellow flowers 4 feet in height, are not seen every day. Grown in this manner and in cool and partially shaded ground, there is no mistaking their value and attraction. I saw two such masses recently growing beneath tall, flowering shrubs, and very beautiful they were. E. M.

The Gazania

I do not think this is grown so much as it deserves. I have grown it for many years and would not think the flower garden complete without one or two beds of it. If a dwarf plant is required for the front of a border this will be found useful. Unfortunately, it is not quite hardy. In this part (N. Devon) the plants are nearly always full of buds in December. The best system to pursue is to strike cuttings in pots and winter them in a house from which frost is only just excluded. The flowers are of a deep orange, while the underside of the leaves is white and the upper a deep green. It requires a sunny spot and is an excellent plant for dry positions. F. H.

Phlomis fruticosa

Under the name of Jerusalem Sage this old-fashioned shrubby perennial was often seen in sunny borders in cottage and old-world gardens, and though it has now given place to more aristocratic perennials it is a plant by no means to be ignored. Both in flower and foliage the Jerusalem Sage is distinctly attractive, and bold masses of it create interest and admiration. The Sage-like foliage is of a pale green shade coated with a brownish down, and the tall stems of yellow blossoms are produced throughout the summer. This plant likes a well-drained sandy soil which has been generously treated with decayed manure. It does well either in a sunny border or it may be accommodated with advantage in a sheltered shrubbery. Cuttings taken during late summer will quickly root if placed in sandy beds in a shaded frame, while seeds may be sown during the summer if given similar treatment. H. GREAVES.

Perovskia atriplicifolia

During August and September the Azure sage produces a charming display, and is most welcome at this period of the year. It is native of Afghanistan and the Himalayas, and is a deciduous semi-woody plant from 3 feet to 5 feet high. The shoots are slender and they support panicles of violet-blue flowers, all the stems or branches being covered with a white downy substance, which is an additional charm. The plant gives off a Sage-like odour, hence the name Azure Sage. Although more or less woody the stems often die down to the base, but a fresh batch will appear in the following season. Even if the growth passes through the winter safely it is advisable to prune fairly hard in the spring. It will succeed in almost any soil, but it ma be afforded the sunniest spot in the ga In semi-shade it will grow, but in sh place its true beauty is never revea Isolated examples are not so effectiv whenever possible a bold clump, say dozen plants, should be set out. P. at folia is increased by cuttings taken in I have watched this plant for seeds, but far I have not seen any. Even in the h summer of 1921 they were conspicuo their absence. T. W

The Gladiolus

The value of the Gladiolus for cutti well exemplified in a gathering of very some spikes from Messrs. Kelway an of Langport. The colours are very vari in many cases are very effective, and sh well in the garden. All admirers of the who are not wedded to the symmetric of the best of the Gandavensis hybrids try a few of the hybrids between G. primulinus—the Maid of the Mist—and G. vensis. The hooded form of G. primu apparent in the shape of the flowers variety of soft colouring in the flow charming, there being pale yello salmon in many lovely shades. It is hoped that the characteristic hood flowers of G. primulinus will not be en ted in the hybrids, as herein we think distinction and beauty.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Viola Ardwell Gem

IT seems hardly credible that this old variety is not catalogued by some of the leading specialists of to-day. It is one of the best sorts for the flower garden, as it forms a carpet of greenery out of which springs an abundant display of oval-shaped sulphur-yellow blossoms that are daintily rayed. I have grown this variety on and off for 35 years, and still regard it as one of the best. I believe I am correct in stating that the well-known margined sorts, Goldfinch, Duchess of Fife, and White Duchess are all members of one family. Quite recently I visited the seed-growing nursery of Messrs. Watkins and Simpson, Ltd., at Feltham, and was pleased to see a fine batch of plants of Ardwell Gem flowering freely, and in the warm summer sun they were giving off a rich and somewhat pungent scent.

D. B. C.

Daphne blagayana

Sir Herbert Maxwell (page 323) is inclined to attribute some of the losses among plants of Daphne blagayana to their being grafted. Such instances have not come under my observation, and it is with much regret that I learn that this practice of grafting on other stocks has been adopted with this Daphne. There are few plants in which the practice is less justifiable. As Sir Herbert Maxwell points out, D. blagayana is readily propagated by layers, and with reasonable treatment a plentiful supply of rooted layers can be obtained from a good plant. Purchasers should insist that plants should be on their own roots. S. ARNOTT.

National Dahlia Society

Dahlia enthusiasts and those who are interested in this wonderfully-improved flower are looking forward with much interest to the annual show which takes place on Wednesday, September 8th, in the Royal Horticultural Society's Hall. On this occasion there is to be an opening ceremony at 1 o'clock by the Right Hon. Viscount Ullswater. Last year's show was a great advance on this Society held in recent years, a anticipated that the efforts of grows year will result in an exhibition equ not better than, that of last year. T derfully diverse forms of the Dahlia know it nowadays have aroused imm terest in the minds of many flower lov in the past took no interest whateve flower. D.

Dates for sowing Cabbage s

One is always pleased to give reas certain seeds ought to be sown at times, and I offer the following for th of Mr. P. Clapham. My dates for Cabbage seeds in autumn are:—a sowing, July 26th; second sowing, 12th. These dates I have adhere many years, and with excellent Plants from the earlier sowing usua the winter well, and heart in dur April. Naturally those from the see ing succeed the others, while plants o same sowing, and which remain ove in the seed-bed, are useful for a third la in spring, and which gives head plants from the outside spring sowi experience is that sowing before Ju may lead to bolting in spring, and ti ing after August 12th is responsible f loss of plants during winter. A good depends, of course, on the varieties e Much the same reasoning applies to ing of Onion seeds in autumn, for vi date is also August 12th. W M

Mabie.

Exhibition v. general utilit vegetables

May I add a few words to the rea "A Surrey Gardener" and those o formed Exhibitor" on this subjec one which crops up every year, summer exhibitions one is confront out-of-season vegetables, grown exp a date, when they are of no possib for the table, and serve no useful e than once I have uttered my protest

ittee meetings when schedules have rawn up to include such things as Par- Leeks, and Celery at August shows— no purpose—and I have been met with joinder that "other societies give for them," and thus they have been in- year after year. The unfortunate part business is, that in making the selec- the biggest vegetables it is often neces- disturb many before the biggest can nd. I have seen more than one Par- ed pulled to pieces, and numbers of uprooted, before satisfactory "stuff" be got. And what is the worth of it n a culinary point of view on a hot day mer? The three vegetables cited are se whatever before cold and frost have eir part in making them tender and arting sweetness to them. It is a l business to lift vegetables before proper season. One cannot blame as they do not compile schedules and nd to adjudicate on what is staged, er their private opinion may be.

LEAHURST.

Training Sweet Peas

ooking through the issue of June 12th, 51, I notice a query on "Training Peas," signed by F. McFarlane. As I am aware the first man to grow ants on the cordon system was Mr. A. gardener to Rev. T. McMurdie, Park, Weybridge, Surrey. This ld grower used to train his exhibition Peas in this manner, and tried this on Sweet Peas, and his first exhibits ms grown in this manner created a nsation amongst other growers.

W. E. W.

Valeriana sitchensis

I be obliged if you will give the name dy plant nursery firm who can supply h plants of Valeriana sitchensis. I that I have tried without success to e this plant from both Messrs. Amos nd from Messrs. J. Stormonth and he root of this plant is the most valu- all the Valerians from a medicinal view, being extremely soothing to ves without being narcotic in its

T. C. FRENCH.

igh Street, Stevenage, Herts.

ar as we know this plant is not in e in this country. This is surprising of its highly commendable properties, extremely soothing to the nerves being narcotic in its effects." It is e the only Valerian native to North , being found in Sitka, also in Cali- nd as far north as British Columbia. Moore, The Gardens, Thorpe Hall, e-Soken, Essex, who has recently visit to Canada, writing in a recent GARDENING ILLUSTRATED, says:— ana sitchensis is very handsome when by the waterside, where it will 5 feet in height. It is attractive in age of its growth. The leaves are its flowers, which are of a pinkish- orne in clusters on thick stems and lly fragrant. Because of this it is Canada the wild Heliotrope. It moist woods there. It is a plant of tivation, and can be propagated by root division. To those seeking an to their bog-loving plants this will be acceptable." We should be d to hear where plants may be .—ED.]

Hybrid Gladioli

is apparently an attempt to re-name ion of Gladioli which has resulted cross between G. primulinus and vered varieties of gandavensis, etc. were "christened" Langprim Gladioli by us when we sent out the first cross from Langport and received the R.H.S. Award of Merit with a silver medal for the strain. The first large-flowered hybrid Gladioli were called Gandavensis through their being sent out from Ghent. M. Lemoine, of Nancy, named his blotched hybrids from purpureo-auratus Lemoinei, and those from Saundersi he called Nanceianus. Surely our connection with Gladioli for three generations, apart from the fact that we first broke this new soil, and first exhibited and distributed the result, entitles us to claim, and readily to obtain, the credit which is usually given to the original hybridiser.

KELWAY AND SON.

Langport.

Blue Hydrangeas

Having been interested in the correspondence *re* blue Hydrangeas in GARDENING ILLUSTRATED I thought the enclosed bloom of true blue Hydrangea might interest your readers of the journal. This plant, true blue in colour, was bought three years ago, and after blooming was planted out in a sheltered corner, and has had no treatment whatever, and the colour is just the same to-day as it was three years ago. The soil where it is growing is loamy clay. J. WATSON.

The Gardens, Pixholme Court, Dorking, Surrey.

[The colour of this Hydrangea is exceedingly good; in fact we do not remember having seen a colour so intense even with plants that have been doctored with chemicals —ED.]

Classes for herbaceous plants

Having to visit many shows in the Midlands and North Wales, I find the most varied ideas in relation to classes for herbaceous plants. One winning exhibit of hardy herbaceous plants contained Gladioli and Pentstemons. I believe I am right in saying it should have been disqualified. In another show, in the class for six perennials, one vase contained Lilium Harrisi. Is it not time there was some ruling? Surely Gladioli, Liliums, and Pentstemon are not "hardy," if herbaceous. Again, is a hardy Fuschia herbaceous. One man got first in a collection with it in one vase. If shrubs, bulbs, and half-hardy plants are allowed, why not let all exhibitors know and be fair?

TAFFY.

Sowing Spring Cabbage

Mr. P. Clapham, in the issue of GARDENING ILLUSTRATED dated August 21st, asks for a more detailed opinion regarding the sowing of spring Cabbage as mentioned by me in the issue of August 7th. If Mr. Clapham will turn to the issue of July 10th he will find under the heading of "Southern and Midland Gardens" the following paragraph: "It is somewhat risky to sow the main batch of spring Cabbage before the early part of August, but a few seeds of Harbinger, Wheeler's Imperial, or Sutton's April may be sown now, and if the winter is not too severe there is every chance of obtaining early heads, which are greatly appreciated during spring." Every gardener knows how essential it is to have young Cabbage as early as possible in spring, but in southern gardens one is not sure what the weather during late autumn or winter is going to be. If too mild the plants grow quickly and are liable to run to seed. Another risk with a large batch of these Cabbages is during the month of February, when forming young and tender hearts. If severe frosts appear many of them will be spoilt. A small batch from a mid-July sowing is worth the risk, but where large batches, especially where grown for market are required, I do not advise sowing the seed before August 10th, as from this sowing the plants seem to stand any weather, and if a little nitrate of soda is given when free growth commences in spring a percentage of the crop should be ready the latter part of April. Of course, Cabbage grown on a warm and sheltered border in a kitchen garden can be expected to turn in earlier than where grown in an open field or allotment. It is well to point out that Cabbage plants grow better when set out on land that was well manured for a previous crop such as Onions, Peas, or early Potatoes. All this requires is levelling with the fork or rake. Soot is an excellent stimulant for Cabbage and may be used sparingly at any time during autumn and winter. This also prevents slugs and other pests from attacking the plants.

W. E. WRIGHT.

Tregarth Gardens, Creigiau, near Cardiff.

The Golden Oriole

From March or April till latest summer the wanderer in wooded regions in the south of England may hear the shrill chuckle or whistle of the golden oriole; far more rarely he may see and wonder at the bright gleam of its golden wings as it skirts the margin of a wood or flits from coppice to coppice, for the oriole is as shy a bird as the cuckoo. The female bird is much duller in tint—of a grey-green hue. The bird is about the same size as, or slightly larger than, the cuckoo, more slender in shape, and much more chary of vocal effort. It returns year after year to the same vicinity, and is known to the Sussex folk as the galley bird. They will tell you when they hear it that you need not water your garden as it is sure to rain. "Wet! wet! wet!" they mimic its cry. But I have occasionally known its prophecy unfulfilled and would rather pin my faith to the harsher call of the corn-crake, which, however, betokens a spell of fine—"set-fair"—weather conditions.

F. H. C.

Sussex.

Guernsey, Trachelium cœruleum in the open air in

I have grown Trachelium cœruleum in my garden in Guernsey this year with great success. I raised a quantity of plants from a packet of seed last year and planted them in a herbaceous border facing almost due east and exposed to the full force of what can be a bitterly cold wind from the sea. They lived through the winter without a check, and for more than a month that border has been a blue wonder of soft, gauzy blossom on long 3-foot and even 4-foot stems, which has attracted every butterfly in the neighbourhood. Red Admirals, Painted Ladies, and Cabbage Whites have haunted this border to an incredible extent. Even the Buddleias are deserted for Tracheliums, and I should advise everyone who appreciates the charm of butterflies in a garden to add a packet of Trachelium seed to his next order.

E. F. C.

Scotland, Trachelium cœruleum in the open air in

It may interest Mr. McGuffog to learn that I planted Trachelium cœruleum amongst the herbaceous plants here this spring. The plants have done well and flowered as freely as under glass. The plants were two years old when set out and had bloomed the previous year in the greenhouse. After flowering the first year they were put into a cold frame and allowed to stand unprotected all winter, which they did, although having to stand frequent fairly hard frosts. From my experience I anticipate that T. cœruleum will survive an ordinary winter here and prove a valuable addition to the border.

A. W. SCORGIE.

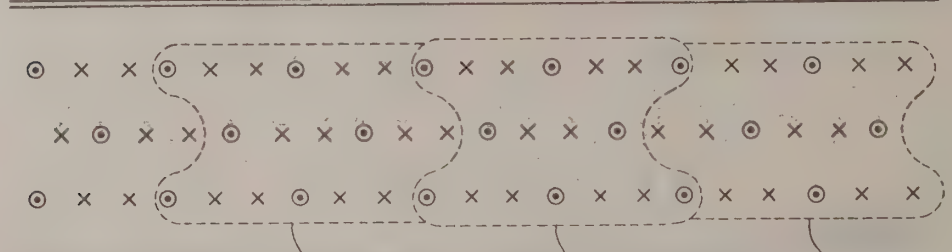
Balgreggan Gardens, Stranraer.

ROSES AND BORDERS OF ROSES

The progress the Rose, and more particularly the modern Rose, has made is astonishing. There are societies which encourage many single flowers, but none of these societies has made the progress of the National Rose Society, whose Jubilee Year this is. The membership exceeds thirteen thousand, so that this single society is far and away the greatest of all single flower societies in the world; in fact, its members are spread over the entire globe

ROSE gardens there are galore, from the most modest to the most pretentious, and the variety of design and methods of arrangement innumerable; yet still the Rose lacks the one thing which crowns it the queen of flowers. This is a Rose border which must be *the* feature of every garden in the future. Imagine a wide path with Rose borders on each side running for 100 yards in length with standards, half-standards, and bushes in bold clumps of one variety, beginning to bloom from the middle of June until they reach their zenith up to the middle of July. July and August still produce effective Rose displays, though individually they may not be so fine as those earlier in the year; but usually the colours are better. Then comes the crowning glory of the year in September and October, when the Roses and borders are at their best with perfectly-formed Roses and refined colours of great depth and intensity. Even when winter puts in an appearance the border is splashed here and there with Roses which have braved the first frosts, and showing their fitness give promise of the glories to come after the winter is past. As to colours, there are untold varieties to draw from which were not dreamed of by old Rose growers. The flowers come in profusion, the colours are glorious, and the fragrance of most distinctive and delicious. Moreover, Roses are a permanency, and will give untold pleasure and delight for many years provided they have been properly planted and established. No replanting is necessary, as is the case in herbaceous borders. Further, should it be necessary to change gardens, the Roses can be taken up and replanted in fresh quarters with success.

There are several ways of making such Rose borders. A centre path 5 feet or 6 feet wide is formed, and the borders run parallel with it, being made 12 feet wide. These borders are raised and edged with red or yellow Deal planks painted with three coats of dark brown exterior solignum. Two things the Rose must have—perfect drainage and plenty of water. More Roses are killed through faulty drainage than any other cause. Protection from frost is quite unnecessary where the drainage is perfect. Loosening the bottom of the trench and then liming before filling up will work wonders whatever the soil. Use only the purest lime, free of all injurious substances. Space forbids full details, but make the border as well as if Grapes were being planted, and use no farmyard manure whatever. The top soil from the paths will help towards raising the beds. When made, leaf-mould, sand, with lime and steamed bone-flour and sulphate of potash in sandy soils should be worked into the surface. When ready for planting the two outer rows of Roses are planted 3 feet away from the edge. The centre row should consist of standards planted 6 feet apart, and the two outer rows of standards with half-standards on each side alternating, planted the same distances apart. Between, and in the three rows, there is room for two bushes between the standards and half-standards. The standards and half-standards in the outer rows are planted midway between the standards of the middle row (see plan). Supposing a start is made about the middle of the length of the border, two standard Château de Clos Vougeot are planted in the middle row, and between these a standard in each of the outer rows with half-standards on each side, also in the outer rows. Then as this variety is unsuitable as bushes, Arthur Cook is planted in between, two in the middle row and four in each of the side rows. On the one side of this clump a similar clump of George Dickson is planted, and on the other side Hadley. Against Hadley a clump of Alexander Emslie, and against George Dickson The General, flanked by Augustus Hartman, followed by The Adjutant and Isobel, all in clumps. Against The General plant G. H. Mackereth, flanked by Hawlmark Crimson and Vesuvius. Next to Vesuvius plant Souv. de C. Pernet, then Florence Izzard. Next Isobel plant General McArthur with Golden Emblem and Mabel Morse; then Mrs. Henry Morse, Columbia, and Dame Edith Helen. Proceed on the same lines at the other end. For white varieties, Marcia Stanhope and Mrs. H. Stevens; for blush, Mrs. Foley-Hobbs and Ophelia. Keep the red-yellow, red-apricot, and orange shades—Shot Silk, Independence Day, Emma Wright, Wm. F. Dreer, with Lady Pirrie, Los Angeles—generally towards the ends, sometimes breaking them with a dark red by way of contrast. Besides those named, Betty Uprichard, Hoosier Beauty, Mrs. Chas. Lamplough, The Queen Alexandra, Lady Hillingdon, Innocence, Pax, Mermaid, and Mme. Edouard Herriot are all suitable for the purpose.



Suggestion for a border of Roses

Climbers and Ramblers should be excluded from the border, though they could be planted in other parts of the Rose garden. The effect of massing the dark crimson, ruby, and red Roses, etc., must be seen to be realised. Enough has been given to allow each individual to work out colour schemes after individual fancies. Space forbids much more, but an important item is the planting. Plant either between October 21st and November 15th, or March 21st and the beginning of May. Provided the soil is good, success then is assured. New roots will form at various points. Shelter from storms and strong winds must be provided. In hot weather keep the surface cultivated, and morning and evening damp down the paths to ensure a moist atmosphere during night and early morning. This is a mo portant point in the management of out of doors and conduces greatly to good health. A raised border has such advantages over any other methods that a wonder it is not more extensively put t The space left unplanted on each side border along the path should be reserve clusively for Tulips—Old English, Da and Cottage—which make such gloriou plays in May, and sometimes early Jun fore the Roses start flowering. Tulips planted year after year in the same site done.

All Roses do not do well as stan This is particularly the case with the be lows—Florence Izzard and Golden Emb particular—but if all suckers are kept for the first year or two, even they make satisfactory standards, which bloom pro at least four times during the season, a blooms are large. The distance of 3 f tween the rows is essential for wo pruning, removing suckers, disbu syringing, and cultivation. The healthy growth made under such cont is astonishing, and it is remarkable w number of perfect blooms of large s the most refined colours are to be had such cultural methods. C. A. JARV

106, *Sutton Court Road, Chiswick, L*

The Macartney Rose (Ro bracteata)

The large number of garden Roses able for general use has done much to out the single-flowered species from o dens, although many of them are very ful when in bloom, while some a worth growing for the sake of their tive fruit. The Macartney Rose is a point, for it is lovely when covered w trous dark green leaves and handsom blossoms. The fruits, however, in th have no special recommendation. native of China and has been know since 1793, in which year it was introd Lord Macartney. Amongst other Rose be distinguished by its rather dense system, greyish bark of the young w deep green, glossy, evergreen leaves, large white flowers, each 3 inches to 4 across, with a central mass of stamens, which are produced singly fr points of short shoots from early Ju October. Unfortunately, it is not very and except in the mildest parts of the requires a wall. If, however, it can bo in such a position that it can develop ally the effect is much in advance of plants that are severely pruned eac When in bloom not only does it attrac tion by the beauty of its flowers, but sence can be detected from a conse distance by its perfume.

Rose Mrs. Wemyss Qu

The garden of Mr. A. Hope Hend Argaty, Doune, Perthshire, contains ber of beds each planted with one va Rose. These have, as a whole, done ingly well this season, but the prido collection for profusion of bloom h Mrs. Wemyss Quinn. Individual have been very fine, and they have b duced in almost endless profusion.

S. AR

IN THE ROSE GARDEN AT SOUTHPORT

Thousands of visitors to the Southport Flower Show have passed through this delightful Rose garden within the last few days

RYSANTHEMUMS

The disbudded early

5 term is applied to a method of grow- an esteemed section of the Chrys- hemum to give blooms in the open before the inside ones flower—from to October. The system has a great recommend it. Pruning the growth ricting the number of blossoms on a this case mean having certain varie- xtra good condition before they would naturally. This is done by selecting ar flower-buds. Specimens so grown anything from 4 inches across and as ith long stems; and in the case of the inds, having foliage not too large, but that the whole is at once a graceful ng item for decoration.

isbudded early has got a firm hold on ket in providing cut blooms for sale, d specimens invariably command pay- es. The white variety Sanctity has, already figured in the market. This tional and the growth of the plant to blooms so forward must be well pre- spring, and, of course, very early uds retained. This variety, by the ooms naturally in the early part of

season has, up to now, been quite ble to exceptional progress, for, as far can gather, in no district has there scarcity of moisture in the soil. Drought is the great difficulty in some seasons, when cultivators must perforce apply abundant water—an important matter all too often neglected. To be prepared for want of rain it is well to consider planting in lines in shallow trenches, so that if we do water, this shall not run away from the roots.

The general growth of the section is branching, and from the first, therefore, we do not interfere with the point. This point in time shows bloom buds, which may, or may not, be removed; but it is noticeable that as the side shoots come lower on the plant a flower with the longer stem is perfected. This peculiar habit of growth was found in the variety Mme. C. Desgrange of years ago. I exhibited specimens of this sort as far back as 1890, and to get the longer stem I remember it was the custom to cut away about 6 inches in length of the plant directly it had shown the flower-buds at the point.

That variety may not be needed to-day with a better selection. A variety that pleased me last year is Framfield Early White, for the plant as well as the flower is ideal. Beautiful waxy-white examples about 4 inches either way, solid and lasting, compared well, from a useful point of view, at any rate, with the giant Japanese so much in request for exhibition.

Cultivation, then, consists of starting in good time in spring with the cuttings, and, when rooted, growing the plants on in shallow boxes till planting-out time. This method is preferred to potting, and a couple of shifts are given in fresh soil to keep plants from becoming starved and stunted. In the open it is well to give ample space, and 18 inches from plant to plant is not too much. The space will be filled with growth by autumn. A 4-foot cane is placed to each, the main branch tied, and then, later, the side stems looped to it; and beyond keeping the surface of the ground free from weeds there is little to do in a year like this, when water has been so abundant. The thinning of growth is carried on as required right up to the time of flowering. A plant may develop from a dozen up to a score of excellent blooms according to variety.

Specialists in Chrysanthemums have lists of varieties—and there are many sorts—but the following 18 names may provide a selection for growers who want a few really good and distinct kinds:—Almirante, crimson, also a red and a bronzy-yellow form; Early Buttercup with its fawn-shaded variation; Cranfield Yellow, Cranfield Pink, Crimson Circle, a new variety; Framfield Early White, beside the primrose form; Delight, soft pink, and its fawn form; Mayford White, most elegant; Mrs. R. Hamilton, rich yellow; September Glory, bronzy-yellow; Pink Profusion and its salmon variation; Sanctity, pure white. Early Buttercup and Mrs. R. Hamilton are examples of the incurving shape—one that is likely to play an important part in early Chrysanthemums as time goes on.

H. S.

1. The garden on the south front

2. The pergola, looking west

3. The Lily poo east front

4. The rock and water garden

5. Japanese watercourse" gr

6. The "Dutch"

THE GARDENS AT "MARTHOLME," WIMBLEDON

The home of George Roberts, Esq.

SOPHOCLES IN A WIMBLEDON GARDEN

S than 100 yards from a busy roughfare, where the vehicles of the neral Omnibus Company ply all day, ıg which a stream of motor traffic in- y flows, lies the garden illustrated on l the opposite pages. It is the result ıarticularly successful endeavour to ·ithin easy reach of city life some of ce and repose that only a pleasant affords, for the words of Sophocles, over 2,000 years ago, are still as true "'Tis only in the garden men may e joy and blessing."

better explain that on the occasion last visit to "Martholme" I had iling away the time on my journey ıng this old Greek author's philo- nd poetry, and if certain apposite of his creep into my notes on dens it is perhaps excusable. If ıt the Editor would agree I would here and now with one of them: ellest thou thy tale of many words? dless speech is irksome everywhere." he pictures tell their own story. Ah None has no sorrow; happiest who ," and if ink spilling is one of mine n over, and "But little count we ills gone by."

e "Martholme" garden is so easy to ıut. In many respects it exemplifies principles of successful garden de- ot that it is in any sense that im- hing—the "perfect" garden. This ıean that it had achieved one in- ; desires and one only. Although rden may be an expression of its individuality, as is this, it is only extends its appeal to others that it ıid to be really successful. Pure in- m in gardening, as in other applied st as likely to produce the grotesque ıeautiful, so the perfect garden, to one individual's ideas, may, and would, be an absurdity to many But conformity to accepted prin- far as such can exist, in garden loes not involve monotonous imita- one agrees that the immediate en- s of the house should be architec- character and design, it does not t any garden need be stereotyped or Within the boundaries of that ined direction that the garden round must partake of its architectural ex- there lies illimitable possibilities for ıf treatment, and at "Martholme" as been made of these. The house it- asing design, is set back sufficiently ply screened from the road by trees ıoment one enters the gates there is e feeling of seclusion that seems incompatible with the speed and on the road just left. By the time es the garden on the south front, ion of being so near the busy world ıly passed, and one is lost in wonder our and health of living, growing Simple in general design, the gar- sunk in a series of levels, and called h" garden, is planted with a free- can only be described as lavish. cascades of colour fall over the low Every suitable plant that can by art be encouraged to grow freely me here. Beautiful things are not ıecause they are common, but are whenever occasion demands them. ıss, preference is given to rarer, ecies when such can be grown in tmospheric and climatic conditions, ve without looking unhappy. The ıe style of garden is carefully main- l a succession of soft colour per- vades the scene to a degree that one hardly expects. Two views of this garden are given in illustrations 1 and 6.

On the east front lies a pleasant lawn surrounded by flower and shrub borders, and in the centre a Lily pool of very happy proportions. The view in illustration No. 3 is taken from the south-east corner of the terrace that surrounds the house on two sides.

Beyond the pool a pergola screens the inevitable ugliness of a tennis lawn, and leads the way to "the glade," and this terminates those portions of the garden designed on geometrical lines. It must not, however, be inferred that even these portions have any of that sense of unnatural formality that one is accustomed to associate with this expression. All around are evidences of that cardinal truth so forcibly expressed by Mr. William Robinson: "Although it may sometimes be imperative to develop the gardens to a formal design, formality in planting is never necessary." Thus we find the lawns bordered with free-growing masses of Azaleas, Lilies, flowering trees, and shrubs, etc., in a delightfully unconventional way.

One feature at the north-east of this lawn is worthy of note. When the house was being built there was a considerable surplus of earth to be disposed of. Also there was the necessity of finding a suitable place for glass-houses, and the only convenient spot was one well within view of the house. A cunning arrangement was therefore adopted of interposing between the house and the glass a huge mound of surplus earth and creating a rock garden that effectually hides the glass beyond, without in any sense detracting from the value of the glass-houses for the purpose for which they are required.

The owner would be the first to admit that, looked at from the point of view of picturesque formation, this rock garden leaves something to be desired, but it well serves its purpose, and anything it lacks in artistic construction is more than compensated for by the wealth of colour it presents during its various seasons. The two pictures now given were taken during the spring, but there is here conclusive evidence that a rock garden need not be dull during any season of the year except mid-winter. In fact I think I have seen it in every month of the year, but never entirely without colour. I have never passed it but I have felt compelled to compliment Mr. Ackland, the gardener, on his success under admittedly difficult conditions.

Passing on through the pergola the "glade" is reached. This is a shadow-chequered lawn around and on which every tree that could be retained successfully has been preserved. Quiet and cool, it is delightfully refreshing on one of those rare, sunny summer days we get even in England sometimes, and here once more Sophocles can tell the story in fairer words than mine:—

In the old rock garden at "Martholme"

This was formed with the surplus earth during excavations for building the terrace to hide glass-houses beyond

"And there, beneath the gentle dews of heaven,
The fair Narcissus, with its clustered bells,
Blooms ever, day by day,
And the bright Crocus with its leaf of gold."

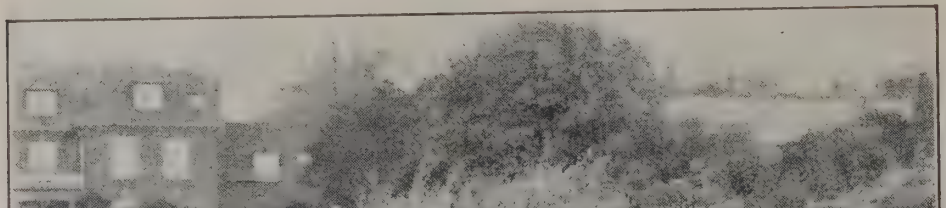
So green and peaceful is this interlude amidst the gardens that it would be a pity to destroy its quiet charm, and such improvements as are in contemplation here are conceived in the spirit of its sylvan character.

Leaving the glade on its eastern extremity we pass through a leafy arch and emerge into the newly-arranged rock and water garden seen in illustration No. 4. This, only completed a few months ago, has already attained an aspect of maturity inconceivable except to those who know the rapidity of growth of the vegetation that thrives under such conditions. It consists of a cliff-like formation, broken and crumbled with age, from which emerges a spring that feeds Lily-decked pools on varying levels. It forms a definite contrast to all that is rigid or formal elsewhere in the grounds, and yet is so secluded that it is

visible from nowhere but within its own confines. Thus it does not offend the senses, but rather emphasises that feeling of having passed through gradual stages to the wildest aspect of modern gardening.

Turning to the right one gets a view of the oriental aspect of the same striving to appreciate and idealise Nature, and at the same time giving the scene that palpable touch of art that expresses man's handiwork. This is a meticulously faithful Japanese "dry water-course" garden, with its miniature hills and valleys, its pebbly lake-bed, guardian stone, cascade stones, lighthouse stone, the stones of unity, harmony, contemplation, and amusement, and all the poetical, and to the western mind sometimes whimsical, fancies so dear to the heart of the Japanese landscape gardener. This also is a recent introduction, and was only completed last spring by Soya Jiju Suzuki, whose ancestors were responsible for some of the finest gardens in old Japan, including the Silver Temple Garden at Kyoto.

Here, then, within the space of a few acres, are concentrated a series of types of gardens, each with its own individual interest, each in its relatively proper place, and each an effort to make the most of the circumstances that existed. The achievement has involved five years of constant and earnest effort to triumph over difficulties, for London, with its fog and smoke, is quite near enough. But it constitutes a series of charming results, and I can conclude with one more shred of Greek philosophy: "Chance never helps the men who nothing do." GEO. DILLISTONE.



Cytisus præcox well placed in the old rock garden at "Martholme," Wimbledon

Mesembryanthemum lilacina

Although this plant is only suitable for summer its grace, charm, and colour are such that even as a summer plant it is a welcome addition to the rock garden. In mild winters it may be hardy in sunny chinks if some light protection is afforded. The plant is useful for hot, dry soils, and should always be planted in open, sunny spots or some arid declivity between two rocks firmly packed with sandy or stony material. Cuttings strike freely in a cold frame in August. Short young tops should be used for cuttings and may be inserted pretty thickly in small pots. The plants should just be protected from frost and kept in dry, airy quarters. A dry, sunny bank, often devoid of plant life, might be made beautiful with this plant.

E. D. V.

TREES AND SHRUBS

Shrubs for forcing.

THERE are two very different ways of treating shrubs intended for forcing prematurely into bloom; first, lifting them from the open ground in the autumn and at once potting them; and secondly, keeping them altogether confined in pots, and forcing them year after year. Where this latter method is practised it must be borne in mind that after the display of flowers is past the plants need just as much care in their treatment as before, that is, they should, after blooming, be protected in such a way that the tender foliage will not be injured by cold, cutting winds or spring frosts, and after all danger is over the plants should be plunged out of doors in a spot fully exposed to the sun. They must throughout the summer receive every attention in the matter of water, and an occasional dose of some stimulant will be of service. Where a few shrubs are grown in this way for forcing, and others that may be required are lifted from the open ground and potted, the established plants should be employed for the earliest batches, and those just lifted for the later ones, as in their case much less forcing will be required. As a rule, the blooms on plants that are established in pots retain their beauty for a longer period than those just potted. Hot sunny weather towards the end of the summer and early autumn is very favourable to the ripening of the wood and consequent formation of flower-buds. Early potting should as far as possible be followed in the case of plants lifted from the open ground and intended for forcing, as by so doing the roots will take possession to a certain extent of the new soil before they are required to be taken indoors. Thus a good general plan, wherever it can be followed out, is to pot the shrubs intended for forcing as soon as possible after the leaves have fallen. In order to encourage the formation of roots as much as possible they should be watered when necessary, and if the pots are plunged in of leaf-mould, Cocoanut refuse, or thing in that way, it serves to mainta soil in an even state of moisture, an protects from frost. With regard different shrubs available for forcing, are now a great many more kinds th the case a few years ago. Lilacs, A Deutzias, Rhododendrons, Kalmias, Cl Plums, Peaches, Almonds, Thorns, St colchica, and Hydrangea paniculata flora are largely grown for the purpo besides these there are the Laburnum of the Weigelas, Spiræa confusa, S. bergi, the Guelder Rose, Forsythia su F. viridissima, Daphne Genkwa, japonicum, Xanthoceras sorbifolia, hanthus virginicus, C. retusus, I stenophylla, Choisya ternata, Maulei, Magnolias, Zenobia speciosa variety pulverulenta, Cytisus Andrean others.

Spartium junceum

During the hot days of July and when many flowering shrubs need a coaxing to keep them alive, this g showers of its golden blossoms. It w difficult, indeed, to find a more beautif than a clump of this shrub 4 feet to high clothed with its golden masses of It is an ideal shrub for hot sandy soil many other shrubs will not thrive. seen some large bushes of it overha pool, and a striking picture it made, flection of the slender stems and blossoms in the water adding not a the charm of the surroundings. Alth a young stage the plants are sparsely with leaves, they are, in older sp almost devoid of them. This is n noticeable as the slender green shoo excellent substitutes. To those who of a poor sandy nature this shru dispensable. In addition to the rich colour of its Pea-shaped flowers the pleasant fragrance, a feature tha commend itself to many. To those plant this shrub, however, it will sary to give a word of warning. the fact that it makes very few ro these of a long wiry character, it tra badly, and only very young plants s used. It is better to purchase the pots as there is then very little risk Pruning is permissible in a young keep it in bounds. Propagation is by means of seed, which is best sow or boxes and raised in a cold frame singly into small pots when about high. H. Sa

2, *Elm Dale Villas, Chepstow, Mo*

Hydrangea paniculat

This is a shrub of distinct beauty fectly hardy. In spite of the pa baceous character of the plant "it summer-leafing subject." Its be grace place it among the most w garden shrubs. It is a comparati shrub to grow as it will flourish any kind of soil that is well drained been deeply and thoroughly cultiva planting in masses in large beds th excellent, the large and beautifu shaped heads of creamy-white flo viding a picture of more than usua It is advisable to cut the shoots w borne flowers nearly down to the l in winter or spring, the young grow during spring or early summer ones to flower. The beds should a good mulching of well-decaye after pruning has been done. The be planted with spring bulbs for ea

H. Sa

The Cause of Grapes Cracking

a well-known fact that only certain ties of Grapes are subject to this evil, worst, perhaps, being Madresfield nd many cultivators have felt com- abandon growing this fine Muscat wing to this particular fault. The ans, too, often crack badly, and Buccleuch is a kind requiring great prevent many of the finest berries be- spoilt in this manner. Muscat of ia sometimes shows a tendency to a certain period of its growth. This usually cracks close round the stalk erry, which is more annoying than at the apex, as the mischief is not detected before decay sets in and o the neighbouring berries. Several of prevention are resorted to by gar- uch as cutting a notch in the wood w the bunch, or boring a hole the shoot, the object being to check of the sap, a superabundance of uses the berries to extend suddenly he power of the skin to resist, ausing them to burst. Others allow teral growth, with the object of off any over-abundant supplies of

t dispute that these means are not s effective, and have no doubt often e purpose for which they were in- ut I think such methods must be l unsatisfactory because they do not he root of the evil. The two former vour somewhat of 50 years ago, or ck still. A free extension of lateral a time when cracking is likely to is no doubt beneficial, but if too ermitted to grow there is a danger ating the evil instead of averting it nting a free circulation of air he Vines. Moreover, if the shoots properly trained and not stopped hard from the commencement there to be any great necessity for leaf

ise of cracking, I am of opinion, dates back to an earlier stage in h of the berries than the ripening which time it always occurs, and d by a check, either from an in- supply of water, or too low a tem- nd cold draughts. These condi- ontribute to hinder the free and ted growth of the berries, at the reducing the elasticity of the skin, n the critical time arrives cannot fficiently; consequently it bursts. inced that cracking is more often ough fear of giving water, with the rting the malady, than by keeping onstantly moist. If ventilation is in a right manner there is no which Vines cannot be well n fact, their roots should never ap- ness. I never hesitate to water orders, most of which are inside, r stage the Grapes may be, feel- nt that by ventilation I can pre- ill-effects, and I seldom have rries, Madresfield Court and Duke ch being treated in every respect her kinds. I should, however, be pply a soaking of water when the e approaching ripening if they had reviously well attended to in this so I should fear the consequences a heavy fall of rain upon an out- r which had not been watered ry time. Roots in a thirsty state up more food than the Vines can this is one potent cause of crack-

it is often produced by a check in of the berries, it is more often a too humid state of the atmosphere of the house and insufficient ventilation. The varieties of those Vines which are known to have a disposition to crack should on no account be forced after the berries have commenced colouring. The texture of both foliage and fruit at this stage will admit of a free circulation of air at all times, and the ventilators should be left open a little at night, according to the state of the weather, increasing the supply considerably during the day, but if the weather is cold and damp, as has been the case this season up to the present time, fire-heat cannot be dispensed with, a gentle heat being required during the absence of bright weather. Damping the borders must be sparingly indulged in during a dull and sunless time. Some assistants will go the daily round of damping and syringing let the state of the weather be what it may, and injury is often done in this way before it is noticed. Damping and syringing are operations requiring observation and thought, so as to adapt the inside to the outside conditions to a certain extent. A glass roof will not shut out the external air, and although we can by artificial means counteract the extremes which unfortunately fall to our lot in this country, it is well not to follow a too hard-and-fast line in the daily routine of firing, airing, and watering, but if the external conditions are against us, exercise a little patience, and make the most of better weather when it comes. B. H.

Early cooking Apples

It is one unfortunate circumstance relating to early cooking Apples that, because generally producing very fine fruits, they figure so prominently at autumn exhibitions, especially so in trade collections, such as are now frequently seen at the Royal Horticultural Society's meetings. Were it not that persons, seeing such as Peasgood's Nonsuch, Emperor Alexander, Lord Suffield, Pott's Seedling, and some others in such fine form thus exhibited, they would be far less in demand than are many others having far better keeping qualities. Naturally the frequency with which any variety is presented helps to do much to popularise it, although for ordinary use and culture it may be far less worthy of such culture than are many others. It would be interesting just now could there be collected from readers of GARDENING ILLUSTRATED a census of the six best varieties of cooking Apples suitable for small gardens, and to cover a long season. A similar census of six best dessert Apples for a similar purpose would be very useful also. But in making lists, readers should not tie their selections to varieties they may be growing, and for which it would be reasonable to assume they have some bias. Rather the selections should be as broad and impartial as possible, putting aside mere beauty or size in preference to good cropping and household fitness. I name as a good collection of cooking Apples for small gardens Early Victoria, Stirling Castle, Bismarck, Waltham Abbey Seedling, Lane's Prince Albert, and Newton Wonder; of dessert varieties, Miller's Seedling (far too little known), Worcester Pearmain, Cox's Orange Pippin, Adam's Pearmain, Cockle's Pippin, and Sturmer Pippin. I have specially excluded such showy varieties as King of the Pippins, Allington Pippin, Jas. Grieve, Charles Ross, and Christmas Pearmain. E. C.

Layering Strawberries

The amateur with his small garden cannot well afford to plant even a score of stout runners in the autumn expressly to furnish early runners. To secure these the bloom trusses have to be pinched out, and that is rather a sacrifice. These very early runners are needful only when it is purposed to get them well established in 6-inch pots for early forcing. When it is desired to have a few dozen or score of strong plants in such pots to push on into bloom gently that fruit may be ripened a week or two prior to other fruit being ripe outdoors, then the earliest runners thrown out by the ordinary fruiting plants suffice. Whilst there is ample time yet ere strong runners be formed, it is not too early to get small pots ready by having them washed, and into each one may be put, if there be such at hand, a small piece of Moss. Failing that, leave any such simple drainage until filling the pots with soil, then place a little fibrous or turfy matter into the bottom of each before filling them with soil. Proper soil or compost may also be prepared now, and a couple of bushels will suffice for many small pots. This should consist of turfy loam, well broken up, one half, the rest being well-decayed hotbed or Mushroom-bed manure, leaf-soil, and some sharp sand. If that be got ready now and put into a box, being first well mixed, its existence will enable the work of pot filling and layering to be done rapidly. All pots thus filled with layers should be placed in alternate rows of plants, thus leaving every other space between the rows quite free for walking in for watering or fruit gathering. With a hand trowel make a small hole in the ground just where each pot is to stand, as that keeps it in an upright position. If the selected layers, which should always be the strongest, be each one secured to the soil in the pots by means of a wooden or wire peg, and in dry weather water be given once a day, extra early-rooted plants are thus easily secured.

Cherries and moisture

No doubt many fruit trees fail through lack of moisture. I have some trees which do grandly in a wet season—at least as far as swelling up the crop is concerned; but, of course, with a wet season there is a serious drawback in the way of cracking, as it is impossible to keep cracked fruit for any length of time, and what is gained in one way is thus lost. There is no difficulty in throwing off heavy rains by planting on sloping banks or by using some conductor to throw off excessive rains and prevent cracking. In dry, gravelly soils the Cherry is short-lived if not well attended to in the way of moisture. If these trees are now suffering at the roots the mischief is soon seen; the leaves droop in hot weather and do not assume an erect growth after a night's shade, and, what is worse, the trees frequently break into new growth early in the year, or even in mid-winter if the weather is mild. This growth is soon destroyed, and the result is canker and in time total loss. I am well aware the Cherry does not like a very heavy soil, but feel sure a very light, dry subsoil will not tend to a healthy growth or long-lived trees. I am obliged to mulch very heavily, and in dry weather to water at least twice a week, this entailing a lot of labour. In no case do I advise a south wall in hot or exposed places, as with a tropical summer the fruits are nearly wasted before they are ripe, as they are much exposed on one side and hard on the shaded side. I lost several trees years ago through drought, hence my anxiety as to a good supply of moisture. With plenty of the latter there will be less decay, as a robust growth will result and little canker. I am alive to the importance of ample drainage in heavy land, but deep planting is not to be recommended, as if the fibrous roots can be kept near the surface, there will be little canker, provided there is an ample supply of moisture. C. A. M.

VEGETABLES

Mushrooms (Agaricus campestris)

THE successful cultivation of these has baffled many gardeners, and will continue to do so unless careful attention is given to the general principles of cultivation, which are more or less complicated. An experiment which was once tried proved most interesting, and resulted in a heavy crop. The spawn was placed in Melon-beds where the Melons were actually growing, the temperature being 80 degs. Whilst the Melons were ripening the spawn increased, and on clearing away the Melons the beds were well watered, the temperature lowered to 65 degs., and the Mushrooms appeared. From this fact it is clear that Mushrooms need not be produced in a dark place, although growth certainly occurs at night, and, generally, Mushroom-houses are dark; but it would appear that the perfecting of the fungus is brought about by light. This then raises the query as to the advisability of the structure known as a Mushroom-house, especially having regard to the liability of an attack common to such houses which distorts the shape of the Mushroom to such an extent as to render it unfit for use. For

CULTURE IN THE OPEN a suitable bed may be made as follows:—Collect really good stable manure, which must be repeatedly forked over to allow any undue heat to escape. Add to this a fair proportion of Oak leaves, and when the whole is well mixed and thoroughly rotted the formation of the bed may be commenced. Select a position beneath an east wall, slightly raise the bed in making, so that heavy rains may drain from it. Its height may be anything from 2 feet to 4 feet, and its width about the same.

Lay out the manure evenly over the allocated space, taking care that it is not dry or unduly damp, for it is in the minor details frequently that success depends. The temperature produced by this layer of manure should not exceed 80 degs., or at the outside 90 degs., but the latter should, as far as possible, be avoided. Arrived at the correct heat, the spawn, which should be the best possible, and procured from a well-established firm, may be inserted. Break the spawn into pieces in size about the equal of a hen's egg. Place them in holes at a distance of 8 inches apart, and just below the surface of the manure. Cover with 3 inches of fine soil, preferably rich loam, when the bed may be firmly beaten with a spade to make it adhere together. This done, the whole may be covered with long straw to retain the heat.

Mushroom-house methods may be regarded as very similar to the above, except that the protection of litter or straw is unnecessary, and also that artificial watering has to be resorted to, and here again is a trap for the unwary, too much water being as detrimental as a shortage.

The management of an allotment

The Ministry of Agriculture has had a chart for the general cropping, manuring, and cultivation of allotments designed and published with a view to helping allotment holders to make the most of their plots. From want of guidance, many allotment holders employ unsound methods or no methods at all, with the result that there is far less than a full return from their allotments, or that there is on them a surplus of one vegetable and a shortage of another; odd rows of green crops interfering with winter digging, vegetables planted in unsuitable land, and manures incorrectly applied.

These and many other points have been carefully considered by the Ministry's experts in designing this chart for allotments. The scheme advocated in the leaflet containing it provides that part of the plot shall be "double dug" each year; that cultivation and labour shall be spread over the longest possible period; that correct methods of manuring and liming shall be employed; that the proper proportion of each vegetable for the average household be grown; and that the proper rotation of crops and manuring shall be followed. It shows also how the correct quantities of seeds and manures can be estimated.

The chart itself is arranged in three sections: (1) A plan of the plot with three divisions on which the rotation is worked, and showing where and how the crops might be sown with distances between the rows, etc.; (2) naming the spring and summer crops together with the dates of sowing, planting, and season of use, and indicating their positions on the plots; (3) showing the same for the autumn and winter crops.

The working of the rotation over three years is followed in a small table at the foot of the plot diagram. Experienced allotment workers who secure copies of the leaflet will notice that the completeness of the rotation is broken by the growing of spring-sown Onions in soil previously occupied by shallots. The latter, as a matter of fact, cannot conveniently be fitted in elsewhere, and practice has proved that the Onion family may, with proper manuring, be grown for many years on the same piece of ground.

The great importance of proper soil working by thorough and deep digging is not so widely realised as it should be. Deep cultivation exposes the soil to the action of air, rain, and frost, making it easier to work; it increases the supply of plant food in the soil; it improves the drainage and provides ventilation; it enables the soil to conserve moisture during dry periods; it decreases the number of soil-pests by exposing them for destruction by hand or by birds; and it breaks up the subsoil, soil pans, or layers of hard, compressed soil, which, if interfering with the drainage or cultivation, always check full fertility.

Growing Asparagus

The general method of production is almost entirely dependent upon the soil being rich, well drained, sandy, and open. Beds can be 4 feet in width and of any length, and should run north to south. Plants one year old are far more to be recommended for the formation of new beds than older ones. These should be got out in March or April, and placed 1 foot apart and not more than 4 inches deep. The application of artificial manures must be treated carefully, but occasional dressings of soot, salt, or guano are recommended. If applied during dry periods this should be well watered in.

In October cut off the grass at about 6 inches from the bed's surface, find each crown, and dress with well-rotted cow manure. It well pays to do this, cleaning the beds of all weeds at the same time. Cover the whole with a sifting of fine, rich soil. The second year, in March or April, replace any failures (vacant spots having been indicated by placing a stick there), hoe and tend generally, giving dressings as previously advocated. As before, in October cut down.

The third year sees the commencement of cutting, suitable shoots being removed with great care, and with the Asparagus knife only. Shoots should be removed at their base when some 2 inches above the ground, and it will be necessary to scrape away a certain amount of soil around the stem, but not more than three shoots may be taken from each crown.

A similar course may be adopted until the sixth year, when the Asparagus will be fully established and will need less coaxing, although at all times too great care cannot be exercised if perfect Asparagus be desired.

Although there are on record nu beds of great age still bearing wo crops of Asparagus, it is safe to say will repay one to renew the beds every 25 years, but according to results s this matter be determined.

Early vegetables are always appr and nothing more so than this, whic possible to cut from December on Crowns for forcing should be three ye and may be planted in boxes or trough by 3 feet by 1 foot deep. Good rich which well-rotted manure and lea have been added, will meet the case ably, and into this, to a depth not ex 5 inches or 6 inches, the plants r placed. A general temperature of 65 with an increase of 5 degs. at night, missible. In three weeks the shoots be visible. B. He

Defoliating Tomatoes

Is it right to take half the lower le Tomatoes off when they have se bunches of fruit? My employer says worst thing that can be done. My o doing so was to let the sun in, and a all the strength should go to the fruit V.

[Cutting the leaves from Tomato although necessary under certain co should not be practised by rule-of The foliage acts as a channel for con the sap to the fruit, although in cases luxuriance the leaves assimilate the v the nourishment, and the fruit, even th may set, usually fails to swell. On m plants partial defoliation is beneficial, every alternate leaf half way three the way up the plants, serving those left entire in the same manner in time. This will check growth genera dering the formation of fruitful tr flower more probable. When, howe plants make only a normal growth freely, the less the knife is used amo foliage the better, as it should be l mind that, in addition to supplying with food, it acts as a protection aga sun, the latter sometimes burning o ing the fruit, some sorts taking har than others. As autumn approaches fruit has swelled to its fullest, relie plants of leaves which hang immedia the fruit is often imperative in order it a chance of ripening before frost indeed, some good growers then use somewhat freely, their contention be as the laying on of pulp has ceased, tion by leaf defoliation is warrantabl of course, refers to open-air plants. way of guarding against excessive and of reducing the need of defolia minimum is to grow the plants in a free soil from the first, and to as stimulants after the fruit is set.]

Forcing Potatoes

Form a bed of hot dung to a si tent with its location, and upon t 6 inches of soil. Use whole Pot planting. Cover over with mats or about a month, when they will sprouted and ready for transfer to on which some 7 inches or 8 inch have been placed. When taken up striking bed remove all shoots e strongest and plant 4 inches de simplest method of all—growing —merely entails the planting of in 8-inch or 11-inch pots, one in t and three in the latter. Fill the pots 3 inches of the rim with rich soil an the Peach-house or other suitable h the glass. The temperature should 55 degs. Water regularly and add t as requisite. Forcing may well co December. Bruce F

REMINDERS FOR THE WEEK

ıthern and Midland

arliest batch of plants is now ready second earthing-up. This should be hen the soil and leaves are dry. A aking of liquid manure should be the roots and the leaves drawn to- nd tied with bass, removing any that w. Place a little soil at a time and m round the plants.

s Sprouts

has been an excellent season for Sprouts and the plants have made wth. All decaying leaves should be from the base of the plants and a ssing of soot hoed into the soil round s will prove beneficial to the crop. at are loose in the ground should be m.

Artichokes

ajority of the flower-heads have now , and the old stems and dead leaves e removed. Encouragement should to induce the plants to form strong or next season. A liberal dressing of l manure should be placed round the nd where ample supplies of liquid are to be had further doses may be th advantage.

Carnations

cent rains have been beneficial to the yers that were put down during l these should now be well rooted. no immediate hurry for planting for a week or two, but the layers severed from the parents. The new uld be prepared by deep digging, oor add a fair dressing of rotted eep enough so that the roots will not contact with it when planting. Old ubble and burnt ballast are helpful ants if forked lightly into the sur- e beds previous to plantings.

hrysanthemums

should now be a good show of nd buds on the earliest plants, and he plants along the ground should stirred and weak supplies of liquid nd soot water given at frequent in- Where it is necessary to have the looms disbudding should be done. side shoots supported or many will ed by wind and rains.

vers

mateurs are disappointed with their r seedlings owing to their being pindly in growth, thus giving a poor looms. To induce the young plants e bushy the tips should be pinched use a break. The soil in which rs succeed best is that which con- e manure and is not of a light or re.

ns

repotting was done a few weeks previously advised, the plants should ng freely, and careful watering is They must not become dry or irre- amage will be done; neither must continually soaked. Take care no any time is allowed to settle in the the corm. On fine evenings during h I find it beneficial to the plants to frames open.

s

f the Lorraine type are now making cely, and where not already done should have their final potting. Take care not to over-pot. Make the soil of a free and open nature and give ample drainage. Keep all flower-buds removed and the young shoots neatly staked. Cuttings of Gloire de Sceaux may still be inserted to form useful plants for next summer.

Schizanthus

Seeds should now be sown of this beautiful annual. Light sandy soil in shallow pans is suitable in which to sow the seeds, and these germinate freely in the greenhouse or frame provided the soil is kept moist and the pans shaded from the light. The seedlings should be pricked off when large enough to handle into boxes and grown on as hardy as possible.

Strawberries

Where new beds are to be made no time should be lost in getting them ready for the plants. It is advisable to add ample manure when making the bed. Soot and bone-meal are both valuable if worked into the soil at the time of preparation. Runners should no longer be allowed to remain on the parent plants. Permanent beds should be kept free from weeds, runners, and dead leaves.

Tomatoes

Where plants are being prepared for the winter crop it is risky to leave in the open air after this date. They should be housed in deep frames or empty pits that have no heat for several weeks before placing in their fruiting quarters. Ample light and sunshine are essential to winter crops of Tomatoes.

Glasshouses

This is the best month of the year to have the various greenhouses put in order outdoors. All leaks should be attended to and painting and glazing done where required. The heating apparatus, too, should also be overhauled.

W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Herbaceous borders

The autumnal gales will shortly be due, and to prevent damage to the taller plants in the herbaceous borders they ought to be made secure by a further tie. In some cases it may be advisable to reinforce the present stakes by others slightly taller, and these should be as unobtrusive as possible. Notes can be taken of badly-placed plants, or of those which clash with their neighbours, so that the needful alterations may be done at an early date. Those who admire the effect of Delphiniums earlier in the season might profitably use some of the later and taller Monkshoods in order to get a blue effect at this time. Remove seed-pods and spent blooms when possible to do so, and if the time permits of it, the borders may receive another hoeing, which, in most cases, will keep them clean for the remainder of the season.

Dahlias

It is wise to do a little thinning among the Dahlia shoots. Congested plants are never so effective as those which are kept rather thin, and blooms from the latter are always of a superior quality. Coltness Gem, of course, is invaluable in many positions, and I yet remain loyal to clumps of the old Glare of the Garden. A dark-foliaged variety with vivid crimson blooms is unique among Dahlias. Its name is (I think, although I am not quite certain) Amy Barillet. It was given to me under the name of Amy Bartlett, but whatever its name it is certainly a showy Dahlia. Among the larger-flowered sorts I like Souvenir de Gustave Duzon, Geisha, and the distinct colour of Porthos. Those who do not object to a little stiffness will find the Pompons useful for cutting.

Border Chrysanthemums

Like other things at this time, the border Chrysanthemums require attention in the way of further tying, and, if necessary, taller stakes. Opinions differ as to the value of disbudding. In the case of single varieties the sprays are perhaps better left alone. As regards the double varieties, some of the larger sorts are certainly better when lightly disbudded. If a mulch can be spared the border Chrysanthemums are benefited, for there is at times a spell of hot and dry weather during September, and if the plants are allowed to feel the lack of moisture they are never afterwards entirely satisfactory.

Biennials

All the Wallflowers, Forget-me-nots, Polyanthi, Sweet Williams, and other biennials ought now to be in nursery lines. There is a tendency at times to overcrowd them, but where there is plenty of room they ought to be spaced out rather widely. Frequent hoeing among the lines encourages growth and may, during a dry spell, obviate the use of the watering pot.

Climbing Roses

It is desirable to tie in the current season's growths in order to prevent damage. Fallen petals and spent blooms ought to be cleared away at least weekly, for nothing is so untidy looking as decayed trusses on Rambler Roses.

Greenhouses

Plants intended for an autumn display will now be receiving attention. Among these may be Salvias in variety and Eupatoriums which have been planted out during the summer. Such plants ought now to be cut round carefully with a spade in order to reduce the size of the balls, and when they have recovered from this trifling operation potting-up may safely be done. It is advisable to put these plants when potted into a shady place for a week or two and to syringe them overhead daily until the roots lay hold of the fresh soil. Hard-wooded plants will yet be safe out of doors for a few weeks, but these must not suffer from lack of moisture.

Roman Hyacinths

The price charged for these now is little short of a scandal, but those who desire to have Roman Hyacinths must be prepared to pay that price. As soon as the bulbs come to hand they should be boxed or potted-up and plunged under weathered ashes, leaf-mould, or something of a similar kind. I have seen mats and sacks used for this purpose, but plunging is undoubtedly best. When plenty of root has been made it is merely a question of heat as to when the Hyacinths will bloom, although, of course, early-potted bulbs may be had in flower in November without any artificial heat whatever.

Kitchen garden

Get the early-sown Cabbages into nursery lines without delay. Surplus French Beans may be picked in a young state and pickled for winter use. Mark good clumps of Rhubarb and strong crowns of Seakale for early forcing. The latter may be lifted now and laid in under a north wall to hasten the fall of the foliage. Autumn-sown Onions should now be pulled and dried off.

W. MCGUFFOG.

Mabie Gardens, Dumfries.

The Southport Flower Show

THE third annual show arranged by the Corporation of Southport in the Victoria Park proved a wonderful success from every point of view. The attendance was greatly in advance of that of last year; in fact, receipts for gate money showed an increase over last year of £500 on the first day of the show. From 1,200 in the inaugural year, 1924, the number of entries has increased to 3,000, which goes to prove the popularity of the show and also the amount of hard and persevering work which has been done by the organisers. Exhibitors from all parts of the United Kingdom delighted visitors with an almost endless wealth of floral beauty. The show might well have been likened to a second Chelsea. Many and varied were the sundries exhibits which were arranged outside the marquees and which attracted large crowds of garden enthusiasts. In addition to the floral side of the show great interest was shown in the horse-leaping events and sheep dog trials, which took place at intervals during the day.

Gladioli

The popularity of the Gladiolus seems to be growing apace. Burton was said to have had no less than 3,000 square feet of Gladioli; Southport cannot have been far behind. Apart from the true Gladiolus exhibits the flower was in evidence in no less than 15 mixed groups, in addition to which the flower was extensively used in the vase and bowl classes. In the cases of Messrs. Toogood and Messrs. Daniels the flower formed the background to some well-grown vegetables. It was extremely interesting to notice the improvement in both the number and quality of the amateur exhibits as compared with three years ago.

Mr. Watkin Samuel, of Wrexham, was first with six vases of G. primulinus, six spikes of each, his outstanding varieties being Ethelyn, Gold Drop, and Fire Queen. The first named is sure to grow in favour when better known. It is one which the late Rev Mr. Jacob would have placed on a pedestal, both in the matter of form, colour, and the way the flowers are carried on the spike. In the class for three vases with the same number of spikes Mr. Taylor, of Formby Hall, was first. Formby Hall was, we think, associated with Gladioli before the war. Mr. Taylor's varieties were mostly of Dutch origin, the leading vases being composed of Salmonea, Souvenir, Orange Queen, and Hesperia. In the class for three vases, any one variety, Mrs. Blair, of Congleton, was first with well-grown Souvenir, Mr. Samuel being second with Salmon Beauty, which, however, seemed to lack something in colour. For six vases of large-flowering, distinct varieties, three spikes in a vase, Mr. Samuel was placed first with fine spikes of Catherine Coleman and Dr. F. E. Bennett (both American varieties) and Dorothy. Mr. Richards, of Wrexham, was placed second, and Mr. Ivor Thomas third. In the class for three distinct varieties, three spikes of each, Mr. Ivor Thomas was first with fine spikes of Golden Measure, Imperator, and Chas. Bertier. Mr. Samuel was second and showed very fine spikes of Evelyn Kirtland. In the class for three vases, large-flowered, any one variety, three spikes of each, Mr. Samuel was first with Europa, a flower which is not seen so much now as a few years ago. Mr. Thomas was second with beautiful spikes of Dawn, also a fairly old variety.

Trade exhibits were mostly composed of the well-known commercial varieties. Messrs. Bath had a fair sprinkling of some of the better-known American varieties, such as Aloha, Anna Eberius, and Purple Glory. Messrs. Unwin had a very fine collection. This exhibit contained such leading American varieties as J. T. Pirie, Richard Diener, W. H. Phipps, Mrs. Leon Douglas, Capt. Boynton, Purple Glory, and Rose Ash, as well as some of the better G. primulinus forms and a fair sprinkling of seedlings. Messrs. Bees' collection contained many French varieties as well as Dutch, as also did that of Mr. Edwards.

Messrs. Lowe and Gibson did not have the mass of flowers most of the other growers had, but they were most artistically arranged and contained many interesting seedlings of which we shall, no doubt, hear more in the future. These were not named, with one exception, a seedling of Nydia. This is of the same shade of pink as its parent, but a larger and better shaped flower with a Picotee edge. We are not quite sure, but we think it was named Mrs. Pilkington. Their exhibit also included a fine lot of Canopus and their new variety Mandarin. An orange flower with a small dark blotch, named Sunnymede, caught the eye as something unusual in colour, but there were one or two seedlings (unnamed) which will run it very close when stocks have been increased sufficiently to justify a name and to be placed on sale. Messrs. Kelway had some very taking new varieties—Lady Ada Fitzwilliam, a pretty salmon with yellow throat, a good distinct variety; Grandeur, a lemon-yellow; Old Master, a rich ruby; Sunspot, yellow with scarlet blotch; Evening Glow; Lady Montague, lemon with crimson blotch; and Panther. The most striking primulinus was Glorious, red with a deep carmine blotch. Messrs. Sutton had a very large exhibit at the end of one of the tents which was a replica of the fine exhibit put up by them at Shrewsbury. OBSERVER.

The following is a list of the principal prize and trophy winners.

"The People" Trophy, for most meritorious non-competitive exhibit.—King's Acre Nurseries, Hereford.

Sir John Brunner Trophy for most meritorious competitive exhibit.—J. Cypher and Sons, Cheltenham.

Southport Corporation Trophy for best rock or water garden.—Messrs. T. R. Hayes and Son, Keswick and Ambleside.

Southport Cinema and Variety Theatres' Trophy for best group of miscellaneous and fine foliage.—Messrs. J. Cypher and Sons, Cheltenham.

Rowntree Trophy for best collection of tree or perpetual flowering Carnations.—C. Engelmann, Ltd., Saffron Walden.

J. P. Rudolf Trophy for best collection of tree or perpetual flowering Carnations.—Messrs. Keith Luxford and Co.

Southport Boarding and Apartment House Proprietors' Association Trophy.—W. H. Woolman, Birmingham.

Sir Albert Stephenson Trophy for best collection of Gladioli.—Bees., Ltd., Chester.

Southport Chamber of Trade Trophy for best group of herbaceous, &c., plants and flowers or cut blooms of annuals, &c.—Bees, Ltd.

Councillor Hartley Trophy for best exhibit of Orchids.—Messrs. J. and A. McBean, Lewes.

Messrs. Clay and Son Trophy for best display of Violas and/or Pansies.—J. H. Milner.

Messrs. Thompson Bros., Southport, Trophy, for best exhibit of Sweet Peas.—Messrs. Herd Bros., Penrith.

Southport Hotels and Hydros Trophy for best decorated table of fruit.—Duke of Newcastle.

Mayor of Southport's (Councillor E. Hadfield) piece of silver plate for best exhibit of twelve bunches of Grapes.—Duke of Newcastle.

Hon. G. E. Vestey Trophy for best exhibit of Orchids.—G. V. Llewelyn, Southport.

Mrs. J. Rayner Batty (Southport) Trophy for best exhibit of Sweet Peas.—J. A. Grigor, Banff.

Southport and District Licensed Victuallers' Association Trophy for best collection of vegetables.—W. Robinson, Garstang.

ROSE SECTION.

NATIONAL ROSE SOCIETY'S JUBILEE EXHIBITION.

Class 1.—Representative group of cut Roses: 1, S. M'Gredy and Son, Portadown; 2, Bees, Ltd., Chester; 3, Wheatcroft Bros.

Class 2.—Representative group of cut Roses: 1, T. Robinson, Nottingham; 2, R. Wright, Formby.

Class 3.—Three baskets of cut Roses: 1, Wheatcroft Bros.; 2, T. Smith and Sons, Stranraer.

Class 4.—Twenty-four blooms: 1, S. Dickson, Belfast; 2, T. Smith and Sons.

Class 5.—Basket of cut Roses: T. Smith and Sons.

Class 1A.—Representative group of cut Roses: E. Hicks, Hurst, Berks.

Class 2A.—Representative group of cut Roses: 1, G. Prince, Longworth, Berks; 2, J. Mattock, Headington.

Class 3A.—Three baskets cut Roses: 1, J. Mattock; 2, H. Drew, Faringdon, Berks.

Class 4A.—Twenty-four blooms: 1, H. Drew 2, Prince, Longworth.

Class 5A.—Basket cut Roses: 1, H. Drew; 2, J. M

Class 6 (open artistic class).—Bowl of cut Ros Mattock; 2, Miss Hale; 3, H. Drew.

Class 7.—New seedling Roses: Three certificates were awarded to S. M'Gredy and Son, and one to croft Bros.

The Newest Dahlias

THE joint committee of the Floral mittee of the Royal Horticultural and the National Dahlia Society second meeting of the current season cent Square, Westminster, on Tu August 24th, when many fine Dahlia ties were submitted for adjudication. following varieties were selected for Wisley during 1927:—

TROPHY.—This is a large flower of ful Cactus form, having long, rather florets, building up a bloom of so whorled form; colour, salmon-cerise; erect stems.

ROSA TAYLOR.—A large decorative having very broad, pointed florets; velvety maroon; very stiff, erect flower

MANNEQUIN.—A very dainty free-flo Cactus Dahlia, having narrow florets ing up a decorative bloom of thi colour, white with lemon centre.

THOS. HAY, V.M.H.—In this ca flower is an ideal decorative Dahlia mense size. The florets are broad, and of much substance, and the colo beautiful rosy-mauve self.

THOS. WANT. This is a good type tus Dahlia, having long, rather narrow slightly twisted; colour, rose with yellow centre.

MARY SEGAR.—Another beautiful Dahlia of large size and good form florets are of good length and the flow lovely yellow self.

DAILY MIRROR.—This immense dec Dahlia was first shown under the n Immense, but was subsequently alt that given above. The form is very si being Cactus-like in its character, havi broad, stiff florets that taper off to colour, magenta, flushed white in the

W. D. CARTWRIGHT.—Another e decorative Dahlia of a tawny-yellow The florets are broad and pointed, li up a handsome flower.

HYDE PARK BEAUTY.—A very large tive Dahlia of Cactus-like form, havi broad florets slightly twisted, taperin a point; colour, bright rose. A most tive flower.

The foregoing nine varieties were sh Messrs. James Stredwick and S Leonards, and the blooms of each were exhibited with stout, erect flowe without artificial support.

CHEERFUL.—This may be describ small decorative Dahlia, and as such of extended culture. The blooms about 5 inches in diameter and the co of the brightest crimson. The flow pleasingly reflexing.

BURFORD STAR.—An excellent add the real "Star" type of the Dahlia, the small side in regard to size. Th little Cactus-like flowers are scarlet fl

The two last mentioned varieti shown by Messrs. J. Cheal and Son Crawley, and the flowers were borne wiry stems. D.

Helianthus quinquenerv

A newcomer is this perennial Su which blooms in June. The yello flowers are each about 5 inches acr bear a striking resemblance to thos annual Sunflowers. It grows about 1 high and is, therefore, very desirable foreground of such borders.

Answers to Queries

ons—Queries and answers are inserted in IG ILLUSTRATED free of charge if corre- ts follow these rules: All communications e clearly written on one side of the paper d addressed to the EDITOR of GARDENING ND, Bouverie House, Fleet Street, London, E.C. 4. on business should be sent to the PUB- The name and address of the sender are in addition to any designation he may be used in the paper. When more than y is sent each should be on a separate paper, the name and address being added As GARDENING ILLUSTRATED has to be sent some days in advance of date, queries lways be replied to in the issue immedi- lowing their receipt. We do not reply to y post.

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

: Meconopsis

l be obliged if you will kindly give me information on Chinese Meconopsis quintuplinerva, sinuata, simplicifolia Wallichi). Are they likely to suc- a light soil of medium quality over e which drains fairly well and dries luring hot weather? I understand e plants are natives of limestone dis- Would the addition of fine chalk sift- light soil provide for their needs in ction? Would seedlings of these raised now be better housed in a cold se for the winter? H. BROWNE.

arieties of Meconopsis you mention best in a rich, medium, loamy soil, must not be allowed to suffer from the moisture during the growing season. make your light soil suitable by add- soil and a heavier loam to the posi- s intended to plant with these. To est results it is essential that a deep- medium is provided to prevent the om suffering from dry weather, and nded position is better than full sun. sis Wallichi is a delightful species ing in the woodland where shade is l light. Seedlings raised now will e wintered in a cold frame or cool se, otherwise the small plants would uring winter.]

auratum after blooming

P.).—After your Lilies have done they may be stood out-of-doors and s before till the leaves turn yellow tems die down. Then, if they need , October is a good time to do so; e same time, if the roots are in a state, annual repotting is by no cessary. In any case, they may be e together in a sheltered spot out- nd protected by a mat or two during ather, or a cold-frame just protected frost is a very good place in which the bulbs. They may be kept y throughout the winter, but when ecommences in the spring an in- mount of water must be given. If e to repot, a mixture of loam, peat, uld and sand forms a very suitable At the same time, bulbs in their ar rarely flower as well as freshly- ones, for although these latter often good deal in transit, the embryo velop, but the bulb has not sufficient form an equal display for the next

as failing

mus).—We regret being unable to you as to cause of the Sweet Peas plants in your garden assuming torted and abnormal growth. That riety of subjects is affected rather think the trouble is due to the soil, t way we are unable to say. Lime edy matters, but we think, seeing that most things make unsatisfactory growth, your best course is to have the soil analysed, first with a view to ascertaining the real cause, if possible, of the trouble. Then, if a deficiency of lime alone is found responsible for the unsatisfactory condition of the crops, we shall, on hearing from you, be glad to advise you as to its application.

A scarlet border

(Scarlet Border).—Your border would be much more effective if the eight Tritomas, instead of being dotted singly along the back, had been in groups of three each, about 12 feet from the two ends, and two in the middle, with Oriental Poppies so placed that the outer foliage of the Tritomas would cover them, for the Poppy foliage goes off in July and does not reappear till September. The earliest flowers will be Tulips, Anemone coronaria, and A. fulgens; then there is necessarily a gap in time till the Poppies are in bloom in early June. The next to come will be Centranthus, commonly called Valerian, the dark variety, for though not to be called scarlet it will be acceptable because of the scarcity of red flowers at its time. Some of the annual Poppies, autumn sown, will be of much use—the scarlet Opium Poppy (P. somniferum), P. umbrosum, and the brilliant P. glaucum—and for the front the pretty Collomia coccinea. Geum Mrs. Bradshaw will be ready in June, and the fine old Lychnis chalcedonica. These and the scarlet Bergamot (Monarda) will fill good middle spaces, to be followed by Sweet Peas at the back and by Phlox Coquelicot, Lobelia fulgens, and Lilium chalcedonicum in the middle spaces. Annuals useful for the front will be Linum grandiflorum and Linaria maroccana, with a good sowing of dwarf Nasturtiums. Antirrhinums, both tall and intermediate, of the colourings now so near scarlet, will be very helpful; also the fine red forms of China Asters. If there is room for a nearby middle group of blood-red Hollyhocks and Scarlet Dahlias of the Fire King type they will be good companions to the Tritomas. The quite dwarf Dahlia, Coltness Gem, should not be forgotten. Some patches or drifts of scarlet Gladioli will be needed, and if any quite tender plants are admitted a good patch of Geranium Paul Crampel can be strongly recommended. The whole effect of the border would be much improved by the introduction of some dark foliage, such as the short-growing Ricinus Gibsoni, and the tender Iresine towards the front; also the perennial Satinleaf (Heuchera Richardsoni) besides the Heucheras with the red flowers.

Hollyhock disease (Puccinia malvacearum)

(Anon).—Spraying the plants every 10 days with Bordeaux mixture has proved effective where it has been taken in hand early. It is necessary, however, that every part of the leaves should be thoroughly wetted with the solution. All the plants, healthy or otherwise, should be sprayed as a preventive, and in the case of plants badly affected it would be well to put them on the fire heap. Anyone who grows fruit trees largely could supply Strawberry plants.

GREENHOUSE

Treatment of Tacsonia

I have in my charge a Tacsonia growing in a conservatory. Could you tell me (1) if it is pruned back after flowering; (2) what is the right compost for potting; (3) is it grown from seeds or cuttings; (4) what is the cause of some of the leaders going yellow at the point? H. LUDLOW.

[No indication is given as to whether the Tacsonia is grown in a pot or whether it is planted out. In common with most climbing plants the Tacsonias grow more freely, and are altogether more satisfactory, when put out in a prepared bed. Such a bed ought to be well drained and filled with a compost consisting of a good loam reinforced by a little peat, if this can be given, some leaf-mould, and sufficient sand to ensure the rapid passage of water. Tacsonias may be propagated either from seeds or cuttings. It is customary to prefer the latter method, as seedlings are (as a rule) not worth troubling about, and, save in very rare cases indeed, of inferior merit, while the raiser must wait for at least two years before his plant blooms. The fact that the leaders of the plant mentioned show a yellowish tinge at the tips is undoubtedly due to defective drainage. Possibly, too, a too low temperature may be partly responsible, although in a general way the commoner Tacsonias are no lovers of heat. Had the name of the variety been given it would have been possible to have given a more definite reply. Those which are usually grown under ordinary greenhouse treatment are:—Tacsonia insignis, T. mixta, T. mollissima, and T. Van Volxemi. There are a few hybrid varieties, among which may be mentioned T. manicata, T. mixta quitensis; T. militaris, and T. Exoniensis. If the compost is sound, and if the drainage be good, it is, we think, unnecessary to dose Tacsonias with fertilisers, or indeed with liquid manure, because over-luxuriance of growth will inevitably mean a reduction of bloom.]

FRUIT

Scale on Nectarine trees

I enclose a portion of a branch of a Nectarine tree and shall be glad if you can tell me what is wrong with it, and the remedy. The tree in question is about 10 years old, and is trained to the roof of a lean-to cold greenhouse. No artificial heat is ever applied. There are two other Nectarine trees and three Peaches in the same house, but no plants or other trees are grown in it at any time. Only part of the Nectarine tree is affected, the others, and the part not affected, quite healthy and vigorous. The tree in question has borne an excellent crop of fruit, but the fruit on the diseased parts had patches of black on them like the enclosed leaves, and the skin was tough and dry. A. B. C. SHERBORNE.

[Your Nectarine tree is affected with the brown scale (Læcanium persicum). If you examine the wood of the part of the tree that is affected you will find numerous brown, hemispherical bodies, closely adhering to the stems. These are the mature females, which are now dead, but the whole of the old scale is filled with eggs. In spring the eggs hatch into tiny "mites," which roam about for a short period and then settle down. They then pierce the tissue of the plant and feed on the plant sap. They do not move again, but begin to grow rapidly, and eventually reach the stage of those you have sent in to us. Peach scale is always a source of trouble to Peach and Nectarine growers, especially

under glass. When the attack is bad it causes the symptoms mentioned in your letter, and we should expect that the other trees in your house will have some scale, but not enough at present to cause failure of crops. You will have to use a good deal of care or the whole of your trees will become badly affected. As soon as all the leaves are off the trees you should take them down from the structure on which they are trained, then the whole of the glass, woodwork, and fittings should be well scrubbed with warm water and carbolic soap. The walls should be limewashed. The trees should be washed with Gishurst Compound at the rate of 4 ozs. to a gallon of warm soft water. You should use a fairly stiff brush for this purpose, but be careful of the buds, because if you rub too hard some of them may be removed. When cleaning down your house you should remove all old tying material, dead leaves, and all rubbish from the house and burn them. Watch carefully next spring for the reappearance of the pest. If it does appear spray your trees with a good nicotine wash used according to the maker's directions. You will be very lucky if you remove the whole of the scale with one cleaning down, but much depends upon the thoroughness of the work done. Young scale can be killed with an insecticide, but after they have settled down, and have got the protective scale covering, it is not so easy.]

Pear scab

I should be obliged if you can tell me the cause of the damage to enclosed Pears—half Glou Morceau and half Doyenne du Comice. Trees on west wall, are about 12 years old. There are 12 others on same wall and several more on other walls. All are perfectly sound except those from trees enclosed. The soil is good and sufficiently watered, etc. The Glou Morceau ceased to expand, or most of them have. Is it fungus or blight? The latter has been very bad here this year; several sorts of garden produce cut off by it. G.

[Your three Pear trees are attacked by Pear scab, which is caused by the fungus Venturia pirina. This fungus attacks the leaves, young wood, and fruits of the Pear. It winters in all three positions. The spores are produced the following season. We should advise you to pick off and burn all the cracked fruits such as you have sent in to us. When the leaves fall in the autumn they should either be collected and burned or dug deeply into the soil. At pruning time the trees should be gone over carefully and all diseased wood removed and burned. Pay strict attention to the young wood and spurs. All cankered dead spurs should be cut out to clean wood. Next year you should spray the three affected trees with lime-sulphur. When the trees are badly attacked, as yours appear to be, it is necessary to spray three times, once just before the flowers open, again as soon as the petals have dropped, and finally three weeks later. In all control measures for Pear scab it should be remembered that the infection of the fruit takes place from infected foliage It follows that if the foliage can be kept clear of the disease scabbed fruit is almost impossible The lime-sulphur should be applied on a still day, and in the form of a mist, so that the leaves are covered with a fine deposit of the fungicide. Pear scab occurs mainly on the undersides of the leaves. It is not an easy matter to spray the undersides of Pear foliage on wall trees. We should be inclined to spray all the trees once and those affected three times. The middle spraying would be the best time to do those not affected.]

Currants failing

I should be very much obliged for any advice as to treatment of Red Currants trained on walls facing north and west. These have hitherto grown particularly well here and borne good crops. This year we suffered from prolonged and persistent cold winds from the east and north-east nearly into the month of June. The Currants flowered well and bore some fruit—not so much as usual—but when they were beginning to get ripe were attacked by a black blight, causing them to shrivel and drop off. Those facing due east and north were first attacked and succumbed earlier, but have in time been followed by the remainder, and lastly by the leaves. P. H. HAMMOND.

[There are only two things which would cause the Red Currants to assume the appearance you describe. The one is a bad attack of the Currant aphis and the other an infestation of brown scale. We have before now seen both foliage and fruit (the latter ruined as a result) completely coated with a black deposit due to the scale insects, and which brought about the partial shrivelling and premature fall of the leaf. If unacquainted with the appearance of scale insects, or aphis, get a practical man to investigate matters for you, and if either or both are found present, which we think will be the case, we shall be pleased on hearing again from you to advise as to remedial measures to be taken to cleanse the trees of their enemies.]

VEGETABLES

Diseased Celery

(A. C.).—Your Celery plants have now proved to be infected with a bacterial rot which has been caused by Bacillus carotovorus. This is an extremely common plant pest and often causes great loss of crop. It is readily introduced into a garden by means of Celery seed, or through manure. At present there is no known method of control other than taking up and burning all the plants affected. You will, of course, use an entirely different site for your Celery another season, otherwise you will have a repetition of the trouble next year. Bacillus carotovorus will also attack Onion and Iris bulbs. You should therefore not use the infected site for either of these plants next year.

MISCELLANEOUS

Keeping flower pots clean

(H. F. Matthews).—To keep flower-pots clean they must be scrubbed occasionally. The only pots that remain clean for any length of time are glazed ones, and these are not good for the plants. You might try the cottager's method of keeping the pots brick red. They use what they call "reddle," really red chalk mixed with water to the consistency of thin paint, and then applied with a brush. So far as we are aware no harm has been done to the plants. A little more ventilation in the greenhouse would probably help to keep down the slime.

The Rose leaf-cutting bee

(Skisdon).—The curious little packets you have sent in to us are the nests of one of the leaf-cutting bees, probably the Rose leaf-cutting bee. If you examine some of your Rose trees you will find that semi-circular pieces have been cut out from the edges of some of the leaves. The leaf-cutting bee uses these pieces of Rose leaves to form her nest. The nest is made in decaying wood, walls, and occasionally in the soil. A little tunnel is first made and then lined with cut pieces of Rose leaves. An egg is placed at the end of the tunnel and some food material, composed of honey and pollen, is placed with it. Another piece of Rose leaf is now cut to shut in the egg with. This process is generally repeated several times, so that each nest consists of a series of little chambers containing one egg and food material, or if found later they would contain one maggot feeding o food material placed there by the moth for the offspring she will never see. specimens you sent appeared to contai one maggot in each, but they were crushed in the post. There is no method of control for the Rose leaf-c bee.

Cottagers' classes

Will you kindly say through the med "Answers to Correspondents" what c substitute for classes—*i.e.*, 47, three v perennials; 48, three vases of hardy ar 49, three vases of half-hardy annuals? cottagers have a hazy notion as to cla tion of plants, and are liable to be disq if a sharp look out is not kept when are staged. E.

[We suggest that Class 47 in the s should remain, but that the words plants excluded (or included) be added. 48 is always a difficult one for amat understand, and we suggest it shou "three bunches of hardy garden (planted and flowered in open air), pe excluded." This arrangement would biennials to be shown. [See R.H.S. judging.] Class 49 should stand, as i difficult to follow. We think, howev a footnote at the bottom of the pag schedule, as follows, would clear up culties:

*Class 47. Perennials are plants years continuance, and exclude all annuals or biennials. (R.H.S. rules f ing).

†Class 49. Half-hardy annuals ar which complete their life cycle in on from seed and usually require the aid to raise the seedlings.]

SHORT REPLIES

C. P.—Yes, a mulch of manure very beneficial. Apply it next spring the weather is dry water freely so as the goodness of the manure down roots. The same treatment will an the Yew. This feeding is all th necessary, seeing the Holly and Y been so long planted. Wakeley Manure makes a good top-dressing ally for Roses.

E. R. S.—See reply to "G. E. Fungus on Celery, p. 496, August 14

NAMES OF PLANTS

Constant Reader.—1, Senecio Cliv bold waterside plant, native of C Mesembryanthemum; please send in

A. Donovan.—Mulgedium (Lactuc teum; too rampant to allow in the but handsome in glades in woodland

R. F. Cranleigh.—1, Next w Stokesia cyanea; 3, Senecio tangi Zauschneria californica.

Harry Ebsworth.—1, Lamb's Ears lanata); 2, the Wig-tree (Rhus Co and 4, next week.

W. J. N.—The Pelargoniums wer shrivelled up to name. Please se specimens.

P. F. Cranleigh.—Hypericum den an American species rather Kalmianum and H. proliferum.

R. Moore.—1, Weigela var.; 2 Bumalda; 3, Lilac, must have fl probably Arbutus Unedo, please sen in addition to leaves; 5, Spiræa to 6, Jasminum nudiflorum; 7, P Lælandei.

B. B.—1, Polypodium species, b representative of the plant; 2, pro Ornithogalum, must have more specimen.

NAME OF FRUIT

Glasbury.—Plum Early Orleans.

ARDENING ILLUSTRATED

79—Vol. XLVIII. SEPTEMBER 11, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

dwarf ... 546
light, erad- 552
AT READ-SLOUGH 549
ardy, sow, ... 548
... ... 555
a lacti- 549
... ... 546
hanging 553
Zoyzii ... 547
Morello ... 555
wall... ... 558
Dahlia Capel Star, Star 546
Dahlias, ideal 547
Daisy, the Namaqualand 546
Blm failing 558
Bpiphyllums, treatment of 553
Fir tree diseased ... 552
Fleabane, a showy and early 548
Fruit, keeping 555
Fruit trees, treatment of 556
Garden by the sea, a 557
Gardenias 553
Geum Lady Stratheden 546
Gooseberries, cordon... 555
Grape rot 552
Greenhouse creepers: Thin now to avoid gloom 553
Hyacinths, early ... 553
Hypericum fragile ... 546
Iris border, treatment of an 557
Iris bucharica 557
Ivy caterpillars... ... 558
Jerusalem Sage 546
Leaves, scented, in the garden 547
Larkspur failing ... 557
Liatris spicata 547
Liliums from scales, propagation of ... 557
Lobelia syphilitica ... 549
Magnolia not flowering and name of shrub 558
Marguerites 553
Marrows, Vegetable... 556
Mesembryanthemum crassulinum 546
Mignonette, the capricious 545
Moles, a plague of ... 558
"Mummy Pea," the ... 547
Nasturtiums for the garden... 549
Parsley for winter use 556
Peas, streak disease of 552
Ranunculus culture... 557
Report on condition of horticultural crops on August 26th, 1926 556
R.H.S. Chelsea Show 547
Rose season, the 546
Roses for bed 558
Roses for walls 558
Rose tree, building up a 558
SEDUM SPATHULATUM 545
Shrub and climbing Roses, moving a ... 558
SIT DOWN AND TRAVEL 551
Sweet Peas in the open, preparation of the soil for... 549
Veronica spicata ... 547
Vine borders, the size of 555
Viola Grandeur 546
Violas at Wisley ... 548
WALL, FOR A NORTH 547
Wasps 546
Weed on pond 556
Zephyranthes, the ... 546

The Capricious Mignonette

be safely said that this is one of the opular of all the annuals. Opinions is to the respective merits of flowers hed by their fragrance, but the l delicate odour of the Mignonette is d by all. It has but one defect in ars, in that it has become liable to s of a disease which, in some soils, ts culture very uncertain. Those dened 30 years ago could grow te with the greatest ease; nowadays extremely capricious. The collapse t when the plants come into bloom, die off in two or three days. Why s in some places is a mystery, and ot know whether it is a fungoid whether it is a form of canker, or there is something lacking in the is absolutely needful for its well- f the evil were in the soil the remedy fairly easy. We mean to try what use will do. This material, in a ay, exercises a very marked, and in s a magical, influence on vegetation. ignonette is so uncer- is advisable to sow mes at intervals of a from the beginning of one of them may be l. In the case of

LTURE there is no diffi- atever; anyway, we r found any, and this e fancy that it is a soil, as, when plants n in this way, the is carefully selected. w very popular this we often wonder that gardeners do not more. The fragrance nette is so grateful annot have it too near ling, and if several are made it can be or several months in and the culture is so Fill 4½-inch pots with loamy compost, with af-soil, sow a dozen l stand the pots in the e last sowing should in the latter end of r early September, as ngs will then be just ough to pass the win- ill be ready to respond influence of spring and will come into the time plants are p in the open ground.

The London market growers produce very fine samples of Mignonette early in spring from seeds sown as soon as the days begin to lengthen. The plants are grown along in gentle warmth without check, with a certain amount of atmospheric moisture. In former years the plants were plunged in fermenting material consisting of a mixture of dung and leaves, which gave out a mild and moist warmth. It was said in those days that Mignonette could only be grown to perfection early in the season in that way, and it was also said that some growers allowed no drainage, the pots being filled without it, and the plants, being plunged in damp material, no water was required during the period of growth. We cannot say if this was true, but very fine samples grown on gentle bottom-heat came from market growers in those days. Sown late in summer for spring blooming, water must be given very carefully during the dull months. A little excess in this way will cause the young plants to damp off, and they must have plenty of light, with a free admission of air in mild weather. In the dwelling the same rule applies. They must be wintered in a cool room, in the living-room they would become so drawn that they would have no power to bloom satisfactorily in spring.

Tree Mignonette.—How many grow tree Mignonette nowadays. We have not seen any for many years, and we have seen no mention made of it. In former years many amateurs prided themselves on possessing specimens some years old. It was simply the old variety grown in standard fashion, a straight stem being taken up and a head formed which became broader and the stem more woody each year.

Sedum spathulatum in the dry wall.

NOTES OF THE WEEK

Sedum spathulatum

THERE are so many of the Stonecrops that are good for garden use that, until a number have been tried, it is difficult to make a fairly restricted choice, but Sedum spathulatum, a native of British Columbia, is one of the indispensables. It is a good plant anywhere in the rock garden, but is, perhaps, best of all in the joints of dry-walling. The little grey rosettes, thick and fat, and solid to the touch, might almost be taken for some kind of Saxifrage. The six-parted bloom, of a clear, pale citron-yellow, is 2 inches across. It is carried flat at the top of the 5-inch high stem, which has alternate, thick, fleshy leaves. In the plants shown in the illustration the flowers, which are at their best in the last days of May, are not yet fully developed. The stems have a slight pinkish colouring which deepens to a rosy tint as they approach the root. There is a variety of the same plant, distinguished as S. spathulatum purpureum, with the same yellow bloom, but with a purplish tinge over the whole of the stems and foliage. Stonecrops in general are quick of increase; in many of the kinds by their second, or at latest their third, year they will grow into matted masses with fewer flowers. The careful

gardener, who wishes to keep these pretty plants in a proper state for making their best show, will thin the growing plants after flowering or divide whole clumps, and fill boxes or pans with nice little short, leafy pieces, which need not have any root. These will have grown into good plants by the autumn, when they had best be planted in fresh places. G. J.

Mesembryanthemum crassulinum

This is a dwarf and desirable creeping plant with waxy-white flowers studded profusely over the shoots. It delights in an exposed position on the rock garden with an open place over which to creep. It will grow almost anywhere, but prefers open sandy soil on arid declivities with a sunny aspect. It may be planted on flat portions of the rock garden or to fall over the face of a rock. It may be grown successfully as a wall plant by first carefully packing a plant in a mossy chink and fixing it firmly with soil and stones. In fact, the most riotous growth is seen on walls constructed with the object of growing plants. This should be planted in a free way, and clumps look infinitely better than examples dotted here and there. The plant is fairly hardy. It is advisable, however, to keep a few plants in pots from fear of loss during the wet season.

H. Stevens.

Jerusalem Sage (Phlomis fruticosa)

There are several species of Phlomis to be found in gardens, but this is by far the finest of them all, and a valuable garden plant that we rarely see freely planted or put to good use. Moreover, whilst other species are herbaceous, this is of shrubby habit, growing as much as 4 feet in height. It flourishes in poor light sandy soil, and in such is less likely to suffer during winter, although this rarely happens, as the plant is thoroughly hardy. An open, sunny spot suits it best, and it looks charming upon a bank in broad spreading masses. The whole plant, leaves and shoots alike, are covered with a woolly down, giving it a whitish appearance in pretty contrast to the varied greens around. The flowers, most profusely borne in dense clustering whorls upon quite half of the branches, are very effective, being of a rich yellow hue, and appear in June, lasting through July into August.

Hypericum fragile

This is a splendid plant for a dry, elevated position, for it will stand drought and heat with impunity. It forms a neat though not too dense cushion of pale green foliage, its slender stems having a decidedly prostrate habit. The small oval-shaped leaves are glaucous, and, when the sun is shining on them, appear to be full of transparent little dots, a feature not noticeable unless looked for. The flowers, which are each an inch or more in diameter, are produced freely at the end of the stalk, the colour a rich yellow. They owe not a little of their charm to the large central boss of feathery-looking orange stamens. For hanging over a large rock or for clothing arid places it is excellent. It will flourish in a modicum of soil, and this need only be of the poorest nature. It is a good wall plant, thriving in the most unlikely places, and is easily increased by seed or cuttings. H. Stevens.

Geum Lady Stratheden

The double Geum Lady Stratheden has now been long enough in cultivation for us to appraise its garden value. It is a pleasing plant with bright yellow double flowers. It is better than G. Mr. John Bradshaw, another good companion to the first of the set, and Mrs. Bradshaw, whose vivid red flowers are so effective. G. Mrs. Bradshaw is apt to die after a short but brilliant career, but G. Lady Stratheden appears to be longer-lived. At the same time it is well to raise some young plants from seeds occasionally. G. Lady Stratheden is a capital border plant 1 foot or 18 inches high, according to the soil and position. S. Arnott.

Viola Grandeur

This is one of the most satisfactory plants I have met with during recent years. It never exceeds 2 inches to 3 inches in height, in which respect it much resembles such charming kinds as Lady Crisp, J. B. Taylor, and others. It is, however, more robust than either of these, and, besides being very hardy, is easily increased. Its flowers, produced in bewildering profusion, are of a fine, deep, royal purple with a white eye. I grow it in various ways, but in none is it more strikingly effective than where it forms a groundwork to a bed of bronze-leaved Roses, resembling a rich purple carpet, which, in effect, becomes more intense in colour as the distance from which it is seen increases. It is certainly a plant which pays for massing. M. G. M.

The Namaqualand Daisy (Dimorphotheca aurantiaca)

From seeds scattered over the surface of a piece of spare ground in the Heath garden early in April a colony of this brilliant Daisy is now a gorgeous mass of colour. The position is full south and well exposed, the soil very poor, it having been occupied for several years previously by Heaths. It was merely dug over one spit deep, broken down fine, and the seed scattered thereon. The colours of these large single flowers vary from white to deep orange-red, there being charming shades of creamy-yellow, golden-salmon, etc., some of the blooms having a central black ring. The plants average about a foot in height, this dwarfness really adding to their charm. I have grown this in a variety of positions and on rich soils, but never with such beautiful and striking results as in the case of the colony referred to.

M. S.

Bouvardias

When it was more fashionable to use flowers for personal wear than is the case to-day, Bouvardias came in for a share of attention, but latterly there seems to be a disposition to drop them. Considering how compact the plants are, and that they bloom in the greenhouse during winter and early spring, it is, I think, to be regretted that the amateur does not take up their u especially so when we appraise the for window and table decoration. At which is only moderately heated in will grow Bouvardias, and they flowe longer period than do some plants r more attention and preparation. Lil other plants for blooming in the gre in the later days of the year, Bouvar a certain period in the open air, w pots should be partly submerged in conserve moisture in positions wh will benefit by sun to enable wood rip be completed by early September, aft the safest place for them is under gla are not at all difficult to propagate, a plants are cut back after they ha flowering, kept in rather a humid atr to induce new shoots, the latter inserted in pots of peat and loam a sand, being plunged in a propagate striking. Afterwards the young plant be potted off separately and kept glass. About 5-inch or 6-inch pots found large enough in which to blo When Chrysanthemums leapt into po many years ago small greenhouse f subjects began to be neglected, a vardias shared in this; but neverthe are plants worth the attention of th own moderate-sized greenhouses. (scarlet), Alfred Neuner (white), and Garfield (pink) are some of the so when in flower, make attractive ph table and general decoration. Midi

The dwarf Almond (Prunus na

It would be impossible to speak t of the beauty of this little shrub. exceeds 3 feet in height, and will dry places, provided the soil is gritty the shoots may be pegged down and to spread freely. It flowers durin when the leaf buds are only begin burst. The flowers are rose-pink and produced freely enough to make display on the previous season's woo

H. St

Star Dahlia Capel Star

This new Star Dahlia was place the Joint Committees of the Roya cultural Society and the National Society on August 10th last by Mes Cheal and Sons, Ltd., Crawley, Sus was selected for trial at Wisley ne The flowers, each about 3 inches in d are borne on stiff, erect flower-stall colour may be described as pink with centre. D.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The Rose season

I HAVE noticed from year to year the difference of colour in Roses. The depth of colour with me this season is remarkable, no doubt the result of the hot weather experienced in early June and July. William Allen Richardson was a deep orange instead of a primrose, as it so frequently is, while Golden Ophelia and Golden Emblem were quite a deep gold. Juliet was of a gorgeous colour, but more of a single colour than in other seasons. Then again, I have never seen Mme. E. Herriot with such an extraordinary colour as this summer. The strong colours in most varieties did not blanch so rapidly as usual during bright, hot sunshine, but the flowers, however, were soon over. Gruss an Teplitz evidently likes heat, for it made a wonderful show in a large bed, and the intense bronzy hue of its foliage was most effective. F. H.

The Zephyranthes

In these days these beautiful bu scarcely known to many gardeners, rate they are seldom met with, anc account of their delicately-coloured l and simplicity of culture they deserve in every greenhouse. I think them indispensable as the Vallota, and flower some little time before the for are doubly valuable. The foliage, on a smaller scale, is a good deal lik the Vallota. The plants seldom 9 inches in height, and the blossoms are produced singly, one on each st very attractive.

Wasps

Wasps are getting so numerous at sent time (August 31st) as to be dangerous, and it may be well to a Plum gatherers to be careful how the

This is specially the case when on gathering from a standard or the t of a wall tree, for one is then in a s position and so more open to atums are the most dangerous of all handle, for the skin is apt to remain ne side, and there is little to indicate centre has been partially hollowed contains several wasps. Among ings advocated to alleviate the discaused by stings there is nothing ter than ordinary washing soda, and ation of olive oil is very soothing if ad several stings. So much damage l to fruit by wasps that the prompt n of nests is a matter that might be much oftener by parish councils.

E. Burrell.

For a north wall

E is often some doubt about suitable plants for northern and eastern cts. The illustration shows one way g such a place. Spiræa Lindleyana, the finest of the larger-growing, Spiræas, with its handsome pinnate and great plumes of cream-white eems to like nothing better than to trained to a wall in any cool aspect, Clematis Flammula is planted beside uided into its upper branches there lovely show of bloom in September the Spiræa's own flowering time a ks earlier. Guelder Rose treated in e way is also a capital thing on a all, with a few branches fixed to the and other growths allowed to come

G. J.

Campanula Zoyzii

eadquarters of this curious Cammay be taken as the sources of the A friend of mine protects the plant liffs and rocks it haunts. There that Campanula has the same habitat as a comosum of the Dolomites and Alps—the crevices of limestone lways shady and moist. It is comd easy to get, but, as one of your ndents says, the slugs come from destroy the plant in our rockeries. ceed with it in a turf wall facing

Henry Correvon.

Liatris spicata

lay this summer, when admiring a n of hardy plants in bloom, one of emed to excite the attention of other It was the subject of this note and full beauty. Growing only about in height, it was full of handsome rple spikes. Liatris spicata is one handsomest of the family of Snakeıd is worthy of wider culture. For ason, not easily understood, not many eem to know much of it. This parmember of the family continues in or quite a long time, and its colour as to call attention to it quickly when kes open. Perfectly hardy, it will sun or shade, and it is easily propay division of roots in early spring. It al to a moist root-run, and on this makes a desirable plant for waterrdening.

Derby.

Ideal Dahlias

are many hundreds of Dahlias in ce at the present time, but very few claim to being in most respects ideal. ite aware that all have good and bad but some are much nearer perfection thers. In the Collarette section I hat fine old variety Tuskár is still on he plant is very robust and free. The are borne in great profusion on stiff e stems well above the foliage strange to say, this plant seems shy ducing), the colour is rosy-crimson tipped rose and white, the collar being straw colour. Its only fault, if it can be described as such, is that it flowers too much. On July 10th the plants were showing 12 to 15 blooms, on August 25th 45 to 50 blooms, the same being grown in ordinary garden soil. I find it essential to give a good mulching about the end of August to prevent the plants from becoming exhausted. The flowers are good for exhibition or cutting. Another variety that will come into favour when better known is Betty. This plant is not quite so productive of flowers as Tuskar, but the stems are good and the flowers all that can be desired; colour, salmon-cerise; collar, white; splendid for exhibition. I feel sure these two varieties will give every satisfaction to all that give them a trial. A. T. B.

Scented leaves in the garden

In the interesting notes by F. A. Hampton on this subject I was interested in the mention of the variety fragrantissimus of Thymus vulgaris. In the south of France I found several different scented sorts of Thyme, but never the real fragrantissimus of Mr. Thompson, which I would like to get. I wonder the author does not mention the best of all Thymes, T. citriodorus, in its two varieties, aureo variegatus and argenteo variegatus. Some aromatic plants change their scent when cultivated. I found, 20 years ago, in an old garden, a form of Lemon-scented Verbena, with a strong terebenthine odour which is perpetuated in the plant by cultivation for more than 50 years. The scent has nothing of the type, but every botanic character is the same. The same thing may be said of Micromeria Chamissonis (or Douglasi), which I found wild all over the neighbourhood of San Francisco last spring. Mine here, grown at Floraire for many years, has an agreeable scent. In the wild state the odour is more resinous and bitter. The Mentha citrata, mentioned by F. A. Hampton, was grown formerly in Savoy for the Chartreux, who used it in the composition of the famous liquor "Chartreuse." The "Genépi" of the Alps (Artemisia glacialis and A. spicata, Achillea moschata, and Herba rota) are some of the finest aromatic plants as well as the roots of Asarum europæum for pot-pourri.

The Coumarine plants (Melilotus, Asperula odorata, Orchis Simia, militaris, and anthropophora) are not enough appreciated for the delicate fragrance of their dried leaves. Cedronella triphylla, Origanum pulchrum, Perovskya atriplicifolia, Populus trychocarpa, etc., are precious, too, for the perfume of their leaves.

Henry Correvon.

Geneva.

R.H.S. Chelsea Show

The Council of the Royal Horticultural Society have fixed the date for the 1927 Chelsea Show on May 24th, 25th, and 26th.

F. R. Durham,
Secretary.

The "Mummy Pea"

I was interested in the note of Captain Saunders about the "Mummy Pea," which appears from time to time in the papers as having retained for 2,000 or 3,000 years its germinative power. Mr. de Candolle proved the inanity of such pretensions, and told us the Egyptians raise these seeds in their fields and sell them to the tourists as having been found in the mummies. Some years ago an English lady brought me some from Egypt and told me she saw the mummy in which they were found. The seeds gave us the common Pisum elatius, which Boissier, in "Flora Orientalis," Vol. II., p. 623, gives as wild all over in Orient. The flowers were different in colour from those of the common one, being of an exquisite azure-blue and pink, something like Omphalodes Luciliæ. It may be it is an Egyptian form of the common Pisum elatius.

Henry Correvon.

Spiræa Lindleyana on a north wall

Veronica spicata

In the report of the Shrewsbury Floral Fête, which appeared on page 527 of Gardening Illustrated, I was pleased to notice a reference to "a popular plant often met with in gardens, the name of which is unknown to so many, the blue Veronica spicata, which provides such a patch of colour throughout the summer." I have grown it a good number of years now along with its white counterpart, and can testify to the favourable impression it created at Shrewsbury. It grows from 2 feet to 3 feet in height and is usually at its best in July and August, but if one is careful to remove the spent flowering stems and mulch the plants with a little old manure one will find, as I am finding this season, that quite a number of flowering stems will follow.

W. F

Violas at Wisley

VIOLAS at Wisley this year are again a success, and the portion of the garden allocated to them is one of the most pleasing features. They are planted on a border overhung with fruit trees, and in this position appear to revel in the partial shade which the trees afford. It is worthy of notice that the Viola has done so well after having been planted in the same quarters for several years. Evidently more than ordinary care is observed in maintaining the soil of the border in an efficient condition, for, almost without exception, the plants were thriving on the occasion of my last visit and flowering freely. The varieties represented embrace the majority of those varieties worth growing, but there are still a few sorts which might with advantage be eliminated. I refer to the few exhibition sorts which will never compare with the dwarf-growing, free-flowering sorts that are essentially well adapted for beds and borders. At one time a few sorts were wrongly named; this was due to no fault on the part of the garden authorities, but to those who sent in stocks, in the first instance, incorrectly named. This defect has since been remedied. It is to be hoped that this trial of Violas will continue, as it shows the undoubted usefulness of these plants in the hardy border. A few of the more noteworthy sorts worthy of mention are the following:—Archibald Grant, generally described as of an indigo blue colour; Maggie Mott, pleasing soft mauve, very free-flowering, with a good constitution; Newton Mauve, deep mauve-blue, good form, and an ideal habit; also free-flowering. In my opinion it is an excellent plant and ideal for bedding. Primrose Dame is still one of the best bedding sorts, yielding its primrose-yellow blossoms in abundance. Swan is still regarded by many as the best white Viola for bedding. The flowers are sometimes disposed to sport and produce a blue margin, but this appears to be an inherent failing with most of the white sorts. If they have not a blue margin they are striped or flushed with blue. All things considered, this variety may be regarded as a very fine white, with a splendid habit and free-flowering. Dr. McFarlane is the best bedding sort of the Fancy type of the flower. It is alternately marked dark purple and lavender, and is a striking sort in the border. Councillor Waters is a free-flowering rich purple self and is much valued because of its tufted habit. J. B. Riding, although it has been extensively grown for almost 35 years, still maintains its popularity as a free-flowering deep rosy-mauve sort, possessing a very sound constitution, good habit, and withal a free-flowering character. Kitty Bell is a very free-flowering lavender-coloured sort with a disposition to get "leggy" as the season advances. Winchmore Bedder is said to be a sport from the last-named, the colour of which may be described as lavender-blue; in other respects it is similar to the original. Peace is undoubtedly one of the most refined Violas in cultivation. The flowers are circular and of beautiful form, and are white with a flushed margin of heliotrope. The habit of the plant is good and it is free-flowering. A good white sort is Snowflake, extremely free-flowering, but the habit is not so that of the variety Swan. Moseley tion, although a very robust sort o soils, appears to be quite moderat Wisley border. The flowers are la are borne on long erect footstalks, colour is rich yellow. Ardwell G beautiful, sulphur-yellow, sligh Viola, was flowering in profusion, that it is still a good dependable Viol border. There is also a good bloc variety Grievei, a yellow of a deepe than the last-named and with heavi and, in my opinion, not so good as Gem, although it must be admitted flowering freely. I was glad to s was a good block of Bridal Morn do and true to name. This flower has quently been exhibited at the Royal tural Shows incorrectly named th pleasing to record that the stock at V true to name. It is blue with a sh mauve, and the blossoms are quite di colour from all others. Royal Sove another pretty rich yellow sort more r character than Moseley Perfection habit is good and the plant free-fl W. H. Woodgate is the nearest app a Viola of a pale blue colour; there mauve colouring in it, however. colour alone this plant is worthy of n

One might go on to mention mar sorts, but the foregoing will suffice attention to a few of the more me bedding varieties. D. B. C

The finest of the pink Mallows: Sutton's Loveliness

Sow hardy annuals no

It may come as a surprise to son always sow their annuals in spring, present month is generally conside ideal time in which to raise hardy for flowering next season. The plan autumn-sown seeds are hardier and than those raised during the spring. consideration is that they usually bl weeks or eight weeks before them, the garden gay at a period when flowers are not too plentiful.

It is best to sow the seeds where th are intended to flower, although them will stand transplanting if ra prepared beds and transferred to the when in the seedling stage. Fork lightly and smooth over with a rake sowing. Keep the beds free from we thin out seedlings where necessary. annuals are capable of withstandin severe winter months when cultivated or medium soils. This, however, ca written of heavy soils, which, wh cessively moist in winter, cause the plants to damp off and perish.

The following brief list is intende guide to readers in their choice of sort may be sown this month, and all are able from any seedsman of re Alyssum, Calendula, Chrysanthemum narium, Bartonia, Clarkia, Car Coreopsis, Godetia, Nigella, Virginian Larkspurs, Eschscholtzias, Viscaria, Poppies, Nemophila, Kaulfussia, Linaria. I

A showy and early Fleab

Great interest is being shown in Eri and one meets with E. speciosum everywhere where hardy plants are the violet-purple flowers earning for popular name of Summer Starwort. is another member of the same fam known nearly so much as it deserves viz., E. philadelphicum, with rose-co blossoms. It flowers from May to S ber and is a most useful sort for c The plant only grows about 2 feet in and is quite hardy and most useful mixed border. This variety is parti nice for cutting. TOWNS

Annual Larkspurs

ıals at Reading and Slough

. many weeks past the trial grounds of ssrs. Sutton and Sons at Reading and ugh have been gay with the brilliant of easily-grown annuals. The bright : of colour may be seen from the e windows as the trains pass quickly t may interest Messrs. Sutton to :hat passengers greatly appreciate the of colour that are provided for them. the first things to attract attention at g was a border of Cambridge-blue ı, really a grand annual for edging :cidentally, a favourite flower for bees. ously enough, the flower which struck it forcibly in the Reading trial grounds ıe humble and despised Nasturtium. lifferent are the plants at Reading to generally seen. It is simply the result wing them on impoverished soil. The l on which they are specially grown it had a particle of manure for over 30 The result is that the plants make ittle leafage and the brilliant flowers en in the greatest possible profusion.

:ing from the Nasturtium patch we ob- many good varieties among the tall, ediate, and dwarf Snapdragons. The · Eclipse is worthy of special men- Annual Chrysanthemums, Coreopsis, Eschscholtzias were wonderfully good :ilfully selected.

Slough we were particularly impressed he new double-flowered Godetia. This annual with a great future. In these grounds we were also much interested · selections of the Swan River Daisy, with yellow eyes and others with black Near by were brilliant patches of deep on, old rose, scarlet, and salmon ed annual Phloxes and bronzy-pink sias.

: annual Larkspurs or Delphiniums, llustrated, were most effective, and in- i a wide range of colour of singular y. Of the Mallows or Lavateras we ht Sutton's Loveliness the finest of all ink varieties. H. C.

Nasturtiums for the garden

th the increased interest now taken in · of the better hardy perennials, hardy als are, perhaps, not so largely grown as used to be some years ago. Seed growers, however, have not been idle of later years, and the result of their efforts is now to be seen in flowers having a greater range of colours, plants with an ideal habit, and, most important of all, free-flowering. A few noteworthy sorts that have come under my notice within the last week or two are worth mentioning. They are as follows:—Feltham Beauty is a grand scarlet sort producing masses of blossoms on plants possessing a fine habit of growth. A true stock of Golden King produces extraordinary masses of flowers. Rosy Morn, rose on a golden ground, and with beautiful golden-green foliage, is a pretty combination, and in Ruby Queen, as the name implies, the flowers are of a ruby colour on gold and very distinct.

HIGHGATE.

Preparation of the soil for Sweet Peas in the open

To obtain really good early Sweet Peas it is essential that the plants are provided with a good deep root-run, much depending on the class of soil one has to deal with as to the depth of trench and the amount of manure used. It is no good attempting to grow good quality flowers in shallow soil, and it is little use trenching soil that is full of stone, shale, or other inferior subsoil without removing this to the depth of at least 2 feet 6 inches and replacing with soil of a more genial nature. It is also advisable not to grow Sweet Peas on the same site two seasons running, especially if the plants were affected with any disease. An ideal Sweet Pea trench should be got out to the depth of 3 feet and the same distance in width, placing the top soil on one side and the lower portion on the other. After placing a good depth of manure, say 6 inches, in the bottom the top soil should be turned in and mixed with the manure, leaving the bottom soil on top to become pulverised by the weather. A dressing of fresh lime given to this and worked into the soil will prove beneficial. This portion of the soil should be turned several times during winter, and, if of a bad character, may be improved by mixing road sweepings, burnt refuse, or anything that will help to make it friable before it is returned to the trench in several months' time. Where it is intended to chance the seed-sowing in the open there will not be time for all this, so the best means to follow will be to take out several spits from the one end of the trench and wheel it to the other end. Unless the soil has been previously trenched and is in good order it is not wise to bring the bottom soil to the surface, but this should be well mixed with manure and be allowed to remain in the bottom, keeping the top soil on the surface in which to sow the seed. Basic slag and kainit are both valuable for Sweet Peas, and may be used in autumn at the rate of 2 ozs. each to the yard-run of trench. When the soil has been brought to a fine tilth the seed may be sown in a double line down the centre of the trench, allowing 9 inches between the lines and 4 inches to 6 inches between the seed, according to the quantity of seed at one's disposal. One-and-a-half inches is about the right depth to cover the seeds, which should be coated with red lead to prevent mice taking them. Protect from birds and slugs when the young plants appear above the surface of the soil.

W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Artemisia lactiflora

This is worth a place in a border of hardy flowering plants, as from August to practically early in October it flowers profusely. It is not unlike a Spiræa just before the flowers open, and makes a nice occupant for the back of a border growing 4 feet or so in height. Those who have facilities for water gardening, or have moist places for planting, should try this beautiful Artemisia.

MIDLANDER.

Lobelia syphilitica

This makes a large tuft from which rises a leafy flower-stem fully 18 inches high and bearing in summer a quantity of blue-coloured flowers. It thrives in any good open soil. A place should be selected by the side of a stream or some damp position where the plant can get plenty of moisture during the growing season and partly shaded from the midday sun. It may be grown successfully as a border plant in moist places. Although perfectly hardy, it is advisable to lift a few clumps and winter in a cold-frame plunged in leaf-mould. The plants may be lifted and divided during March.

H. STEVENS.

Echinacea heterophylla

Native of Mexico. Flowers lavender coloured

From Sweet's "British Flower Garden," Tab. 32

Dracocephalum altaiense

The Bitony-leaved Dragon's Head from Mongolia. Flowers large dark blue

From Sweet's "British Flower Garden"

Lathyrus magellanicus

Cape Horn or Lord Anson's Pea

From Sweet's "British Flower Garden," Tab. 344

Triptilion speciosum

Native of Chili, with small azure blue flowers and spiny leaves

From Paxton's "Magazine of Botany," Vol. X.

Sit Down and Travel

By T. Hay, V.M.H., Superintendent, Hyde Park

nterest and enthusiasm for horticul- in this country receive a great ılus from the constant introduction pecies of plants. They reach our through many agencies and from urces. This generation has been fortunate in its plant collectors, and much to that band of intrepid -Wilson, Purdom, Farrer, Forest, d. We are constantly being re- f the work of these men at every ral exhibition and on every visit to cked modern garden.

ite safe to prophesy that there must ıy when there will be nothing left in f fresh territory for the plant hunter , but in spite of all the new forces ntions that modern civilization is into play, and which seem to make ıces shrink and the earth appear hat day is still in the remote future off.

known Professor has said, however, future generation of garden lovers to see so many new species of plants sent and past generations have seen l. This is no doubt true, but in the re we may expect great advances in ding. We may be certain that our of Genetics and our students of Mendelism will have solved most of the problems they are now engaged upon, and we may be quite assured that, say in 2026, our seedsmen and nurserymen will still devote page one of their catalogues to a list of "novelties," and that the Royal Horticultural Society's Floral Committees will still sit in state at Westminster deliberating and giving judgment on plants "new, rare, or otherwise meritorious."

It is right and to be expected that the scientist and the plant collector should be most interested and attracted to the exploration of new territory, with all its alluring mystery and hidden possibilities. It gratifies also that human and reasonable ambition to be first in the field. Fresh fields and new territory may be less in area than we suppose, but when there is none left the plant collectors' task is by no means done—there will be plenty to do in re-introducing the many fine plants that are now absent and lost to our gardens. That we have lost much is at once apparent and well known to those who own, or have access to, a botanical library. In such works as "The Botanical Magazine," "The Botanical Register," "The Botanical Cabinet," Sweet's "British Flower Garden," "Andrews' Repository," and many others we have a faithful record of plant portraiture covering more than two centuries, and almost every volume shows some interesting and beautiful plant now unobtainable. Fine species disappear through many causes. It may be from lack of knowledge of their exact cultural requirements, or because of the changes of fashion, or by a winter of exceptional severity.

The re-introduction of many of these plants was a subject in which the late Canon Ellacombe was greatly interested, and in the life of the Canon, written by Dr. Hill, we are informed that he repeatedly requested Kew to prepare a list of the lost plants that were figured in the books mentioned above, in the hope that interest would be created and effort made to restore them to our gardens. There is also a note by Dr. Hill to the effect that the work would be worth doing.

The preparation of a complete list, as desired by the late Canon, is far beyond the writer, who will content himself by calling attention to but a few plants that seem particularly desirable in the hope that some reader may interest himself in the subject and endeavour to re-introduce such as may appeal to him or her. There are many ways of doing this. We are a nation of plant lovers, and members of our race are to be found in every corner of the habitable globe.

If a drawing, coloured if possible, of the desired plant can be sent to the exact locality it makes identification much easier even if the recipient has no knowledge of plants.

At this point I am reminded of Alphonse Karr, author of one of the most delightful books about gardens, namely, "A Tour Round My Garden." Alphonse invites his readers to "sit down and travel," while from a comfortable seat he discourses on the treasures planted in his garden from all over the earth. We will take his advice, and we shall require no help from the Imperial Travel Bureau, neither from Cook's nor Bradshaw; instead we shall take as couriers Curtis, Edwards, Andrews, Sweet, and Paxton; our trip may defy all the laws of geography and travel, but that is a small matter.

Let us first take as guide that fascinating book, Sweet's "British Flower Garden." The seven volumes were issued between the years 1823 and 1838. Opened at Vol. IV., tab. 32, Echinacea heterophylla is figured. It is easiest described as a lavender-coloured Rudbeckia purpurea, native of Mexico.

Corvania plicata

can dwarf shrub with red flowers like single Roses

Sweet's "British Flower Garden"

Monsonia speciosa

The large-flowered Monsonia. A Cape plant related to Geranium

From Curtis' "Botanical Magazine," Vol. III.

At tab. 57 of the same volume is Dracocephalum altaiense, one of the most beautiful of blue-flowered hardy plants. It is resident in Mongolia and was many years ago a much-prized garden plant.

Nierembergia intermedia, figured in Vol. VI., tab. 237, is a lovely dark coppery-red flowered plant graceful and elegant; native to the banks of the Parana river.

In Vol. VII., tab. 308, we see Tupa (Lobelia) blanda, a huge spiked plant with lovely pink or rose-coloured flowers like the Tupa we still grow. This is also a native of Chili.

At tab. 400 we are shown Cowania plicata, a much-to-be-desired dwarf shrub with large, deep rose flowers like Apple blossom. It hails from Mexico.

In this same volume is the famous plate of Lord Anson's Pea, of which hopes are entertained that at last this long-looked-for plant has been again introduced. At least more than one species of Lathyrus is in cultivation in which hopes are centred, and that the Straits of Magellan has once more yielded up this much-desired Pea.

Open a volume or two written or edited by the good Sir Joseph Paxton. His Magazine of botany ran for 16 years between 1834 and 1849. Vol. VI., page 147, depicts the lovely Thunbergia Hawteyneana with fine blue flowers. It is a native of Nepal.

In Vol. VII., at page 103, is figured Hibiscus multifidus with magnificent pale-blue blossoms. Its native home is on the Swan river, Australia.

In Vol. X., page 269, we are shown Triptilion spinosum, a superb plant, plentiful, it is said, near Valparaiso. The flowers are a vivid shade of blue on which, Paxton says, it is a delight to gaze. It first flowered at Dropmore in 1827, and created great stir

when exhibited. Five of the current periodicals of that day issued a coloured plate of this fine plant. It is practically hardy and there is a record of it growing well in Argyllshire. The late Mr. Elwes has said that Gentiana Farreri alone was worth the expedition to China. Triptilion spinosum is as lovely as any Gentian.

In Vol. XI., page 221, we have Thunbergia chrysops, a wonderful combination of purple, blue, and yellow. A native of West Africa, yet it can be successfully flowered in the open in this country.

Here we will leave Paxton and consult Curtis, who founded his Magazine in 1787, which is still being issued and now contains over 9,000 coloured portraits of plants all numbered consecutively.

At tab. 73 we are shown Monsonia speciosa, a very showy Cape plant. I have never met a gardener who has seen a Monsonia in the flesh. All the species are handsome and look most desirable.

At tab. 2,321 we reach the Caucasus to look at Aster alwartensis. It is true there is no scarcity of Asters in these days, but this species looks so distinct, with large showy rose-coloured flowers. All we are told about it is that it was raised from Moscow seeds and that "it was soon lost."

At tab. 3,471 we have Trifolium reflexum, a native of N. America. This is a most distinct and charming plant with very large globular flower-heads that are a lovely combination of pink and white, and which we are informed are in perfection in the open border in June and July.

At tab. 3,909 is Prepusa Hookeriana, a lovely Silene-like plant from the Organ Mountains, growing at an elevation of 6,857 feet, where it blossoms in March and April. I set down the elevation figures precisely so that it is made easier for any reader who may wish to set off for these mountains.

We note at tab. 4,941 the unusual coloured Lysimachia nutans from the Cape. It has very handsome deep rose or maroon flower-heads, and we are informed it bears the open air well during the summer, but may require winter protection. This was written in the year 1856. I can find no trace of this desirable Lysimachia since that date.

At tab. 5,266 we are on the Murree Hills, North-West India, to see Arnebia Griffithii, a fine species of the Prophet flower with golden-yellow blossoms and the five familiar black spots as seen in the Caucasian Arnebia echioides.

Tab. 5,549, Palafoxia Hookeriana, is described as a charming addition to our list of herbaceous plants from New Mexico. It is a lovely member of the Nat. Ord. Compositæ, with large branching heads of rose-purple flowers in the way of Senecio pulcher.

At tab. 5,677 is one of the most striking plants in the whole of "The Botanical Magazine," Calceolaria pisacomensis. This plate was published in 1862, and the plant is described as one of the choicest contributions to the flower garden. It was introduced by the famous house of Veitch by their collector Mr. Pearce from near Arequipa, Peru. There is at least one Calceolaria enthusiast at Kew who would dearly like to see this magnificent plant again in cultivation, and if I am fortunate enough to have a reader in far Arequipa I respectfully suggest to him that he transmits seeds of this much desired Calceolaria to our National Botanic Garden without delay.

At tab. 6,143 there is the extraordinary Blumenbachia Chuquitensis, also introduced by Messrs. Veitch, who described it as a handsome herbaceous plant. It certainly has a very striking appearance not easy to describe, and said to be quite hardy. It is difficult to account for such a fine plant disappearing, as nothing has been heard of it for many years. This plate attracts me very greatly, and if there is a Londoner resident in San Antonio, Peru, who has any love for the playground of his youth will he endeavour to send seeds in time for next year's display. The remarkable plant figured at tab. 6,155 is Wahlenbergia tuberosa. It has a flat tuberous root like a cluster of small Potatoes, from which spring many erect dainty growths each crowded with beautiful Campanula-shaped flowers that are white with pink stripes—a lovely thing that should specially interest youthful readers, as it is found only on the romantic island of Juan Fernandez. This plant was no doubt well known to Robinson Crusoe and his man Friday.

And now our trip for the present is ended. We have only been able to disembark at a few ports. The tour as desired by the beloved Canon Ellacombe can hardly be said to have commenced, but if readers are interested perhaps the Editor will arrange for its resumption, and together again we may "Sit down and travel."

PESTS

Streak disease of Peas

(J. S., Ayrshire).—The plants labelled Nos. 1 and 2 are both affected with streak disease, which is caused by a bacterium called Bacillus Lathyri. This has been an exceedingly common disease this season amongst Peas and Beans, both in the garden and the field. The pest was probably introduced into a garden either by infected seed or by manure. If infected plants are thrown on to the manure-heap, when that manure-heap is put into the land it means that if a suitable crop be grown the crop will stand a good chance of going under to the disease. When a crop becomes infected control measures are of little use; preventive measures are at present the only means of fighting this pest. The pest is, of course, spread largely by means of biting insects feeding on an infected plant and then passing on to a healthy one. We should advise you to burn up all your Pea haulm, whether infected or not. Do not grow Peas in the same position next year, and we should give all the land where you intend to grow either Sweet or culinary Peas a good dressing of sulphate of potash. This disease attacks many other plants, *e.g.*, all Legumes, Potatoes, and Tomatoes. Sulphate of potash as a preventive measure should be used at the rate of 1 oz. per square yard. Apply this in the spring.

Fir tree diseased

We have standing in the park here a Fir tree. The branches of same are covered with white, like the sample I am enclosing herewith. Would you be good enough to name the disease and say if contagious?

RALPH WORMAN.

Park Cottage,
Hillfield Estate, Burghfield, Reading.

[Your Fir tree is attacked by one of the Chermes. These are allied to the scale insects, and there are many species, all of which attack various Coniferæ. Chermes do a lot of damage to the tree on which they are living. They feed by piercing the part attacked and sucking out the plant sap. This so weakens the tree that it is often killed. A tree infected like the pieces sent in to us is a source of danger to itself and any other trees of the same kind growing in the district. From the small amount of material sent in to us we are unable to identify the tree, but it will probably help you when we say that Chermes Pini attacks Scots Pine or Austrian Pine, C. corticalis attacks Weymouth Pine, and C. Piceæ attacks Silver Fir. It is almost impossible to do anything to check this pest on big trees. Spraying with a tar-oil wash would undoubtedly pest, but it is impossible to spray la Young trees, on the other hand, can sprayed. In all probability the pest on the tree a long time and is gradu ting worse. We leave you to judge it is possible to control the pest by or whether it would be best to do a the tree altogether.]

Grape rot

I am sending for your inspec bunches and leaves of outdoor Grape you, through the columns of G ILLUSTRATED, inform me if they are by a very bad form of mildew? T which is attacked every year, is grow border facing S.W. If it is mildew clined to think it is due to the roots ing into the clayey subsoil and not spheric conditions. Are you of opinion? R. F

[Your Vine is attacked by Grape is caused by a fungus known as Gloeampelophagum. This disease ofte trouble to Grapes, more especially grown out of doors. The general attack are many blackish or brow which later on develop into cank should advise you to remove and much of the diseased material as You might at least remove all the bunches of Grapes. You could also ably reduce the wood. When thi give the Vine a good spraying with phur at summer strength. Lin will probably burn the foliage rath but at this time of the year such da not hurt the Vine permanently. D dormant season the Vine should pruned and sprayed with lime-su winter strength. Repeat the spray disease reappears next spring. To sulphur on young Vine foliage you to be very careful. Start by using tion very weak; increase its streng find the foliage will stand it. W think that soil conditions have m with your trouble.]

Eradicating American blight

(A. W. Leatham).—We think eradicate the American blight, this trouble with which your Appl affected, and not mildew, if y Gishurst Compound and persevere afterwards should occasion arise ing. First purchase a box of the from your nearest seedsman, then clean half-worn-out paint-brush a tin or jar to hold clean water in wh the brush. If the insects are secre no doubt is the case in the rough surrounding the wounds or cankere of stems and branches, clean them knife before applying the remed the insects are present on the surf bark and on the young wood this ne not needed, as they can be killed by them over with the Compound. T use the latter for this purpose is brush in the water, then to ma lather by working the brush back forwards on the Compound, after plying it to all parts of the trees infe the blight, taking care to wo thoroughly into all crevices, wo cankered parts of stems and bran all this at once and be on the alert ne and deal with the pest as advis you detect any of the insects to b The remedy recommended can be u time of year and is suitable for use trees, as all parts are easily getatab remedy can, therefore, be systema more effectively applied than is the other forms of tree.

DOOR PLANTS

Gardenias

might think that this beautiful ever-n stove flowering shrub is extinct, so om do we see it grown nowadays. meet with it in a florist's shop or in iarden Market. Cuttings of half or ned shoots should be inserted during r April, placing them singly in small pots containing a mixture of equal ous loam and peat, with an addition sand. Place these in a propagating-ere a good bottom heat can be main-keeping them syringed and shaded ght sunshine. When well rooted pot a size larger pot, using a rooting of equal parts peat and loam, with a d added, still allowing a brisk heat ty of moisture. When these become ablished pot on into 48-sized pots, rous peat, loam, and sand, to which added some dry cow manure. The should be a 24, in which they will The soil on this occasion may con-arger proportion of loam and more Water sparingly until well estab-t the same time keeping the points ong shoots pinched out, and lightly the branches so as to let in more air t to help ripen the growths. Grow nty of heat, and when the pots be-ll filled with roots give them some uid-manure. If possible use sheep as this will be found to impart that dark green colour to their foliage looked for in Gardenias. During r the temperature may be slightly with less shade, so that the growths ully ripened and flower-buds set. In nn, when the flower-buds are swell-them a temperature of from 55 degs. to 65 degs. by day in sunny weather. rdeners prefer to keep their plants al years, but I prefer to raise a fresh m cuttings annually, as I find these come somewhat leggy and lose a lot bottom leaves. Should this method g old plants be adopted after flower-ll the growths well back, giving the thorough cleaning to remove all insects, scale, mealy-bug, etc. After been attended to place in a brisk ing copious syringings, when new will be seen to push forth. When wths are about an inch long turn of their pots, taking away as much d soil as possible without injuring After this has been done pot into 8-inch pots, giving them a good keeping them well syringed and ntil established, growing them on in manner as that advised for young In a large establishment in Kent, erved as journeyman, a large span-ouse was planted with Gardenias. ss in growing Gardenias plays a rtant part in their cultivation, being e to attacks of scale and mealy-bug. osts are at all troublesome sponging eak solution of XL All should be giving copious syringings of tepid ward off attacks of red-spider.

KEWITE.

Marguerites

gh an easily-grown plant, I am culture is not generally attempted urs, probably from a want of know-the simple details necessary. To edom of flowering and good shape, s must be raised annually from cut-l the old plants discarded. Cuttings w and inserted in sandy soil in pots d in a warm greenhouse until rooted soon form nice bushy plants, and ely during the winter. The cuttings should be firm and 3 inches or 4 inches long, cutting just below a joint. When rooted put singly into equal parts loam, rotten manure, and sand, and keep in a close frame for a few days, shading them from sun until growth commences. Shift into larger pots as required, gradually harden, and plunge the pots in a bed of ashes in the open in June. Well supply the plants with water during summer and remove to the greenhouse in September to bloom. Cuttings taken in August, rooted, kept in a cold frame until spring, and repotted will flower during the present and succeeding months. F. H.

Treatment of Epiphyllums

With reference to Mr. W. McGuffog's note on Epiphyllums (on page 505) I should be glad if he could give us a short article on the cultivation of Epiphyllums, and also state what he considers the best varieties. E. truncatum is an old but good variety, but he might know of a better and more showy kind.

SOUTHSIDE.

[Epiphyllums are a small group of the Cactus family, and the majority bloom during late autumn and the dull days of winter. The flowers are very beautiful, and the plants are by no means difficult to manage. Naturally the Epiphyllums are epiphytes, and they are useful for hanging baskets, while in addition they succeed as pot plants struck from cuttings. They are, however, seen to the best advantage when grafted upon other stocks. Several stocks are used for this purpose, Pereskia Bleo being, I consider, the best, although P. aculeata is very satisfactory. On one occasion I had charge of a batch which had been worked—*i.e.*, grafted—upon Cereus speciosissimus, and these plants made very handsome specimens. Grafting is a very simple operation and may be done at almost any season of the year, and the junction is, as a rule, quickly effected. The only point is that stock and scion must be accurately fitted.

The best time at which to pot Epiphyllums is undoubtedly in April, and a very suitable compost may be made by using two-thirds of a good loam, plenty of sand, a little leaf-mould, and one-third of the whole of soft brick pounded into pieces the size of a Broad Bean. Failing the latter, crocks may be substituted. Let the soil be pressed down very firmly, and before potting see that the plant is secured to a stake, otherwise the weight of the branches may cause them to break off. Keep the plants fairly warm for a time after potting, taking care not to overwater, and using the syringe freely. Plants properly potted ought not to need further attention for some years, but it is necessary, of course, to see that the initial drainage is effectual and likely to endure. After the flowering season the plants should receive less moisture, and if possible be removed during summer to a sunny greenhouse to mature. For early flowering a few pots may be placed in heat in September, and successional batches treated similarly according to requirements. There are many varieties, differing chiefly in colouring and in the size of the blooms. Epiphyllum truncatum and its varieties are probably the most robust. These flower during the winter, the colours varying from orange-red and white to pink and crimson. E. Russellianum is much the same as the preceding. The blooms are large and showy, but in this case the colouring varies from flesh and white to pink and reddish-scarlet. E. Russellianum is also a winter blooming sort, and there are, of course, a good many varieties of this type. One of the finest Epiphyllums, however, is the spring-flowering variety, E. Makoyanum, which is at its best in May. It is distinct, too, in colour, the blooms being of a bright cinnabar-red and quite free from the purple and magenta colouring which to some makes E. truncatum (or some of its varieties) less acceptable. The blooms of E. Makoyanum, moreover, are more regular than those of the others, and resemble the flowers of a partially-opened Cereus. It is as easily grafted and grown as the others.]

Early Hyacinths

Highly prized by all flower lovers on account of their purity, fragrance, and earliness to flower at the beginning of winter, with very little artificial heat, intending growers should lose no time in procuring the required number, as the earlier they are potted up in September the better. These bulbs require five or six weeks after potting to fill their pots with roots. It is a mistake to hurry them until this has been achieved, then a little bottom heat will quickly assist the spikes to push up, giving them all the light possible to prevent any weakness of growth. Grown thus they will continue to flower a long time either in the greenhouse or dwelling. A loamy soil with the addition of a third part of leaf-soil and enough sharp sand to make it porous should grow them well. Clean pots 4 inches in diameter will be large enough, placing three to five in a pot according to size of bulbs; keeping the apex ½ inch above the soil and not pressing the soil too firmly have given me the best results. Place the pots on a firm ash base, water with a rose-can, and plunge in coal ashes, covering the tops with 6 inches of like material. They should remain until the roots can be seen at the base of the pot, when remove to the greenhouse, watering carefully and using a weak stimulant once a week. The Italian bulbs push up much more foliage than the Roman, which is an advantage if grouping has to be done. When these early Romans are required for cut flowers only they may be grown in boxes, placing the bulbs moderately close together, working down the soil with the fingers and treating similar to those in pots. The bulbs are not worth the labour of planting in the open. J. M.

Greenhouse creepers: Thin now to avoid gloom

In the early autumn, when the days begin to shorten, it is important that creepers which may have become overgrown on the greenhouse roof should be attended to and thinned in order to let in the light. Nothing is calculated to impede the progress of plants on the stages so much as gloom brought about by leafage above. A roof slightly covered with creepers a few short months ago may have proved helpful to some of the plants then, but as autumn approaches, a different state of things prevails, and light should be one of the first considerations. One has but to mention such things as Passifloras, Plumbagos, Clematises, and Lapagerias to realise how essential it is that these quick-growing creepers should be curbed in growth. Besides the question of obscurity of light it is essential for the creepers themselves that pruning should be resorted to. LEAHURST.

Bulbs in hanging baskets

In late autumn it is sometimes found that hanging-baskets which have been used for summer occupants are turned out and put away until spring, but if desired they can be put to good use by filling them with fresh soil (if this is found necessary) and planting small bulbs like Snowdrops, Crocuses, Scillas, etc. It will be better to re-line the baskets with Moss, and when planting has been done they should be placed in a cool shed or cellar for some months until roots have formed. If a little trouble is taken to procure fresh green Moss and to "stud" this with bulbs the result cannot fail to please in spring when the flowers appear. TOWNSMAN.

REMINDERS FOR THE WEEK

Southern and Midland

Onions

All spring sown, as well as those transplanted, have now practically ceased to grow, and where the foliage shows signs of decay the bulbs should be carefully lifted and laid out thinly in the sun to finish ripening. Onions as a rule root firmly in the soil, and if carelessly pulled by hand many of the best bulbs are apt to be damaged. To prevent this a fork should be placed well below the roots and lifted gently upwards.

Potatoes

Attend to lifting and storing the main Potato crop. In cases where the foliage shows traces of blight the tubers should be examined and any that are diseased should be thrown out when gathering. Late varieties, such as Tinwald Perfection and Majestic, may be left a little longer if the foliage remains green.

Lettuces

Seedlings that were sown during autumn should now be transplanted either into frames for winter and spring use or to a warm, sheltered border which commands all possible sunshine. Keep the soil open by continually hoeing, and dust the plants occasionally with lime to keep away slugs, which are always troublesome amongst the plants during mild and showery weather.

Calceolarias

Although displaced by other more up-to-date summer flowering plants in many gardens, they are, however, in some instances essential, and to ensure a stock of young plants for next season there should be no delay in taking cuttings of the basal growths and inserting them in sandy soil either in cold frames or boxes.

Lawns

As autumn draws nearer there is more to do to keep the lawn in good order than there has been the past few months, although the use of the lawn mower after this date is a matter of judgment. Sweeping and rolling are very essential. Those who possess an implement known as the Pennsylvania lawn sweeper should put it in use from now onwards.

Perennial Asters

This beautiful class of hardy plants is now coming into its own, and the plants need a bit of attention to keep them neat and tidy, and to prevent them from being damaged by wind and rains. A look round the plants every other day is advisable, and any shoots that are swaying should be loosely tied to stakes. A few Pea sticks placed amongst the plants I find save much labour in tying.

Border Pinks

It is a poor garden that does not contain some of these beautiful old-world flowers. Now is a good time to lift the plants, and after manuring the soil divide and replant. The Dianthus loves lime in the soil, so it may be added at this time. Cuttings and pipings taken during summer that are well rooted may be planted out.

Primulas

All greenhouse varieties should be by this date in their flowering pots and growing freely in airy frames. Keep all bloom-buds removed for the next few weeks to give the plants every opportunity to become strong. The P. malacoides forms that have had their final shift may be helped with weak doses of soot-water provided the pots are full of roots. The same applies to the varieties of P. obconica and P. Eureka. Keep the plants free from insects by occasional sprayings.

Achimenes

Most of these useful flowering plants have passed their best and should be gradually ripened off by lessening the water supply and keeping the pots near the glass in a sunny position to have the corms ripened as much as possible before placing them in an out-of-the-way place in the greenhouse, such as beneath the stage. In this case the pots must be laid on their sides during the winter. They should not be placed too near the hot-water pipes.

The fruit store

This should now be examined and everything got in readiness, as some of the earlier Apples will need gathering during the next week or two. Rev. W. Wilks, Ecklinville Seedling, Lord Grosvenor, and other Codlins, James Grieve, Ellison's Orange, Stirling Castle, Washington, and Domino are some that benefit when gathered and stored when ripe for a few weeks. Lift the Apple in an upright position, and if it parts readily from the stem it is fit to gather.

Figs

Trees that will be required to produce an early crop should now be repotted if necessary, but not otherwise, as they crop more freely when the pots are well filled with roots. A partly-shaded position out of doors should be chosen for the pots to stand on a bed of ashes for a week or so after repotting. Syringe the trees twice daily and keep them free from insects.

Melons

The majority of this crop is over or approaching ripeness, and where late crops are finishing in frames they should be carefully watched, and when showing signs of parting from the stem they should be cut and placed on a shelf in the greenhouse for several days before taking to table. Late crops in heated houses should have a regular temperature of 75 degs., and ventilation and watering must be carefully done. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Roses

We may probably want fresh groups of Roses, or to select a fresh site for climbers, or fresh groups or borders of herbaceous plants, and, though we sometimes have to improvise such things, it is better to think the matter well out first, and provide the necessary soil and manure for giving the things a good start. Roses may still be budded, but, as a rule, the early-budded plants take the best, and the ties of all buds put in early may now be loosened, and, if desired, some may flower, though, as the dormant buds make the best plants, one does not care to see the buds starting early, as it often means their death during winter.

Bedding plants

Cuttings of many things may be put in now, either under glass or outside. The former will include all kinds of bedding plants, both tender and hardy: the latter will include Violas, which should have a special bed made for them, or be inserted in boxes in a cold-frame, and to these may be added the double-flowered Arabis, which makes edging plant or to droop over a bank in association with Aubrietias. Primulas and Polyanthuses which ha raised in boxes may be pricked out borders.

Groups of shrubs

Very often in the beginning thes planted much too thickly, and so arrangement is now necessary. Fr middle of September to the end of is a good time to move evergreer ciduous things may be moved Madonna Lilies may be moved now, the early kinds of Narcissi planted. drops also, and Crocuses may be mov though, of course, they can be plante but it is important to get the early-fl Narcissi planted in good time.

Fruit garden

Though the fruit crop will in man be thin, insects, such as American must be dealt with. The best treatn these in summer is a small brush dipp time to time in a small vessel co paraffin, using the brush to smear white, fluffy patches. This means all the insects touched with it, and go can be done in this way. A boy ca cheaply.

Greasebands

It will soon be time to make arran for fixing these on the stems of fru and all fallen Apples should be gath and destroyed if not good enough Plums are a scarce crop, and some scarcity is due to heavy crops last ye not having time to thin the fruits. should be lost now in planting new Strawberries or in potting the plants forcing. Give mulch and water if the comes dry. The birds are trou among outdoor fruits and Morello Red Currants, and late Gooseberries be netted up. I have used hexagon for these, as this keeps out wasps. pruning is still being done, espec thinning the shoots on bush-tre pyramids, but thinning only is done. of shoots is left in the open places t and carry on the work of the trees.

Arum Lilies

If it has not already been done, Arum Lilies which have been left through the summer ought now to tended to in whichever manner is cus Some growers shake the plants out pot in fresh soil, others are content dress. In the latter case the drainag to be inspected and, if necessary, Whichever method be adopted, with luck such plants will bloom roun Christmas with very little forcing mittedly the spathes from plants so may be rather small, but this, for dec cannot be called a drawback.

Orchard house

Where the majority of the trees orchard-house are in pots, and if th have been secured, the plants may s removed out of doors to a sheltered which they will mature their growt house itself should receive a t cleansing in order that it may be sw free of insect pests when the time when it will be refilled with the Chrysanthemums.

W. McGr

Mabie Gardens, Dumfries.

Apricots

IY are Apricots not more often met :ith in amateurs' and cottagers' gar- ens? True, they will not succeed in and in all climates, but few can say, ıey have made an intelligent attempt them, that they will fail in their The best advice I can give to s is to ascertain what has been done ssional gardeners in their neighbour- t is somewhat difficult to say exactly really the best soil for Apricots, but I vays found they do well in a deep, ned, fertile loam inclined to be sandy. layey soils are not suitable, but these improved by the addition of sand, bish, or light garden soil. Not a ends in all cases upon the choice of ıe trees must have the benefit of a l the aspect should be nearly or quite r the trees to get all the sun, other- wood fails to ripen properly, light ing the result. Instead, therefore, ıny house and other sunny walls not ilised, why not try what can be done ricots? A sunny site is most neces- d next in importance comes a well- root-run. Few amateurs will err in ıe trees a too rich compost, though I own professional gardeners to do so, lt being a rank, unfruitful growth. ch moisture is also injurious, but in raised borders will obviate this

ch tree open holes not less than 3 feet and to a depth of 18 inches with of 12 feet between. Remove all soil ff clayey nature, also any excess of r gravel. Return the top spit into forking a little fresh soil into it, and m. Then add sufficient fresh, good oil to raise the back about a foot ıe surrounding level with a slight the front. If the soil be poor a ddition of ½ inch bones and some rden rubbish will act beneficially.

fan-trained trees of three years' ıre the best to plant. Prior to plant- away all bruised ends of roots and ep planting. The collar of the tree be nearly, if not quite, exposed and s evenly distributed. The plan of he tree in a hole, shovelling the soil e roots, will not do for the Apricot. well to plant properly and surround with a little fresh light compost. If is at all wet avoid trampling on it, e newly-planted trees a mulch of itter to exclude severe frost. As to NG, there is no mystery about it, he same time it is an important de- well-trained tree will have from eight inches, all about the same size, which e laid in to their full length. Either rowth or fruiting spurs will develop v joint. During the summer all rowths other than one or two on each these being required for furnishing all space with the extension of the ıould be shortened to about 4 inches ıced to 1 inch at the winter pruning. uit should be allowed to form during mer following planting, but if all is w a few to form the following year. ssoms of the Apricot are liable to be by frost, therefore some protection afforded them at this time. The ay is to use netting suspended over Apricots, when protected, usually set uit thickly, and thinning must be ıly carried out. As a rule, I leave til they are the size of Hazel-nuts, as thinnings come in handy for the for tarts, etc. The roots of trees heavy crops must be kept moist, and eather both water and liquid nourish- ment must be liberally supplied. On no account give mere surface waterings as these do more harm than good.

The Apricot is liable to have whole branches die off. I consider this due to allowing the roots to become too dry in hot, sunny weather. When hot weather sets in, my practice is to put on a good mulch, and the same with frost, with the result that few, indeed, of the branches die. The varieties most successful with me are Hemskirk, Moorpark, and Oullins Early Peach.

F. H.

Keeping fruit

The advisability of adopting measures for the above was suggested by an appeal to cottagers to be more enthusiastic about their fruit entries in connection with our local show, and receiving the reply that the show was too late I reflected that a little selection and protection would easily give a few dishes to help to strengthen the fruit classes. In Gooseberries and the three types of Currants there are late sorts, and a bit of cheap fish-netting or some old curtains past use indoors will keep the birds away. Dishes of good varieties of Gooseberries and White Currants any time during the early part of August are not to be despised. There is a small green hairy Gooseberry and a large amber-coloured Currant that keep well and are both very sweet at the time noted above. Of course, where any aspect like a N.W. wall is available for such fruit it will naturally keep longer and can be easily protected. A similar aspect does well for late Plums. I have gathered Coe's Late Red and Blue Imperatrice from a N.W. wall in the middle of November when the early frosts have not been too severe. Morello Cherries, too, if allowed to hang until nearly that time, become almost black and lose a lot of their sharpness. Birds are not slow to avail themselves of the improved quality unless the trees are securely netted. Mention of late Plums reminds one of the wonderful keeping qualities of that fine old Plum Ickworth Imperatrice, and intending planters should make a note of it if not already in stock and they want something exceptionally late. I have had this, too, on a N.W. wall, but it is not quite the position for any dessert Plum. This Plum is a worthy successor to Coe's Golden Drop, and continues the season until autumn is well advanced, so that one is never without this fruit right away from the early Gages.

Hardwick. E. BURRELL.

Cordon Gooseberries

As a gardener who has had to do with the above for close on 50 years, I should like to add a note to the interesting articles on pages 488-9. Given careful attention to the planting and after root nourishment it is difficult to fix the number of years they will continue to bear successfully if the rejuvenation of the spurs is taken in hand in time. However careful one may be in the pruning, there comes a time after some years when there is a big knotty excrescence from which the young growth springs, and if allowed to remain the young shoots gradually deteriorate. When this is so a few of the knots should be cut away annually with a sharp saw, not too close to the main stem, but allowing for back breaks, one of the strongest of which should be allowed to remain to help to build up a successional army of spurs. Where four or five stems are allowed to each cordon, and one of them seems inclined to go wrong, a young shoot should be laid in from as near the base as possible to take its place. A reminder may be given that in tying in, the young growth should not be allowed to come into direct contact with the wire. I have known Gooseberries under this system to keep in good health and continue to bear well for 30 years.

A complaint is occasionally heard as to the poisonous nature of Gooseberry thorns, but I have never felt any ill effects, and have had my hands dotted over with the marks in the old days after pruning. In connection with the lengthy season during which this useful fruit is available it may be interesting to note that the first picking for cooking was made this year on May 22nd, and the last ripe fruit was gathered on August 22nd. There has been a continuous supply during the three months. E. BURRELL.

Hardwick.

The size of vine borders

Of late years there has been a considerable leaning towards forming small Vine borders, or at least smaller than they used to be. Although I do not wish to imply that such huge borders are necessary for the well-being of the Vines as was at one time considered requisite, yet I think there is too much of an inclination to go to the opposite extreme, and form the borders much too small, or at least too small to ensure the Vines producing good Grapes for a series of years. Vines with their rooting space limited to a width of 5 feet or 6 feet, and to the depth of 30 inches or thereabouts, require as much attention in watering and feeding as even pot Vines. To sustain Vines in good health for a series of years, each of the borders, inside and out, should not be less than 12 feet wide. With the soil placed in in sections the roots do not ramble away, but form a complete mass of fibrous roots. I have noticed that the small borders which require watering so very often soon become sour; consequently after a time the root action becomes weakened and the Grapes shank.

A.

The Morello Cherry

In some gardens the Morello Cherry is most disappointing, the branches dying away in an apparently inexplicable manner. But even in these cases the grower need not despair, as some means might be found by which the trees may be got to succeed fairly well and successful crops be assured. I think a sluggish root-action is answerable for most of the failures. To this and hard winter pruning, or the two combined, may be fairly traced the downward course of many trees. With others it is the want of suitable food, the yellow cast of the foliage plainly denoting this, and which, if not arrested in its early stages, soon brings about the tree's downfall.

On heavy and cold soils too much care cannot be taken in the preparation of the site for the trees, especially in affording ample drainage—that is, if not present naturally. The site—a northern aspect, and which is the best generally that can be devoted to the culture of the Morello—is often, on account of its position, in anything but a satisfactory state both as regards soil and drainage. In this garden this Cherry succeeds splendidly, but at one time it would not do so, the branches dying away wholesale. The remedy was found in affording free drainage and devoting a good portion of the border solely to the roots, without any disturbance of the surface for other crops. The roots by this treatment are kept quite up to the surface; consequently they derive the full benefit of the sun's rays. In preparing the site the border was raised above the ordinary ground-level, a tile drain also being laid direct from the base of each station into the drain running along the walk. Over the bottom, before returning the soil, flat tiles were laid, these in their turn being

covered with old brick rubbish. To the soil, as it was being returned, was added a fair amount of burnt refuse and wood-ashes. As regards pruning, the trees are gone over in the early summer, shortening back any shoots not required for laying in so as to form spurs. In the early autumn, after all the fruit is gathered, the trees are generally overhauled, further pruned if necessary, and the shoots nailed in. My opinion is that the shoots are not best nailed in until the period named. In the first place it would interfere with the fruit, and, further, the shoots are enabled to become better ripened if allowed more freedom throughout the summer. Black aphis, often such a pest, will not be troublesome if the trees are syringed with an insecticide during the winter, and also before the buds burst in the spring. Black aphis can be kept under if carefully watched, but once let it get hold, the difficulty commences, and in the end most likely the trees will entirely fail. T. M.

Treatment of fruit trees

(Mrs. Barries).—In pruning Loganberries, after cutting out the old canes the weakest of the young or new ones should be taken away and no more of the latter left than is required to furnish the trellis or fence on which they are trained to supply fruit next year. These young canes should not be topped before February next. Gooseberries grown in bush form are not adapted for training out as espaliers. For this purpose the plants are grown specially from the cutting stage, and can be purchased at a reasonable rate from any nurseryman who specialises in fruit trees. Black Currants may be pruned any time after the trees have shed their leaves. With regard to the Raspberries, the way to avoid the trouble complained of in future is to reduce the young growths which push up around the stools in number so that there may be slightly more than you will require for replacing the old ones after they have done fruiting. In selecting the growths for retaining give the strongest the preference and cut or hoe all others clean off. The reason for leaving rather more canes than is necessary is to allow of a selection being made in February, when the final tying and the topping of the canes should be done.

VEGETABLES

Vegetable Marrows

THE Vegetable Marrow classes at exhibitions show that no one kind is favoured more than another, as with most other vegetables. If we turn to the exhibitions of garden produce from the best private gardens, long, short, round, or Custard Marrows are invariably presented, but with this difference—that only white kinds are shown, whilst cottagers have just as much regard for green or mottled kinds as for white ones. Very probably, all other things being equal, it will be found that white kinds get the preference, but that is purely a matter of fancy, as when cooked it would be difficult to discover in what respect green-skinned kinds differed from white ones. Some kinds are more prolific than others; the smaller-fruited kinds produce more than large-fruited ones, but in the end the balance of actual bulk is about the same. Of course, if the fruits of the longer or larger kinds be cut whilst small, the relief given to the plants favours more abundant fertility. In the market gardens the Long White is preferred, and if somewhat ribbed, all the better. Still, a nice green specimen or two is not objected to, as these produce variety, and give some acceptable colour to the greengrocer's window. Cut while the skins are tender; Marrows soon become battered and disfigured. There are few directions in which reform is more needful in connection with market garden produce than our method of packing and getting it fresh and uninjured to the consumer.

Some little divergence of opinion exists amongst good vegetable judges as to the proper size or age for prize Marrows. They may be too big in some cases, but, if the skin is quite tender and the fruits even and handsome, it seems unfair that small fruits should be put before larger ones. It is a common rule to allow something for size in the case of cottagers' products, for these show by their exhibits that they think size of considerable merit. When, however, such kinds as Moore's Cream or the round Pen-y-byd are presented, of course, size is out of the question, and here it is really one of quality and flavour. Marrows have become very popular; they are widely grown, and they prove valuable aids to the gardener during the summer months.

Parsley for winter use

In some gardens Parsley always winters badly outdoors, no matter how much care may be bestowed upon it in the shape of affording protection with mats or tanned canvas covers laid on a rough framework, or long rods arched over the beds, and having both ends inserted in the soil. In such cases the precaution should be taken to fill a frame or cold pit at the present time with plants raised from a sowing made in the early part of July. If nice, rich, friable compost is employed as a rooting medium the plants quickly become well rooted, and are soon established. Once the plants begin to recover from being transplanted, the lights should be drawn off, and the plants should be encouraged to make as hardy a growth as possible. The lights need only be used in the event of sharp frost occurring, or when the weather is very wet or snowstorms are expected. In the last two contingencies the plants may receive the requisite amount of air by tilting the lights at the back. Care must, of necessity, be taken to see that the plants receive all the root-moisture they require, but at the same time over-watering must be guarded against, otherwise rotting and cankering at the collar will result. Grown on these lines, a frame filled now with plants standing 6 inches apart will furnish a quantity of pickings all through the winter, or whenever the weather is too severe to allow of the outdoor plants being interfered with. When the time arrives for the frame or pit to be required for something of a more urgent nature the Parsley plants may be lifted and planted outdoors in a sheltered situation should those which have wintered outdoors be in such a condition as to render it unwise to destroy them altogether. When the demand is not so extensive as to require a pit or frame being set apart for the accommodation of the plants the case can be met by filling a few boxes some 6 inches or 9 inches in depth, or a suitable number of large flower-pots, with some good-sized plants. These, being portable, they can, on the approach of hard weather, be accommodated in an orchard-house, or any structure from which severe frost is merely excluded. Failing this, a cold pit matted over at night would answer.

All this may appear very unnecessary to many, but as Parsley is in daily demand in so many establishments, and has, moreover, to be forthcoming, this is the simplest way out of the difficulty when either the nature of the soil or situation renders the wintering of it so uncertain that to place dependence on it doing so is a sure means of courting trouble and annoyance.

Report on condition of horticul crops on the 26th August, 19

VEGETABLES.

Beans (Kidney or French).—An a crop.

Beans (Runner).—Crops slightly average.

Beet.—Promises a good average cro

Broccoli.—Plants look well and are satisfactory growth.

Brussels Sprouts.—Plants health vigorous; early plantings buttoning w

Cabbage (spring-sown).—Is hearting condition normal; good heads being some districts.

Carrots.—Crop has improved re Late sowings are most promising; f troublesome.

Cauliflower.—Promises generally a age crop, good heads of early varieties cut.

Celery.—Plants are making good growth.

Cucumbers (outdoor).—Making fai gress, but condition not up to average.

Kale.—Growing well and looks ve mising.

Leeks.—Are making clean, strong g

Marrows.—Making good progress setting slowly in some districts.

Onions.—Crop has improved and bu ripening fairly well generally.

Parsnips.—Are making satisfactory and look promising.

Peas.—Late crop is generally averag

Savoys.—Making good progress.

Sea Kale.—Looks very promising.

Tomatoes (outdoor).—Promise abo average crop; fruits ripening slowly.

Turnips.—Early sowings are making progress, late sowings are a good plan

FRUIT.

Apples.—The light crop of fruit is s well and quality seems good, but sc pest attacks are bad in places. A culinary varieties, Early Victoria, dier, and Lord Derby are the best. ley's and most other varieties are poc Dessert varieties, Lady Sudeley, Wo Pearmain, and James Grieve are fair. Orange Pippin is very poor.

Pears.—A rather better crop tha anticipated a couple of months ag almost average in Kent and eastern co but much scab in places. Conferenc tility, and Hessle are good generally.

Plums (ordinary).—Crop heavy in good in eastern counties generally Worcester; elsewhere variable. Vict very good. Czar, Pershore, and B Red good; Monarch fair.

Plums (Gages).—Good in Kent; v and below average in most other distr

Plums (Damsons).—A good crop principal growing districts. Ayl Prunes about half crop.

Weed on pond

(O. H. Comber).—The weed to whi refer is Potamogeton pusillum, a pest will completely cover the surface of a ponds and sluggish moving water. T effective remedy we have so far emple that of lifting it off the surface of the by means of a small meshed frame wo structed in the shape of a tennis racke a long handle attached. A fine-r sieve or thin, dried Willows laced firm gether will answer the purpose, bu essential that whatever is used sho strong but light. You might try a few or a pair of swans, but these are not factory where Water Lilies or other a plants are occupying the water. We think the water snails would have any f

Answers to Queries

ons—Queries and answers are inserted in G ILLUSTRATED free of charge if corre- s follow these rules: All communications e clearly written on one side of the paper d addressed to the EDITOR of GARDENING w, Bouverie House, Fleet Street, London, E.C. 4. on business should be sent to the PUB- The name and address of the sender are in addition to any designation he may be used in the paper. When more than y is sent each should be on a separate paper, the name and address being added As GARDENING ILLUSTRATED has to be sent some days in advance of date, queries lways be replied to in the issue immedi- owing their receipt. We do not reply to y post.

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

ent of an Iris border

ou kindly tell me the best treatment ris border about 6 feet wide which me over-run with Couch Grass and Elder? The border has been planted years, and for the first six years was itest success, the Irises blooming During the war the Irises did not get attention, and the weeds made their ce. About three years ago I had rises taken up, the border trenched and the Irises replanted, but they seem to have the same vigour, weeds are thicker than ever. The ight and chalky. Should they be keeply and very closely together? I the rhizomes must be broken in get rid of the weeds. As the border dug up preparatory to replanting I very grateful for a reply.

M. F. W.

ll the plants and wash out every f soil from their roots in order to e that every trace of the weeds has ved. Plant them in lines and close n a reserve border which is shaded f the day, and water from time to dry weather continues. You will able to deal with the border y, and there are two ways of doing Burn the surface soil at least to a foot by first getting a good bed of y logs and rough wood. The soil be put upon the fire in layers of r so at the time, entirely enclosing Before the second layer is put on, with successive layers, a sprinkling ould be spread over the whole sur- depth of 2 inches. Such fires need ation, and, properly done, will de- he weeds. (2) Take out a trench ches wide and 2 feet 6 inches deep same to the opposite end of border in the last trench. The trenching the border should then be com- sing the same width and depth as t taking special care to see that icle of the first spit, which should leep, is placed in the bottom of the eeding. If this is properly and e the weeds will be suffocated, and ing a little well-decayed manure ashes into the surface the border ly for the plants. We suspect that e weeds were left in among the f the plants when the last trans- vas carried out. The rhizomes about an inch beneath the surface ted and no harm will accrue from up the rhizomes in order to clear them of weeds.]

by the sea

L. Mathews).—You will be well keep your little 10 feet square den by the sea as simple as possi- only attempt to grow the old- lowers in it that seem to belong to s. Anything else will be out of keeping. Against the cottage plant the winter-flowering Jasmine (Jasminum nudiflorum), and with it plant Clematis Jackmani. Both do well in a north aspect, and both have long flowering seasons and will not hurt one another if tangled up together. Another good plant is Cydonia japonica, the old deep red kind, if space permits. For your walls keep to simple rock plants as white Arabis, a good purple Aubrietia, and the golden Alyssum for earliest spring, and they will bloom even in mild winter. To follow them take Erinus alpinus and its white form, Campanula muralis and C. pusilla, both blue and white, and Viola cornuta and its white form, as well as Linaria pallida, and do not hesitate to introduce a few plants of the old Snapdragon, the old double yellow Wallflower, and the little bright yellow Corydalis, golden stonecrop (Sedum acre), and any odd little Fern that you can coax into a chink. This will give you a long season of flowers; all the year round, in fact, in an average season. And all those mentioned will do very well in the rather shady aspect. In the garden ground itself plant old double Daisies, Pansies, the old London Pride (Saxifraga umbrosa) and bulbs, Tulips, Hyacinths and Daffodils, and the little hardy Fuchsia, and if room allows a Hydrangea hortensis, pink or blue, and any other simple old plant you can think of. The old English Marigold in yellow and orange suggests itself, and Canterbury Bells, and do not attempt any formal arrangement or follow any strictly-set plan. We have given you plenty to choose from, and if you use the plants suggested with a little artistic understanding you should get a most pleasing and appropriate setting in that tiny spot.

Larkspur failing

(J. S.).—Your No. 3 (the Larkspur) is affected with one of the parasitic eelworms. There is no cure for a plant affected so badly, and the plant would be best burned. When plants have been attacked by eelworms the pest winters in the soil, and efforts should be made to carry out some form of soil sterilisation. Soil sterilisation is the only known method of controlling eelworms, and while it is generally not practicable to sterilise soil in the field or garden, it is practicable to sterilise soil for flower-bed and greenhouse work. Soil sterilisation is always carried out either by means of chemicals or heat, particulars of which can be got from our advertisement columns from time to time. A dressing of sulphate of potash helps a plant to resist attacks of eelworm.

Ranunculus culture

(R. Moore).—Most of the Ranunculi do well in ordinary garden soil. For the varieties of R. asiaticus a little special care will give very much better results. A bed should be prepared by taking out the soil to a depth of 18 inches. If the soil is not drained naturally a drain should be made to carry away surplus water. You should then make up a compost of two parts loam, two parts soil of bed, half a part good leaf-soil, and a little well-rotted cow manure. Enough good sharp river sand should be added to keep the whole of the compost open. The beds should be made up at least six weeks before the end of February, which is the best time to plant. As the flowers are opening, light shading helps to retain the colour of the flowers. This Ranunculus likes partial shade. We have grown it very well on a border under a north wall. The wall was about 7 feet high and the bed made 3 feet away from the base of the wall. If your plants fail next season send us a specimen and we may be able to help you.

Iris bucharica

(B. W. J.).—This is quite hardy. It reaches about 15 inches and flowers about mid-April. The tips of open flowers may be injured by frost, but unopened buds unfold uninjured. It belongs to the Juno section and is not fastidious about soil, but prefers a fairly rich loam and abundant moisture while in active growth. Iris Korolkowi belongs to the Regelia group of the difficult Oncocyclus section of Iris, and is much more amenable to cultivation. They like a warm position and shelter from rough winds, and something rich well below their roots, and it is important to see that they have a good resting period after the leaves die down. Iris Pavonia is a South African species, bulbous, and only a success in very warm positions in sandy soil, and perhaps best in pots in a cool greenhouse. Iris tingitana is lovely, but a very shy flowerer, and asks for a warm place in sandy soil, shelter from cold winds, and rich feeding with old manure buried well below the base of its bulbs and not in contact with them. The warmest and most sheltered corner of the garden is the place for it, and the protection of a handlight might be advisable in the early months of the year. The bulbs seem perfectly hardy, and the leaves do not seem to suffer from sharp frosts, but the flowering will be impaired by exposure.

Propagation of Liliums from scales

Having had fair success in raising several varieties of Liliums from seed I should like to increase my stock by propagating from scales of bulbs that have flowered this year. The tops of these are now dying down, and I should like to know if this is the best time of the year for this method of raising new bulbs, also the best compost to use. I have L. auratum, candidum, chalcedonicum, excelsum (testaceum), giganteum, japonicum, longiflorum giganteum, monadelphum Szovitzianum, pardalinum, philippinense formosanum, regale, Sargentæ, and sulphurgale. I presume that these could all be increased in this way. I have frames available for the purpose, but no greenhouse, as all my Lilies are grown outdoors after the seedling stage.

J. I.

[A fairly sheltered border, where the soil consists of a well-drained sandy loam, is the best place for them. This border must be well dug, but no manure should be added. A convenient way is to divide the border into beds about 6 feet wide. In planting, an inch or a little more of soil should be taken from the top of the bed, and put on one side. Next sprinkle the scales over the bed so that they are about 1 inch apart from each other, and when the bed is filled in this way, carefully return the top soil, which has been put on one side. The result of this will be that the scales are covered with quite 1 inch of soil over their topmost portion, and that is a very suitable depth at which to plant them. In a general way it will take four years for the bulbs to reach the first size. This is the only way of increasing Liliums from small beginnings, but where they are grown in quantities the practice followed is to dig up the entire lot, pick out all saleable bulbs, and at

once replant (at the latest before August is over) all the small ones. In this way the stock can be continually increased, for established bulbs often produce several offsets available for planting.]

ROSES

Building up a Rose tree

(Crystal).—In order to build up a large Rose bush pruning must be less severe than with dwarfs. Cutting away the blooms will help this. Allow five or six eyes to remain on all strong shoots when pruning is done in March, at the same time cut away to a bud or two all weakly shoots. Permit the leading growths to forge ahead by retaining 9 inches of the past season's wood. The late shoots, such as the centre one in your sketch, must be cut back to sound buds, as often such shoots do not ripen thoroughly. When removing flowers from secondary shoots it is only necessary to cut them away to the actual base of the flowers.

Roses for walls

(Skisdon). — Bouquet d'Or, Zephirin Drouhin, Emily Gray, Gloire de Dijon, Paul's Scarlet Climber, Climbing Lady Hillingdon, American Pillar, Alberic Barbier, Lady Waterlow, and Tea Rambler.

Roses for bed

(Casetta).—(1) Allen Richardson would do, but Reve d'Or is much better. (2) Lady Hillingdon, Mrs. Wakefield Christie Millar, Red Letter Day, Mme. Leon Pain, Caroline Testout, Prince de Bulgarie. (3) Papa Gontier, Paul's Scarlet Climber, Zephirin Drouhin, Cramoisie Superièure.

TREES AND SHRUBS

Moving a shrub and climbing Roses

(D. F. P.).—You do not say what the shrub is which you wish to move, except "japonica," a word which applies to many subjects. If it is Andromeda japonica or Aucuba japonica, both evergreen, then transplanting may be carried out in March. If Pyrus japonica (deciduous) then it may be moved in November.

Magnolia not flowering and name of shrub

(Skisdon).—Your Magnolia is too weak to bloom. Apply a good dressing of farmyard manure to its roots, which should have the effect of thickening the wood. You might also thin out some of the shoots to allow air and sun to reach the centre of the shrub. It is Magnolia grandiflora, and should be in bloom at the present time.

Creeper for wall

(G. G.).—If you need a Rose we should select either one or more of the following:—Climbing Caroline Testout, C. Lady Hillingdon, C. Sunburst, C. Richmond, C. Lady Ashtown, C. Ophelia, and C. Mme. A. Chatenay. Marechal Niel is not suitable. Useful climbers are Eccremocarpus scaber, Solanum jasminoides, and Lapageria rosea.

Elm failing

I am sending by the same post a branch of Weeping Elm in case you can give me a reason for an apparent blight. It started in the crown of the tree and is spreading throughout, a branch at a time. The appearance is as if each branch had withered with fire-heat. It bids fair to spoil the tree, and I am completely at a loss as to the cause. Can you reply in your paper to me on the matter? E. RAWSON.

[A careful examination of the specimen you have sent does not reveal anything likely to cause the death of the tree. We think that the cause of the tree failing is something seated deeper than in the material you have sent us. You say that the tree started to go in the crown. This rather indicates that something is wrong with the roots and water supply. You should examine the roots and trunk of the tree. You may then find the source of the trouble. The roots getting down into unsuitable soil sometimes accounts for a tree going off as yours is doing.]

Ivy caterpillars

(W. Preston).—The caterpillars attacking your Ivy and Privet are those of the scalloped Hazel moth (Odontoptera bidentata). This moth is on the wing during May and June, and eggs are laid on various plants, including the Ivy. The caterpillars appear shortly afterwards and begin to feed on the foliage of the plant on which the eggs have been laid. If they are numerous, and food supplies become short, they often wander off and attack other plants near by. The caterpillars become fully fed towards this time of the year and then pupate. The pest remains in the chrysalis state throughout the winter. We are not certain where the pupa stage of this insect takes place, whether it be in the soil or amongst the leaves of the food plant. We think, however, that you will find the pupæ in the soil underneath the Ivy. Your best method of control will be to spray your Ivy with a good nicotine wash. Arsenate of lead would be better, but it would disfigure the foliage rather badly for a time. Spraying with either of the above insecticides will, of course, be only practical if your Ivy plants are fairly small and easily got at. If the Ivy is all over the house we should give it a thorough drenching with a hose pipe. You will then find that most of the caterpillars will drop to the ground. They could then be picked up by hand, or if very numerous sprayed with nicotine. We are afraid that at this period many of the caterpillars will have gone into their winter quarters; if so, spraying will be of little use. If the chrysalis stage takes place in the soil a dressing of naphthalene at the rate of 2 ozs. per square yard would kill them.

MISCELLANEOUS

A plague of moles

(W. N. B.).—The best way is to employ a mole-catcher. If you can find the main run procure some of Calvert's No. 5 carbolic acid. It is very powerful, and should be handled with great care. Place some in a small bottle in each run. The fumes are very penetrating and will, in all probability, drive the moles clean away.

Obituary

MR. WALTER CHARLES SLOCOCK.

We regret to record the loss of a prominent nurseryman and horticulturist, which occurred at Woking on Tuesday by the death, following a brief illness and an operation, of Mr. Walter Charles Slocock, the Goldsworth Nurseries, Woking. Mr. Slocock had been head of the concern at Woking for nearly 50 years. He entered the profession under the tuition of Mr. Waterer, head of the nurseries bearing that name at Knaphill. After working at establishments in this country and in France and Belgium he settled at Woking and reorganised the Goldsworth nurseries. These had lost some of their former importance and were but 24 acres in extent. Under the management of Mr. Slocock, who combined with his business acumen an enthusiasm which made his work a pastime, the nurseries became a recognised source of first-rate productions only, and a large export trade was built up. Mr. Slocock did much to bring to the notice of a wider circle the knowledge and appreciation of hitherto rare species of trees and shrubs, and it was for this work that he was awarded, some 10 years ago, the Victoria Medal of Hon the instance of the Council of the Horticultural Society. Mr. Slocock latterly assisted by one of his two sons also leaves a widow and a daughter.

MR. JAMES TAIT.

There passed away, with startling s ness, on August 18th, this fine old gar Mr. Tait, who had reached his 73rd only recently retired from the charge extensive and beautiful gardens of Ly (now Justicetown), Carlisle, where h been for 30 years. Previous to that h for several years head gardener at D Hall, Cockermouth. Mr. Tait took interest in local affairs, and was for years Chairman of the Parish Cou Cockermouth, where he resided. H buried at Blackford, near Carlis August 21st. Mr. Tait raised mar varieties of Strawberries, Raspberrie Apples, besides an excellent Tomato. (

SHORT REPLIES

T. M.—Your Tomatoes are what is as "scalded." See reply to Watson issue of August 14th, p. 496, middle c

R. S. Falkner.—Yes, Hop manure make a good top-dressing for your Ro the winter, but it would do more goo the plants are starting into growth spring.

C. F., Croydon.—You ought to w makers and get them to advise you very difficult for us to suggest a reaso out seeing the stove.

NAMES OF PLANTS

Harry Absworth.—3, Corydalis lut

Lady Clonbrook.—1, Hypericum losum; 2, Hypericum patulum Henry

Constance Lumley.—Rose Trier.

Skisdon.—Clerodendron trichotomu

Captain E. A. Saunders.—Helianth Mellish.

H. C. G.—1, Leycesteria form Cestrum aurantiacum.

Chas. Berrington.—Red Oak (rubra).

O. R. Clark.—1, Artemisia lacti Eupatorium, should like to see l Astrantia carniolica; 4, Cimicifuga cana; 5, Campanula carpatica a Senecio Clivorum.

J. A. Dalby.—We cannot under name florist flowers.

J. E. M.—Milk-weed (Asclepias tu

E. A. Lyne.—Celsia cretica.

Perthshire. — An ordinary seed Tuberous Begonia. You ought to batch of seedlings and you will in hood get quite as good forms.

Anon.—1, Hibiscus Bleu cœle Hypericum (?). Should like to s specimen.

Fern Lover.—1, Nephrodium n Corydalis lutea; 3, Asplenium bul 4, Adiantum concinnum.

A. S.—1, Ceanothus azureus; machia vulgaris; 3, Epimedium pi 4, Veronica subsossilis.

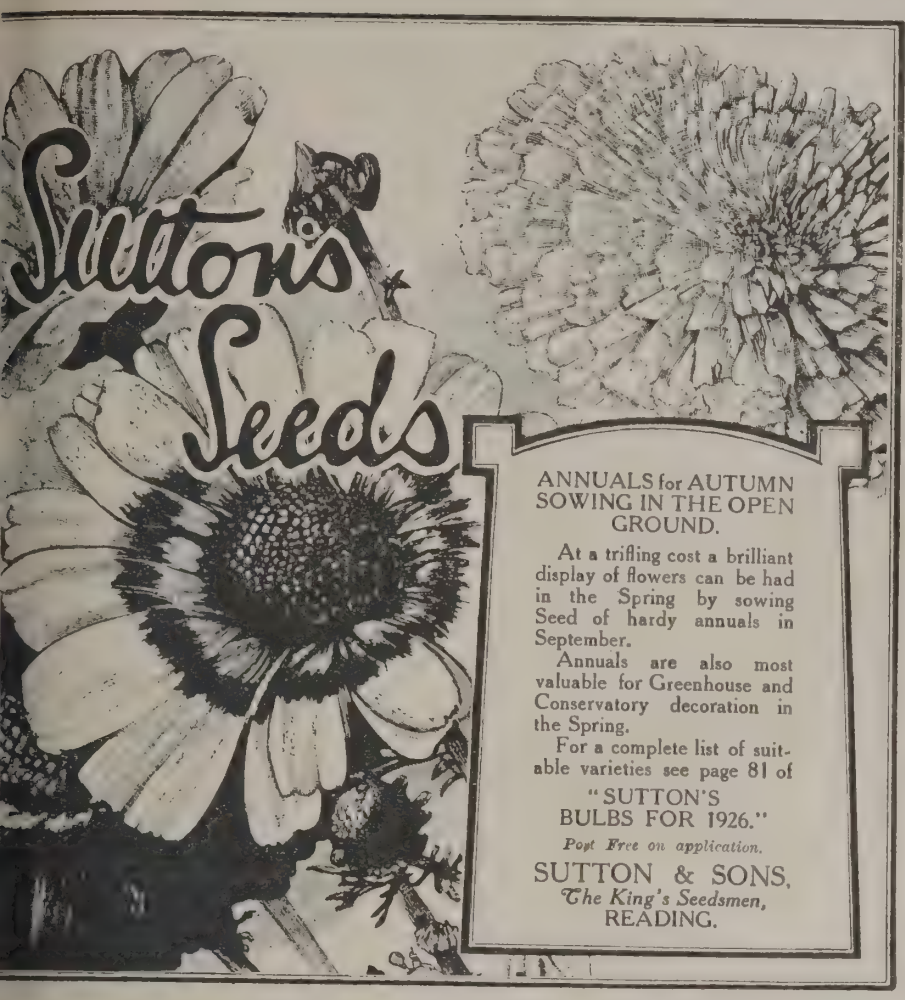
NAMES OF FRUITS

J. Fleming.—Grape Black Hambu

Skisdon.—Ellison's Orange.

The Lazy Back digging fork

As a regular reader of GARDENIN TRATED I shall be glad if you can in as to where I can purchase what I known as the Lazy Back digging used in the western counties. It is, similar to an ordinary digging for that it has a much longer handle, ar member rightly the fork is rathe than usual. H. F. W



ANNUALS for AUTUMN SOWING IN THE OPEN GROUND.

At a trifling cost a brilliant display of flowers can be had in the Spring by sowing Seed of hardy annuals in September.

Annuals are also most valuable for Greenhouse and Conservatory decoration in the Spring.

For a complete list of suitable varieties see page 81 of "SUTTON'S BULBS FOR 1926."

Post Free on application.

SUTTON & SONS,
The King's Seedsmen,
READING.

DOBBIE'S SWEET PEA COLLECTIONS

For Present Sowing

COLLECTION A (G.I.).—Six Splendid Novelties for 1926-27—Gleneagles **(12)**, Red Gauntlet **(12)**, Chieftain **(12)**, Patience **(12)**, Magnet **(25)**, Mary Pickford **(25)** **5/6**

The figures in brackets denote the number of seeds per packet.

COLLECTION B (G.I.).—The Exhibitors' "CHAMPION" Collection of Fifteen Splendid Exhibition Varieties—20 seeds of each—Constance Hinton, Crimson King, Grenadier, George Shawyer, Hebe, Hawlmark Salmon Pink, Jean Ireland, Majestic Cream, Mrs. Tom Jones Picture, Powerscourt, Renown, Royal Purple, Warrior, Youth **5/-**

COLLECTION C (G.I.). — Twelve Splendid Exhibition Varieties—20 seeds of each—Austin Frederick Improved, Charity, Constance Hinton, Dignity, George Shawyer, Hawlmark Pink, Matchless, Mrs. Cuthbertson, Royal Purple, Royal Scot, Renown, The Sultan **2/9**

Our Autumn Catalogue of Bulbs, Roses, Sweet Peas, etc., post free on application.

DOBBIE & CO., LTD.,
Royal Seedsmen, EDINBURGH

Established 1804 Incorporated 1809

The Royal Horticultural Society's GREAT AUTUMN SHOW

HOLLAND PARK HALL, Holland Park Avenue, London, W.

21st, 22nd, and 23rd SEPTEMBER, 1926

A GREAT AUTUMN SHOW OF FLOWERS, WITH A DISPLAY OF AUTUMN FOLIAGE AND BERRIED PLANTS

PRICES OF ADMISSION FOR NON-FELLOWS:—

Tuesday,	21st September,	2 p.m. to 5 p.m.	10/-
,,	,, ,,	5 p.m. to 7 p.m.	5/-
Wednesday,	22nd September,	10 a.m. to 5 p.m.	5/-
,,	,, ,,	5 p.m. to 7 p.m.	2/6
Thursday,	23rd September,	10 a.m. to 5 p.m.	2/6

FELLOWS' TICKETS ADMIT FREE, and on TUESDAY, 21st, at NOON

Particulars of Fellowship may be obtained on application to THE SECRETARY,
ROYAL HORTICULTURAL SOCIETY, VINCENT SQUARE, LONDON, S.W. 1

Royal Horticultural Society's Amateur Vegetable Show

THIS annual show is gaining in strength both in regard to the number of exhibits and exhibitors, and also in regard to the quality of the individual exhibits. The term "amateur" in connection with this show is used in its widest sense, for it permits the owners of some of our largest gardens, who have in their employ many gardeners, to exhibit as "amateurs," and also permits amateur gardeners who grow the vegetables they themselves show to enter into friendly rivalry. There was only one trade exhibit, this came from Messrs. Sutton and Sons, Reading, and was a magnificent display. There were, in all, some 250 different individual exhibits in this wonderful display, and they were arranged in most artistic fashion. Leeks, Celery, Onions, Carrots, Cauliflowers, Potatoes, and a host of other special sorts for which this firm is famous, were represented in ideal form and condition, and there were many other subjects less generally known that called forth the praise and wonder of the visitors. Superbly fine aptly describes this grand display of vegetables.

Classes open to all amateurs

There were four competitors in the class for 12 distinct kinds of vegetables. First prize and the Sutton Cup was well won by Viscount Hambledon, Greenlands, Henley-on-Thames (gardener, Mr. W. Turnham). All-the-Year-Round Cauliflower, Superb Pink Celery, Prizetaker Leeks, Tender and True Parsnips, Ailsa Craig Onions, Intermediate Carrot, Arran Comrade Potato, Phenomenon Peas, and Best of All Tomatoes were the 10 most noteworthy subjects of this very fine exhibit. Second prize was awarded to Sir Chas. Hall Caine, Brockett Hall, Hatfield (gardener, Mr. T. Pateman), whose Onions and Cauliflowers were noteworthy. Third prize was won by Sir J. Tichborne, Tichborne Park, Arlesford, Hants.

Open to amateurs who have not more than six employees

There were six entrants in the class for nine distinct kinds, and they made a most interesting and attractive display. First prize and a silver-gilt medal deservedly went to a grand lot of vegetables sent by Mr. R. Chetwynd-Stapylton, Headlands, Gt. Berkhamsted (gardener, Mr. W. Meager). Celery, Leeks, Cauliflower, Onions, and Potatoes were good and noteworthy. Second prize was awarded to Mr. R. H. Ling, The Braes, Berkhamsted (gardener, Mr. Bedford), and third prize was secured by Earl Beatty, Reigate Priory, Reigate, Surrey (gardener, Mr. A. Barrett). A class for six kinds of vegetables, open to amateurs who have not more than three employees, found five entrants. That which gained first prize was shown by Mr. H. Lingi, whose display was well arranged and represented Cauliflowers and Onions in good form. Second prize was awarded to Rev. T. G. Wyatt, Horley, Surrey (gardener, Mr. Shirley), who had a clean even set, and third prize was won by Mr. R. B. Hoare, Sutton Veny, Warminster (gardener, Mr. Penfold). Another class for six kinds, open to those who employ no gardener and to those who employ a single-handed gardener, provided six capital exhibits. Mr. J. Day, Queen's Road, Berkhamsted, led with a dainty exhibit showing Cauliflowers, Leeks, Onions, Potatoes, and Celery in excellent condition and free from coarseness. Second prize was awarded to Mr. F. Barratt, 156, High Street, Eltham, S.E., also with a clean and even lot, and third prize was secured by Mr. A. Geary, 408, Berkhamsted Road, Chesham, with a really first-rate exhibit.

Collections of Potatoes

There was no fewer than eight collections of 12 distinct varieties of Potatoes, and without exception they were all most praiseworthy. First prize was won by Mr. G. Thorn, Willesborough, Kent (gardener, Mr. Hoad), who showed clean even specimens of Arran Comrade, Majestic, Ben Lomond, Model, Katie Glover, Up-to-date, Ben Cruachan, Great Scot, White City, De Vernon, Catriona, and Bishop, a really good exhibit. Second prize was won by Mr. J. Wells, Worth, Sandwich. A good exhibit secured third prize for Mr. H. W. Henderson, West Woodhay, Newbury (gardener, Mr. Pike). There were 13 exhibits in the class for a collection of six distinct varieties of Potatoes immune to Wart disease, and they needed the most careful judging. First prize was again won by Mr. G. Thorn, who showed ideal specimens of Arran Comrade, White City, Majestic, Great Scot, Ben Lomond, and Catriona. A quite good collection won second prize for Mr. F. Head, Willesborough, Ashford, Kent, Bishop, Ben Lomond and Catriona being noteworthy. Third prize was awarded to Mr. J. Wells, Worth, Sandwich, for a very neat and even collection.

Onions

There was a most interesting competition for six distinct varieties of Onions, no less than six well-known growers entering the lists. A well-finished collection won first prize for Viscount Hambledon, who showed Ailsa Craig, Cranston's Excelsior, Improved Reading, Sutton's Globe, Crimson Globe, and Silver Globe. A grand lot of Onions secured second prize for Sir Randolf Baker, Ranston, Blandford (gardener, Mr. A. E. Usher), Ailsa Craig, Excelsior, A1, Red Globe, Brown Globe, and Silver Globe being superbly shown. Mr. J. Wells, Worth, was placed third.

Saladings

There were only three collections of six distinct kinds of salad vegetables, and first prize was easily won by Viscount Hambledon, who showed beautifully-blanched Solid White Celery, Black Beet, Curled Cress and White Mustard, Best of All Tomatoes, Delicacy Cucumber, and Ideal Cabbage Lettuce. This exhibit was splendidly staged. Second prize was won by R. Chetwynd-Stapylton, and third prize by Mr. C. H. W. Mandu, Blacketts, Chorley Wood (gardener, Mr. L. A. Brown).

Single dish classes

The classes for single dishes of well-known vegetables are always interesting. Sixteen entrants for a dish of Scarlet Runners found Mr. J. T. Hill, Westbury, Wilts, leading, with Sir Joseph Tichborne second. Sir Chas. Hall Caine led the five entrants for French Beans; Mr. C. H. W. Mander was second. For climbing French Beans there were 11 entries. Major C. B. Krabbe, Coliot Grange, near Reading, was first with a fine lot of Masterpiece. Globe Beet was well shown. Mr. F. Head was first out of 21 exhibitors. Second prize was awarded to Mr. G. Thorn. Nine exhibits were put up in the class for long type of Beet. First prize was won by Sir Joseph Tichborne with good specimens of Selected Black.

There were only three dishes of Brussels Sprouts, first prize being awarded to Mr. S. Thompson, S. Darenth, Kent; second, Mr. R. H. Ling.

For three Cabbages there were no fewer than 13 exhibitors, first prize being awarded to Viscount Hambledon for small specimens of Favourite.

Six exhibitors showed three Cauliflo no first prize apparently being awarde

There were 11 entrants for three he White Celery, a well-blanched and grown lot winning first prize for the Sir Ronald Lindsay with Solid White

Only seven entries were forthcoming class for Red Celery, a grand lot w first prize for the Cheadle Royal Hospital, Cheshire (gardener, M Falconer).

Eight braces of Cucumbers were sh well-grown brace from Mr. R. Che Stapylton being awarded first prize.

Eight lots of Leeks were also beautiful specimens winning first pr Mr. James Fleming, Galashiels.

The nine lots of Marrows (shown in were not of a high order of merit. three sent by Mr. J. Wells won firs Three small white Marrows won seco for Mrs. Farnham, The Heights, (gardener, Mr. Binnington).

For six Onions sown in the open there were no fewer than 16 entries. ripened specimens of Ailsa Craig, not means large, won first prize for Sir Tichborne, Bart., with Premier. Si Hall Caine, Bart., was second with In Reading.

For six Onions sown in the autun were 15 entrants, first prize being aw Autumn Queen sent by Mr. R. Obe Broad Oak End, Hertford (gardener, Wren).

For six Onions sown under glass exhibits made a fine show. Leading were secured by Viscount Hambledon superb specimens of Ailsa Craig.

Nine lots of Parsnips were quite so early in the season, but it seem for this vegetable. Six even roots of Crown from Sir Randolf Bake awarded first prize. A smaller ser second prize for Mr. F. Barratt.

Five entries were tabled in the clas Long Carrots, a well-grown be finished set winning first prize for Sir Baker with Long Red. The othe very poor.

Nine exhibits were put up in the Intermediate Carrots, Sir Randol again being first with New Red Inter

Ten lots of Stump-rooted Carrots e hibited, a very nice clean lot secu prize for Mr. Tyzack with Favourit prize going to Mr. J. Day, and thir Beatty.

Nine dishes of Peas were show class for a dish of Peas, Selected G winning first prize for the Cheadl Hospital.

White-fleshed Turnips were show exhibitors, and they were not very int First prize went to the Cheadle Hospital.

Yellow-fleshed Turnips were show five growers. Again the Cheadle Hospital led.

For a dish of Round Potatoes ther many as 25 entries. A good dish Comrade won first prize for Mr. J. Kenley, Surrey (gardener, Mr. H.

No fewer than 27 growers show of Kidney Potatoes, and there we very fine specimens shown. Leadin fell to Mr. G. Thorn with Majest condition. A beautiful lot of Bis Mr. J. Day was placed second.

Nineteen dishes of red Tomatoe fine show and they were all good. I was awarded to Mr. R. H. Ling, w Best of All. With the same va Tyzack was second, and with Pr Wales Mrs. Cross was third.

GARDENING ILLUSTRATED

80—Vol. XLVIII. SEPTEMBER 18, 1926 [Prepaid Annual Subscription to any part of the World, 15/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

vitifolium plant ... 562
mosa) ... 574
s umbella- ... 563
MERIA SIS ... 563
Gooseberry ... 562
n a cold wintering y... ... 574
uaveolens 563
... ... 568
aves, in- ... 574
Beech hedge ... 574
Caterpillars for name 564
Caterpillars, surface 564
Cauliflowers, caterpillars on ... 564
Clivias not flowering 574
Convolvulus Cneorum 566
Dahlias, ideal ... 567
Eccremocarpus scaber in Perthshire ... 562
Ferns, the vitality of 563
Ferns, Tree, the cultivation of ... 568
Fruit, wasps eating... 571
Fungi, edible and poisonous ... 562
Gladiolus primulinus—two striking vars. 562
Godetia Crimson Glow 562
Golden Oriole, the ... 562
HEATHS, WINTER FLOWERING ... 561
Heath, the Dorset ... 569
Hippocrepis comosa... 566
IRISES, BEARDED... 566
LAVENDER, DWARF 569
Leucopogon Fraseri... 562
LILIES, WATER ... 567
Lonicera Maacki ... 562
Melon culture ... 571
National Dahlia Society ... 572
National Rose Society ... 573
Pelargoniums ... 574
Phlomis Russelliana 562
Plants, climbing, for Chestnut pale fence 8 feet high... ... 574
Plants in the garden, staking ... 561
Plants, winter-flowering... ... 568
Plum rust ... 571
Plums, gumming in... 571
Plum tree, silver-leaf on ... 564
Potatoes failing... ... 571
PRIMROSE GARDEN, THE ... 565
Primulas, Vine weevils destroying ... 564
Radishes for autumn and winter ... 571
Roses, a dozen rust-free ... 564
Roses failing ... 564
Roses in a Scottish garden, some disappointing ... 564
Satureia pygmæa glauca... ... 567
Sweet Peas to flower in August next year 565
Silver Tree, the ... 574
Syringa suckers... ... 574
Trachelium cœruleum in the open ... 563
Trees for a garden in North Oxfordshire 574
Valeriana sitchensis 562
Vegetables, exhibition v. general utility in 563
Verbena Chamædryoides ... 574
Veronica linifolia ... 566
Viola Violetta ... 562
Wallflowers—an afterthought ... 567
Water rats ... 564

Staking Plants in the Garden

is an important point in garden and one that is often very badly A few points which should tend to this work are :—(1) Start early. If put to plants when only half grown vent many growths from growing or from getting broken by the Use suitable sticks; they should too thick nor too thin, nor too long hort. (3) Never bunch up plants look like so many besoms. (4) En- have stakes ready before they are they may often be cut and pointed lay when other garden work would ible. (5) Having obtained good e care of them! How often one s left in the flower border all e winter, where they are no longer y useful purpose, and will prob- ne quite rotten and useless. My ce is to pull them up as soon as the longer need them, scrape the soil nts with the back of a knife, and in a dry place. I have in this way oos and other hard-wood sticks in ny years.

at point in the successful staking s to select sticks of the right length g enough to support the plants aving a lot of wood sticking up n. I remember once seeing a lot planted in rows and tied up to mboos, which were many inches n the tallest spikes of the plants—happy sight. I like to see her- ants in fairly good clumps. They more effective than when planted o support these clumps one must r four sticks, which should be well o the soil with the points as near to the roots of the plants, and the y inclining outwards. Then fasten to the sticks low enough to catch cipal growths, but not necessarily rter ones, or the effect will be too m. One string at a time is gener- nt; a second one may be added growth has been made. If the ould be dry and hard at time of handy little crowbar with a good great help, for it is often impos- sh sticks into hard soil, especially ones used for tall subjects, such iums, Hollyhocks, etc. Almost f wood will make garden sticks if ough, but, of course, the softer only last one or two seasons. re very useful, but the weak point is that they are almost impossible ess it be with a fine saw, so the correct length must be chosen for each class of plant or the unsightly tops of the sticks will be poking up above the plants. I was once lucky enough to secure some Teak sticks which lasted quite 10 years, but alas they have all gone! Last year I was in a wholesale sundries warehouse in London and spotted a large bundle of golf-club shafts which were intended for flower sticks. The price was reasonable, and as an old golfer I knew Hickory to be a fine hard wood, so I bought some. They were rather glaringly new looking, but a coat of wood preserver toned them to a nice modest brown, and they have proved excellent and look like lasting for a number of years.

Erica gracilis nivalis

Great care should be exercised in staking standard Roses, fruit, and forest trees, or the stakes may do as much damage as the wind. The stake should not quite reach to the branches of the tree or the wind may chafe them against the stake top and rub the bark through, also prevent the top of the stake from chafing the tree stem. To avoid this many gardeners wrap a piece of sacking or cloth around the tree stem and then tie tightly with cord to the stake. This is all right, but I think a quicker and neater way is to use rather thick cord, put it once round the tree stem, then cross the ends one over the other once or even twice, then tie around the stake tightly. The twist in the tie forms a buffer between tree and stake, and yet holds it firmly. When thick stakes are used the ends of cord may be nailed to stake, thus preventing any possibility of the knot coming loose. Ties should be examined every now and again or the swelling stems of the trees may cause the cord to cut through the bark and do much damage. Unless trees are well staked they may as well be left to the tender mercies of the elements. Larch and Spanish Chestnut both make very good stout stakes for standard trees, but they are not easily obtainable except in large quantities. All stakes should be tarred at the bottom high enough to come above the ground line. The ground line is the place where stakes and posts always decay first. I have often seen Oak posts decayed at that point, while the end, buried 2 feet in the ground, was good for years to come.

J. Duncan Pearson.

Lowdham, Notts.

NOTES OF THE WEEK

Winter flowering Heaths

NOVICES in gardening, and sometimes even old hands, fight shy of growing Cape Heaths because they regard them as subjects for the professional only. The difficulties of culture are really somewhat exaggerated. These plants certainly need unremitting attention, but it is well worth while taking some pains to get such beautiful plants in bloom during the dead season of the year. I know of people with every facility for growing Heaths, but who remain content to buy their plants year after year and throw them away when they have finished flowering. This is satisfactory enough to the nurserymen who grow thousands of these plants, but the person who regards himself as an amateur gardener might well exercise his skill, and with due patience he need not be disappointed.

The few essentials to the successful culture of Cape Heaths are to pot the plants very firmly in good fibrous sandy peat and to provide ample drainage. Keep the plants out of doors during the summer, and when they are brought under glass for the winter let them have ample ventilation and very little, if any, artificial heat. When the plants have finished flowering cut back the flowered stems, but avoid cutting into the hard wood which does not break. In spring, when the new growth

commences, the plants may be repotted. Like other pot plants, the quantity of water given must be regulated by the root activity. Plants which have been recently cut back will not need so much water as those carrying their full amount of foliage. At blooming time the plants may be assisted by occasional doses of liquid manure. Plenty of fresh air and no coddling at any time seem also to be important factors to success. H. GREAVES.

Godetia Crimson Glow

Quite recently I was inspecting a number of the better Godetias in a seed-growing nursery and was astonished to note how great was the advance made with these hardy annuals in more recent years. One of the most noteworthy sorts is the variety under notice. In the distance the mass of blossoms is most effective, and as you get nearer to it the colour appears to be a brilliant carmine-red. The habit is branching and yet stocky. Those who want a really good annual should make a note of this fine Godetia. D. B. C.

Gladiolus primulinus—two striking varieties

This year I am growing 100 each of several varieties of the more beautiful primulinus type of the Gladiolus, and they have proved most effective when grouped in masses. Two varieties, however, have given me more than ordinary satisfaction. They are Souvenir and Salmonea. The former, one of the best, is deep yellow, the large flowers being developed on rather taller spikes than the majority of varieties, while the latter is one of the loveliest in cultivation. The colour may be described as richest salmon. I have a bowl of cut spikes of blossoms of these two and the contrast is beautiful and showy without being in the least garish. I think Gladioli are seen to advantage when arranged in bowls, and I would commend the practice to readers of GARDENING ILLUSTRATED.

C. H. C.

Leucopogon Fraseri

A very charming addition to our dwarf and prostrate Heath-like plants is this, which comes from the North and South Islands of New Zealand and finds our climate congenial to its welfare. This shrubby plant forms a perfect mat of loose wiry growth which, by reason of the bronzy leaves, renders it interesting at all seasons, but especially so at the present time, when each slender shoot is freely sprinkled with sweet-smelling white or yellowish-white flowers. The drupes which follow in its native land are said to be ⅛ inch long, yellowish-orange, juicy, sweetish, and edible. Although quite at home in open sunny positions in the Heath garden and shrub border, it is a most desirable subject for rock gardens, and a plant which introduces distinction even among the great variety of alpine plants we now possess.

E. MARKHAM.

Viola Violetta

It is very pleasant for one who has always admired the charming little Viola Violetta, and who was in touch with the late Dr. Stuart, of Chirnside, the raiser of this lovely plant, to see that it is still much appreciated in many places, although in others not now cultivated. Mr. Matthew, Director of the Glasgow Parks, with his able superintendents of the various parks, appears to recognise the value of this Viola. It is largely grown in the parks' nursery at Bellahouston for distribution to the other parks, and large nursery beds were delightful in the beginning of August. In the lovely flower garden of Ibrox Hill, also under the Parks' Department, Violetta is largely employed in various ways, and, among others, as a groundwork for Roses; and there was no Viola more suitable than Violetta of the many grown for this purpose. Its soft white and yellow colouring is delightful, while the charm of fragrance, which it possesses in no slight degree, accentuates its worth to very many folks. S. A.

Abutilon vitifolium as a wall plant

This may sound strange, but flowering with me in June was a plant of this, 4 feet or more in height, which is growing in the crevice of a stone wall at 5 feet from the ground. The wind or other agency is responsible for its presence in this unique position, and seed must have been carried large old specimen (now dead), as I ol it when it bore only three little leaves rare to find such a beautiful shrub inc in such a simple and enjoyable manner.

Lonicera Maacki

When allowed to form a large r bush in the open this is one of th beautiful Bush Honeysuckles we hav will attain from 8 feet to 10 feet in with a graceful spread of branch whole bush freely laden with pure flowers which turn yellow with age.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The Golden Oriole

Surely the bird to which "F. H. C." refers under this heading, in your issue of September 4th, is not the golden Oriole, but the green woodpecker! No one familiar with the melodious and flute-like, three-syllabled note of the Oriole would describe it as a "shrill chuckle," words that clearly suggest the woodpecker's ringing call. It is the woodpecker which is the galley bird of the Sussex country folk (see Charles Swainson, "Provincial Names of British Birds," pp. 99, 100), and whose cry is supposed to predict rain.

The Oriole is so rare a visitor that one might wander for a lifetime in the wooded regions in the south of England and never hear or see one. A. L. BUTLER.

— Your correspondent "F. H. C." evidently confuses the golden Oriole (Oriolus galbula), a very scarce summer visitor to the southern part of England, with the green woodpecker (Picus viridis), a common resident in all wooded parts of England and Wales. The description of the whistling note and of the sexual difference in plumage is correct for the golden Oriole, but all country people know the green woodpecker as the galley bird, and are convinced that its loud chuckling or laughing cry foretells rain, though probably it does nothing of the kind. The two birds are somewhat similar in appearance, but their nesting habits are quite distinct. REV. WARE, M.B.O.A.

Valeriana sitchensis

If this Valeriana is not in the trade in this country, then I believe Kenneth McDonald and Sons, seedsmen and nurserymen, Ottawa, Canada, would be able to supply it. I grow another Valeriana here which, I believe, is also a native of Canada, V. congesta. It is a pretty annual growing very compact, 6 inches high. The seed came from Dr. Stoker, Lake Cowichan, B.C., who is a great lover and collector of native flowers there. R. MOORE.

Phlomis Russelliana

The recent note in GARDENING ILLUSTRATED on Phlomis fruticosa, a distinct shrubby species, reminds one of the rarity with which one now sees P. Russelliana, or its companion among the yellow-flowered species, P. Samia. While they cannot be called highly refined plants, they are very distinct and have an aspect all their own when in clumps in the border, or, better still, in the wild garden. For the latter they are well adapted, and a big mass with the bold leaves and yellow flowers in whorls up the tall stems is of considerable value. Yet P. Russelliana is seldom catalogued, and, on looking through several lists, it is conspicuous by its absence. It is still to be seen in cottage gardens. I am emphasising its worth for the wild garden, as P. Russelliana is in spread at the root and is a greedy feed must not be allowed along with cho baceous plants of slow growth. In t garden, however, there is plenty of r a rule, for its expansion, and the big group the finer the effect. It may be from seeds or increased readily by di

Edible and poisonous fung

Contrary to general belief, the nu kinds of fungi which are really poiso comparatively few. It cannot be too emphasised, however, that the or method of ascertaining whether a fu edible or poisonous is to know its b characters, and to be able to distingu recognise it just as other plants ar nised. None of the "rule of methods, as, for instance, the id poisonous fungi when cooking will b silver spoon, can be relied upon with

The latest of the Ministry's s Miscellaneous Publications (No. 5 2s. 6d., post free) deals with some of t common kinds of fungi found in th Isles. Twenty-five species (16 edi nine poisonous) are described, purel cal terms being avoided as far as A glossary has been included, howe this should be of assistance to begi the few cases where the use of t terms has been found unavoidabl example is illustrated by a coloured which a remarkably "true to life" ance has been obtained. Identific thus rendered easy and safe, and, arr the information now made availab possible for a savoury addition to be the resources of the kitchen for no m the effort of gathering.

Eccremocarpus scaber in Perthsh

Thanks so much for postcard anc GARDENING ILLUSTRATED received. much interested in Mr. Arnott's not climbing plant Eccremocarpus scab the south wall of which he speaks C Gloire de Versailles has been flowe fusely for several weeks now, and pretty picture along with Clemat manni and climbing Rose Lady Hill

J. A. R.

Beechcroft of Argaty,
Doune, Perthshire, N.B.

American Gooseberry mild

As it appears that some misunder still exists as to the present regulati regard to American Gooseberry disease, a summary of the Orders operation affecting Gooseberry and bushes grown in England and Wales for the information of growers and The present position is that outb suspected outbreaks of American G

occurring on premises on which rry or Currant bushes are grown for st be reported to the Ministry or to an r of the Ministry. Outbreaks on emises need not be reported, but the will be glad to arrange for advice to to any grower as to the measures ould be taken for the control of the Gooseberry bushes affected with n Gooseberry mildew may not be sold d from any premises until all visible the disease have been removed from es. M. A.

Alstrœmeria chilensis

deep, light, warm soil this beautiful American plant grows to perfection, ally if it is given a place with a posure, as in front of a wall facing west. It varies in colour from red pink to a pale flesh colour, and from o buff. All the shades of colour go ther. A well-established bed is a fine middle summer. The root is a bundle tubers and should be planted deep, he crown is 6 inches below ground it is a little tender. A good winter f half-decayed leaves is also a useful . The young growth comes early, it is about 6 inches high it is well t support by pushing in among it f branching spray that will stand t of the ground. If this is not done us growths are apt to fall down in eable masses. It is a capital flower g, lasting well in water. G. J.

ibition v. general utility in vegetables

irst's" remarks upon the waste- f lifting immature vegetables and exhibition are both pertinent and, at n, apropos. The action of societies g prizes for Celery, for Leeks, and ips in July and August is not only but absolutely unjustifiable. Like t" I have seen a Celery trench rom end to end in the endeavour to paltry monetary prize which would the exhibitor for the actual labour n lifting and dressing the exhibits. t" overlooks another case in which te takes place. I refer to the ex- o "features" Potatoes. Consider er of roots which must be lifted in secure "show" specimens for arieties of Potatoes, six tubers of ty." No one, not even the most xhibitor, can defy that the area ist be lifted in order to secure d clean examples is a large one, fting, in many cases prematurely, itably lead to downright waste.

A SCOTTISH GARDENER.

elium cœruleum in the open

bliged to your correspondents for esting notes concerning the hardi- e blue Throatwort. Naturally one e more confidence in the hardiness nt in the Channel Islands, where ." has so successfully grown it. gie's experience, however, en- ne to try it next year in the hardy- ers, although we in East Galloway favoured in respect of soil and of our friends further west. In Wig- and in the immediate vicinity from Scorgie writes, I have frequently success which attends the cultiva- finer things. It is quite a common nstance, to see magnificent clumps auratum grown entirely in the which are a revelation to those of gardening lines are cast in less for- tudes. By the way, in a rather of approximately 50 plants of T. cœruleum, I have half-a-dozen or thereby this year which are white. This, of course, is not uncommon, but I fancy the percentage is larger than usual. W. McG.

Mabie.

Agapanthus umbellatus

Some weeks ago a note dealing with the hardiness of Agapanthus umbellatus appeared in GARDENING ILLUSTRATED—a note which, to me, was interesting in a special degree. At one time, when in charge of a garden in close proximity to the Solway Firth, and where the climate was of a most favourable description, the African Lily succeeded in the open in a remarkable manner. The white form, too, A. u. albus, did extremely well, as also did A. Mooreanus. None of these were ever protected in any way during winter, and during 26 years they never suffered from extremities of weather or failed to bloom profusely. At St. Mary's Isle, three miles distant, these Lilies also succeeded in the open, as did many varieties of Crinum, these being associated and forming a very effective border. I had also considerable satisfaction with Amaryllis Belladonna, this, too, in a south border, being unprotected. Generally speaking, it is only possible to succeed with these plants when surroundings, soil, and climate are in Scotland more than usually favourable. Here, for instance, 30 miles to the east of the gardens mentioned above, I find it necessary to house specimen plants of the Agapanthus during the winter. These are in 14-inch pots—good pieces which are placed out of doors during the summer and autumn, and which throw many heads of their characteristic blooms each year. W. McG.

Mabie.

The vitality of Ferns

I find that some Ferns (Nothochlæana), Cheilanthes fragrans, Asplenium Petrarchæ, and Ceterach) want a rest where they are not watered at all. I once found Asplenium Petrarchæ at Mentone as dry and looking as dead as possible. I took some home and they recovered. Since that day I always let them have a rest during the summer. Last spring I found, near St. Louis, some Cheilanthes lanuginosa and Pellæas. I put them in my pocket and forgot them. Six weeks after they were found on clearing the pocket of that coat. I put them under glass and they are now flourishing. Some other Ferns I got from California were very dry and seemed to be dead. They all recovered and are now growing freely.

Geneva. HENRY CORREVON.

Alstrœmeria chilensis in front of a wall facing west

Aquilegia suaveolens

The gift of a friend a couple of years ago was this rare and beautiful plant which I have been able to increase and which now furnishes me with several distinct and lovely sweet-scented blooms. The petals are rich cream and flatter than in the majority of this

interesting family, and form a perfectly round centre 2 inches across, the sepals and short spurs stained with pale purple, and thus we get a refined and beautiful flower. These are borne on slender stems 18 inches high. To enjoy them thoroughly a ledge above the level of the eye on the rock garden should be chosen. E. M.

ROSES

Some disappointing Roses in a Scottish garden

WHILE the majority of Roses flourish exceedingly in this somewhat late upland garden there are several that will not, no matter how carefully they are treated, do well. Some of them I have wrestled with for years, all to no purpose, so they have now gone, or are going shortly. I never think it wise to discard a variety on one year's acquaintance, but usually allow about three seasons' grace, after which the fire is its portion if it continues unsatisfactory. Among the worst cases is America, a Rose that occasionally gives a perfect bloom of fine size, but even at its best the colour is insipid and uninteresting. Augustus Hartmann can be good, as is proved at many shows, but as a garden Rose is a fraud. Donald Macdonald, which was strongly recommended to me by one of our leading trade growers as much superior in every way to the last-named, is really very little, if any, better, either in colour, habit of growth, or freedom of blooming, so will have to go also. Archie Gray occasionally gives a fair bloom, but when one has to disbud to one or two per plant it is not worth its space. Souvenir de Claudius Pernet "balls" so persistently that I shall be forced to discard it, notwithstanding the delightful blooms it can produce. Mrs. Frank J. Usher is a little like W. F. Dreer in colour, but very much inferior in habit of growth, vigour, and floriferousness, and must be parted with to make room for something better. Margaret Dickson Hamil so persistently refuses to grow that for all its beauty it, too, must be cleared out. Muriel Dickson, owing to its exquisite colour, has been reprieved repeatedly, but will, I fear, have to go. Golden Ophelia, although it gives some exquisite small blooms, produces so few of them and the plants grow so little that it will not be retained much longer. Emma Wright grows but poorly, and so I will not duplicate it as I had intended to do. Lady Roundway gives us much the same colour while growing well and producing fine crops of bloom. Sunstar, while being pretty near to Mrs. C. V. Haworth, is in every way inferior, and I have little use for it. Mrs. Wemyss Quinn grows vigorously, but is by no means a continuous bloomer, and seeing we have Mabel Morse, Christine, and Florence I. Izzard, there is no need for this variety. Juliet is a most vigorous grower and occasionally opens a bloom, but even when it does there is really nothing attractive about it. The colour is hideous, and even the best blooms flat and uninteresting.

Others that are seldom worth a place are:—George Dickson, Edward Mawley, Willowmere, Marquis de Sinety, Dorothy Page Roberts, Leslie Holland, and Sunburst. True, all of these, on occasion, yield grand blooms, but as reliable garden Roses they leave a good deal to be desired.

Preston House, Linlithgow. C. BLAIR.

Roses failing

(Hebe).—The difficulty in trying to assist you is in not seeing the Rose trees and their surroundings. Are they growing close to or under other trees? The cause, too, may be that in the case of those shoots not flowering you are not cultivating the Rose at all, but the wild stock on which this Rose was budded. In the first place sucker growths form under the surface of the ground, and may have grown until everything else is smothered. If some person in your district who has expert knowledge of Roses—a local florist, for example—were called in to give advice, you would know if the above suggestion pointed to your trouble.

A dozen rust-free Roses

(Rose-lover).—Joseph Hill (coppery-yellow, shaded salmon-pink), Mrs. Wemyss Quinn (canary-yellow), Mrs. David McKee (cream), Prince de Bulgarie (silvery flesh, shaded salmon), Mrs. A. R. Waddell (copper and salmon), Betty Uprichard (salmon-pink and carmine), Lady Hillingdon (deep apricot-yellow), Mrs. Aaron Ward (Indian yellow), Mme. Abel Chatenay (salmon-pink), Marie Van Houtte (lemon-yellow, rose edge), Lady Inchiquin (rose-pink, suffused orange), Antoine Rivoire (creamy-buff).

PESTS

Surface caterpillars

I SHOULD be much obliged if you could tell me what the grub enclosed in box is. It has done a lot of damage, clearing off whole beds of young seedlings. I should be very pleased if you could tell me how to deal with it. J. T.

[Your grubs are those of one of the surface caterpillars, or cut worms, so named because they live just on the surface of the soil and because they often eat off or cut off a plant just below the surface. There are several kinds of caterpillars whose life histories are similar, but the one sent in by you is that of the Heart and Dart moth (Agrotis exclamationis, L.). This pest will attack almost every plant grown in the garden, but is especially fond of young seedlings. Under garden conditions hand-picking is probably the most effective method of dealing with the pest. Potatoes cut in half and half-buried in the soil form good traps. These should be examined two or three times a week. The caterpillars feed at night, and you can catch numbers if you examine the infested site at night with a light.]

Vine weevils destroying Primulas

(F.R.H.S., Co. Donegal).—The grubs of the Vine weevil which you found in the soil are the culprits. The only practical way of destroying this pest is to get rid of the parent beetles. The weevils only feed at night and fall off the plants when they are disturbed. Lay a white sheet under the plants on which you suspect the beetles are and give them a good shake, so that when the beetles fall they may be easily seen. Then some two hours after it has become dark throw a bright light suddenly on the plant, when the beetles will fall down and can be destroyed.

Caterpillars for name

(F.R.H.S., Co. Donegal).—The caterpillar labelled No. 1 is that of the White Ermine moth (Spilosoma Menthastri). The moths appear in June and July, and eggs are laid on many kinds of low-growing herbaceous plants. The caterpillars feed during August and September, and, when fully fed, pupate in a loose cocoon in or near the surface of the soil; *e.g.*, a flat board lying on the surface of the soil is a favourite spot. If such a board is turned over the cocoons can often be found on its under-surface. The White Ermine and its near relative the Buff Ermine (S. lubricipeda) are both common garden insects, and in some seasons are liable to do much damage to herbaceous plants. We ha seen them feeding on Gooseberry a foliage. If the plant on which they a ing be given a vigorous shake all th pillars drop to the ground, where th be destroyed by hand-picking or an convenient method. No. 2 was de beginning to decay. If you will s another specimen we will name it Put more foliage into the box, it wo to keep the caterpillar alive. The put in had dried, and we think t specimen was starved.

Caterpillars on Cauliflower

(W. C.).—The small caterpillars y sent in are those of the garden pebb (Pionea forficalis). This is an e common garden pest. The moths a May and June, and the caterpillars found throughout the summer. It able that there are two broods each y any case the late caterpillars sp cocoons and pass the winter in th pillar state. Within the same coc pupate in the spring. The larg caterpillar is that of the small Cabba butterfly (Pieris rapæ L.). This is destructive pest of the Cabbage famil bage caterpillars are difficult to con cause spraying with a poison wash i ally out of the question. Hand pic caterpillars is as yet the most effect of dealing with the pests. Spraying water has been known to give goo if the work is well done. The spray generally made up by using 2 ozs. of salt with 1 gallon of water.

Silver leaf on Plum tree

(F. Grove).—The shoot of Plum j has been attacked by silver-leaf. there is, unfortunately, no remedy, best plan will be to grub the tree and If you purpose planting you ought t all the old soil as there is the poss the root system of the new tree be taminated if you leave it. If you plant any other, barring stone fru will be no need to remove the soil. ing of lime applied a few weeks befo ing has been recommended and it worth while trying it.

Water rats

(Mrs. Fox Pitt).—In view of the the garden is surrounded by a moat no doubt that the damage complai caused by the water rat—mistak called, for it is really a water vo phibious in its habits, this animal bivorous, its usual food being the le roots of aquatic plants. Japanese I Water Lilies (especially the choicer varieties!) it devours greedily, but it disdain humbler fare. To get ri menace, there is nothing more effec shooting. It is not necessary to ki nights' persecution with a rook rifle unskilled hands, I have known to ca rats to move their quarters. Ordi traps, too, are serviceable, and the w is much less suspicious and more e cumvented than the common rat. C will not face the latter will attack th animal, and weasels pursue it eag reliable poison may be named in Ro not spread the poison on bread or ar substance, but lay it down near the the vole in pieces the size of a Haz suppose the inquirer will not find m faction in the fact that this little b animal is one of our original Brit mals which are now so few in num learning that it is easily tamed and most affectionate and delightful pet WM

The Primrose garden

'E special strain of large yellow and hite Bunch Primroses has a place to self where one or two well-grown Oaks artial shade. The illustration shows a quarter of the Primrose garden. er along, where the shade would have it is carried on by some Cobnuts, d here and there so as to distribute it evenly. These shading comforts were anged because I had always noticed n the wooded places where the wild ose is at its happiest it is where there aks at intervals and an undergrowth of The soil of the place was the forest so that the ground has to be enriched ear when the Primroses are replanted. ll our care they are not so vigorous as ould be on a natural loam, but possibly oms show all the better when the growth is not over luxuriant. Some ers like to sow the seed as soon as it is here we keep it till the following ry and then sow it in boxes in gentle ricking out later, and planting after s are cleaned and freshly manured in

G. J.

t Peas to flower in August next year

would be the best time to sow Sweet eeds to have them in flower about 12th when frames are the only thing le to put the seeds into? Also what would be the best artificial manures to apply to have good blooms? H. H. GIFF.

— I shall be pleased if you can tell me how to grow exhibition Sweet Peas by disbudding; what kind of manure to use; and do they require chemical treatment to produce strong growth, and if so what kind do you advise? R. LEE FALKNER.

[To produce the blooms noted at exhibitions requires not so much any special manure as it does deep cultivation of the ground, and a start in spring with strong plants raised from seeds sown in autumn. Any animal manure that is dug into the ground should be worn-out, as it were, and reduced to humus. Fresh manure is unsuitable, but Sweet Peas revel in rotted leaves, as they do in the burned refuse of the garden.

These inquiries are interesting, and perhaps a somewhat detailed reply might be helpful to others who may be desirous of high-class flowers. As to the preparing of the soil, this should be taken in hand in autumn. The start should be made by being satisfied as to site—an open position. The width of the prepared ground may be 2 feet. Start by digging the top spit and placing it on one side of what will be a trench. Then dig a second spit, not using a worn-out spade, by the way, and place this soil on the other side of the trench for the time being. With a clear road you can go still deeper by either digging with a spade or breaking up with a fork the third spit of earth, which, however, may remain where it is. Collect leaves as they fall from the trees and place in the trench to a depth of 6 inches after having been trodden down. Then return the second portion of the old earth. Over this put a layer of the garden refuse or thoroughly-decayed manure, and cover with the last portion of the soil, that which was taken from the trench first.

When finished leave the earth in a rough state through winter, give a dressing of lime and fork it level in early spring, when all will be ready for the plants. These are had by sowing the seeds end of September, either one seed in a small flower-pot or put a couple of inches apart in boxes not more than 3 inches deep in loam and leaf-mould sifted. Place pots or boxes in a cool frame. Here the seeds will germinate. Protection from mice should be afforded and let the plants remain till put into permanent quarters. In winter Sweet Peas should be treated as hardy plants, requiring shelter only from storms and severe frosts.

By the end of March the plants should be full of sturdy young leafage with strong shoots ready to start from their base. Plant these in two lines, 9 inches apart in the lines. From each plant take up two leaders, previously fixing Bamboo canes some 8 feet in length for the growth to be trained to. All side shoots are removed as they appear, and when the first blooms show, the time comes to sprinkle light dressings of "chemicals" about the plants to get washed down with rain. These compounds help to enhance the size of the blooms, but are harmful unless

In the Primrose garden

the plants are well rooted and doing well. It is a mistaken idea to think that the grower has only to put this or that "patent" manure to the roots to obtain all that is required in the way of blooms.

Referring to soils, again, Sweet Peas will do really well after crops of the previous year that have been well cultivated.]

Veronica linifolia

Although one of the New Zealand Veronicas, most of which are of shrubby habit, V. linifolia is a true herbaceous plant, and is a great beauty when seen in good condition in a spreading mass. It is not difficult in the rock garden, and looks exceedingly well hanging from a crevice in rockwork in such a position that its roots can penetrate to good soil behind. It makes a mass of very fine stems clad with hosts of fine leaves, so graceful that, even if the plant did not flower, a place might well be found for it for its foliage alone. It freely spangles itself with lovely light flowers of pale blue, white, or pink, which are borne in succession for a long period. S. ARNOTT.

Hippocrepis comosa

This is one of the prettiest of our wild plants, and well worth cultivation on walls or some arid position at the top of a rock where a plant of trailing habit is required. It is a neat plant with a prostrate habit, forming a dense, spreading mass of wiry shoots that bear a quantity of little Coronilla-like crowns, bright yellow on slender stems. The unopened flowers are drooping, which adds considerably to their charm. It is quite perennial, but on some cold soils perishes in winter. Where it does so it should be propagated annually from cuttings.

H. STEVENS.

Bearded Irises

By G. L. PILKINGTON, President of the Iris Society

Rhizome rot: Increase by division and raising from seed

THE Bearded Irises are somewhat liable, under certain climatic conditions, such as an abnormally wet, late summer or autumn, which does not allow of a proper ripening of the rhizomes, to a bacterial disease, known as "rhizome rot" (Pseudomonas iridis). An acid medium is fatal to the bacteria, which thrive under alkaline conditions. This rot is most liable to occur during the flowering season or in the growing season just previous to this, viz., April and May. The presence of the disease is readily detected. The growths of apparently healthy plants will be found to be drooping, and the leaves to be turning yellowish at the tips, and, on further examination, to have rotted off at the base. The rhizome itself soon becomes soft and rotten, and emits an offensive odour. A plant thus attacked should be dealt with at once in the following manner:—Cut away all diseased tissue (an old teaspoon is a good tool for the purpose) and burn it and all the affected leaves, afterwards dusting the wound liberally with superphosphate of lime. This treatment will generally check the spread of the disease, and in most cases the plant will ultimately recover. A more thorough method is to lift the affected plant, and, after treating in the above manner, to replant in a new position. Particular care should be taken to destroy all the affected portions and to abstain from handling other healthy plants without first, in some manner, disinfecting the hands.

PROPAGATION.—The plants are increased by division, which should be done every third year or so, according as they have b crowded. The strongest and hea rhizomes can then be broken off th rhizome and replanted.

In the winter most of the Bearded lose their outer leaves. When these completely died down they should be rem as they only harbour insect pests and The dead foliage, however, should come quite easily in the hand, and must pulled or broken off, as this can only re injury to, and weakening of, the plant

A word of warning about the use hoe. More harm than good will be d the use of this tool, as the Bearded Iris shallow-rooting plants as to their roots. Weeds, therefore, must be erad by hand, and in place of the garden small hand-fork will be found quite as a means of breaking the surface of t in dry weather.

RAISING FROM SEED.—For those wh the time and leisure, the raising of B Irises from seed will be found a mo cinating pursuit, and not so difficult a ness as is generally supposed. The see should be gathered before they split an in a dry place to ripen thoroughly, wh seeds will readily fall out. The seeds further exposure to a dry atmosphere, w come wrinkled, and are then ripe. Th is best sown in October or November in pots, sowing the seeds about 1 inch round the rim of the pot only. Th themselves should be filled to one-th their depth with crocks to ensure good age, and to within 2 inches of the brim compost, and, when the seeds are should be plunged in a frame in ashes winter. If very severe frosts are exper a "light" may be put over the leaving, however, a good wide apertu the admission of air. The seeds do quire in any way "coddling," and germinate during the following Ma June. When the seedlings have atta height of about 2 inches, or have mad third leaf, they can be pricked out in seedling bed, and, if planted about 8 apart, they can remain there till they flowered, which in some cases will be following year, but generally in the year after sowing.

To those who intend to go in for hy ing, or raising Bearded Irises from s would say "use only the best parents, not save seed from any but the varieties." There are already far too comparatively worthless varieties in merce, and if you would compete wi "modern" Iris your seedling will ce have to be a "good one" to "live" i company. It is as easy (probably eas raise a seedling of good parentage as indifferent parentage, and the result, case of the former, is sure to be the satisfactory in every way.

Iris Kharput

Convolvulus Cneorum

This is a dwarf shrub of great beau easy to grow in sheltered places, and fore useful for the rock garden. It moderate growth. The flowers, whic pure white and produced in cluste singly at the extremity of the shoot, the form of a cup, and contrast favo with the shining grey of the foliag usually flowers about the end of su Although perfectly hardy, it is advisa provide some light protection during weather and propagate annually to ke the stock. H. STEV

Water Lilies

garden of any pretension is complete hout some of the many hybrid varie- now in cultivation. Deep pools are ary, 3 feet of water being ample for ngest growers—in fact, the major ds but 18 inches of water above the o ensure success. Shallow hampers ts make capital receptacles to plant ould the pond or tank be deeper than ove build up little tiers of brick or carry the plants. Good holding ide moderately firm, is the best root- rial for Water Lilies, especially when s have to be periodically emptied to d out, as in our case; but where emain unmolested the roots quickly f the mud at the bottom, and get blished. While the water is out s must be heavily shaded with e sun soon shrivels up the foliage. been treated thus for 18 hours y ill-effects while clearing away h which we are greatly bothered summer months. Varieties are all more or less beautiful, but, as stronger growers give most satis- ecially on large lakes, though the vered, less robust varieties may en a place near the margin, where be seen to the best advantage. often play havoc with the crowns, kept down by shooting, the best terminating these pests. Ducks, swans, and geese sometimes molest them. In such cases one or two plants should be first given a trial. C. T.

Strong growing Water Lilies on a large lake

Ideal Dahlias

The Double Show and Fancy

This fine old type of Dahlia has not the support that was given it 10 to 15 years ago, but it still has many admirers, as a visit to one of the autumn exhibitions will show. The competitions are gradually increasing, and no doubt in time will come back to the high position it once held. It is difficult to find amongst these any plants that carry their heads erect, yet this character must be one of the main factors of an ideal Dahlia. Many experts quote Mrs. Gladstone as the most perfect show Dahlia. This is so as far as the show bench is concerned, but in the garden its blooms are pendent, so its beautiful blush colour and perfect shell petals are lost. The best in the light section is Tom Jones; colour, cream suffused rose; very free flowering; stems erect; with just a slight weakening of the stems as the blooms become fully developed. The best dark variety is W. Rawlings, a very old favourite and still one of the best; colour, maroon-purple; beautiful shell petals; deep blooms carried on very stiff, cane-like stems well above the foliage. One can often cut six to eight exhibition blooms in a space of three days. This variety has most of the qualities that should be expected from an ideal Dahlia. There is one double fancy worthy of note, viz., Peacock; colour, maroon with pure white tip; very free flowering on extra long stems carried well up.

To see eight to 10 blooms fully out on one plant is a perfect picture. It is a great attraction to visitors to the garden, the colour being unique in doubles. A. T. B.

Bedford.

Satureia pygmæa glauca

This is a diminutive aromatic plant forming little bushes about 12 inches high, and one of the most precious of dwarf rock shrubs. In general appearance the plant resembles a Thyme with its dense green foliage. It should be planted on a level spot in full sun, rather low down in open sandy soil; all the better if mingled with limestone chippings and grit. It is perfectly hardy, and will withstand heat and drought with impunity, and is of easy increase from cuttings. H. Stevens.

Wallflowers—An afterthought

You may have sown your Wallflowers for next spring, and omitted to get in seed of the Siberian Wallflower, Cheiranthus Allioni. It is not too late. The Siberian Wallflower has a colour all its own, a pure orange, a most telling colour for spring bedding, especially where the plants are grown in masses. This is a subject no one who provides for spring beauty should omit.

Leahurst.

The Cultivation of Tree Ferns

A recent exhibit of Tree Ferns at Vincent Square serves to remind us of the grace and beauty of these interesting plants

THESE, although at all times taking a liberal supply of water, will now be found to dry up far more quickly, especially if a strong and plentiful crop of new fronds has been thrown up this year, as in the case of Dicksonia antarctica, D. squarrosa, or Cyathea dealbata. These kinds are disposed to develop a cluster of fronds at one time, whilst others, as Cyathea medullaris, Cibotium princeps, and other varieties, with Alsophila australis and A. excelsa, are more continuous growers. All of these latter will be found to take a regular and liberal supply of water also when growing. I have found that when the fronds come up in clusters more water is needed to sustain the plants. The error usually made is that of not distinguishing between one period and another, but following in a too methodical line of treatment. Take, for instance, Dicksonia antarctica, which is more often to be met with than any other kind. Of this, the plants frequently present a poor appearance with anything but a good crown of fronds; sometimes, in fact, these are very scanty. This is, in my opinion, to be attributed more to a starved course of treatment than to any other cause, and is brought about by what may be fairly termed too careful watering. The plants may not have been allowed to get dry, but they have been watered cautiously, receiving sufficient to keep them existing, it is true, but not enough to impart vigour into the growth. In such instances I advise the amount and frequency of application of water to be considerably increased with a free use of the syringe upon the stems as often as it is possible. The only point from which harm is at all likely to accrue with additional watering is where the soil is exhausted and sour or the drainage bad.

Tree Ferns should not on any account be allowed to become dry at the roots; even if they do not show signs of distress they feel it all the same. When, however, the extremities of the pinnæ are seen to be curling up, chiefly towards the points of the fronds, radical measures must be taken to prevent further injury. Not only must abundance of water be applied to the roots, but the plants must be kept constantly wet by the use of the syringe until further danger is past, with heavier shading if possible for a time. When the pinnæ curl up in the manner described it is very rarely that they recover. One of the worst in this respect is Dicksonia squarrosa, but Cyathea medullaris and C. dealbata both very nearly approach it. This drying up at the roots occurs far more quickly with plants which have been grown on from a small size into specimen size with a large ball full of roots. In dealing with large plants which it was not thought advisable to repot at the time I have made holes in the balls so that water could penetrate in a more equal manner. In the case of such vigorous growers as Dicksonia antarctica, Cyathea medullaris, and Cibotium princeps, it is perfectly safe to stand the plants in a pan of water, so that they may draw up nourishment when necessary. This I have done, and seen others do, with distinct advantage. Such kinds as are susceptible to attacks of thrips, as Dicksonia antarctica and D. squarrosa, should be closely watched for any attack to which they are oftentimes susceptible at this season of the year. When taken in time, this plant pest can be kept under by a free use of the syringe. In the treatment of Tree Ferns which are unavoidably exposed to a free circulation of air, the stems should be bound around with Sphagnum Moss. This, if kept well moistened, will be of great assistance to the plants. Small plants of Tree Ferns which are potbound should, if possible, have another shift, so that they be again well rooted into the new soil before the winter. If not potted, then adopt the plan of standing the pots in pans of water. Where plants are getting too tall for their positions some plan should be adopted to meet the case, if possible. In some instances it will be found possible to sink the pots or tubs; in others the fronds will have to be drawn down from the glass. Those which may be planted out can probably be sunk still lower, while as the last resource the stems can be shortened, but this I would not advise except in extreme cases, and then the fronds should be shortened also.

The shading of Tree Ferns at this time of the year is oftentimes carried too far. This is productive of a tender growth with less enduring powers in the fronds. Where the glass is good and the plants not too close to it, it is safe to grow them without any shading at all. This I have seen done in more than one instance with distinct advantage to the plants which have not then been so susceptible to a disease (at least I think it to be such) by which the fronds assume a brownish appearance without any trace of insects being present. C. P.

Aspleniums

For the cool fernery, the greenhouse, or for house decoration, some of the Aspleniums are among the most useful of all Ferns—light, graceful, and symmetrical in habit, with bright green fronds, which are of good substance, and consequently stand a dry atmosphere better than many Ferns. Those of the viviparous group are, perhaps, the most serviceable, and these can be readily propagated from the bulbils or small plants which are produced on the surface of the fronds. Aspleniums are, perhaps, rather slower in forming good plants than many of the Pterises, Adiantums, etc., but after they once get a good start, they grow away more freely, and with care the same plants will remain in good condition for a considerable time. It is, however, necessary that young plants should be grown on to succeed those which have become too large, especially where they are required for table decoration, etc. The Aspleniums may be propagated either by taking off the little bulbils when quite small and treating as tender seedlings, or by pegging down the fronds on some suitable soil for the young plants to form some roots, after which they may be removed and potted. The former method is the better, as it does not interfere with the old plants so much. The bulbils may be taken off as soon as they have formed the first tiny frond; in some sorts they come off freely, while others require some care, otherwise a portion of the parent frond will come off with them, and it is best to avoid this if possible. Pots should be prepared before the bulbils are taken off; they should have plenty of drainage, and may be filled to within an inch of the top with any rough porous soil, and surfaced over with sand, peat, and Sphagnum Moss, the last cut up small, and all rubbed through a fine sieve. Into this the bulbils may be pressed firmly after giving the pots a good watering with a fine-rosed watering-pot, and placed in the close propagating pit. The young plants, which should be well shaded, especially for the first few days, do not require much heat, just enough to prevent damp and stagnation. As soon as they begin to grow, a little air may be given, and it is essential that the plants should be potted off singly before the roots get matted together. The Asp like a rather light, open soil. Loa mould, and peat, with plenty of sand are a good compost, and should be rather a rough state. Aspleniums wi exposure better than most Ferns, b thrive best in a shady position, and, a they do not require much heat, they not be exposed to dry draughts.

TREES AND SHR

Winter flowering plant

THE value of plants which will pleasure during the dull month year cannot be over-estimated. of gardens are more or less unint and it is well to consider what might to improve the borders and shrubberi object of this article is to put before r selection of such plants with a brief tion of their habit.

CAMELLIA SASANQUA.—This evergre has dark shining leaves varying i from 1½ inches to 3 inches. Its flo pink, varying to deep rose, 1½ incl inches across.

CAMELLIA LATIFOLIA has single flow reddish tint with golden stamens. I growth, a fair specimen is consider 8 feet or 10 feet in height. It bloo fusely and the flowers are ideal for c

ABELIA SERRATA is a wall shrub bloo March. It bears pale red, scented Judicious pruning will transform i satisfactory bush.

CYDONIA JAPONICA.—Too much pr not be given to this shrub, disco 1796 and yet not known widely u 50 years ago. Here is a shrub v garden can afford to be without. I its wonderful blood-red blooms cases before Christmas, often co until June.

AZARA INTEGRIFOLIA.—This everg Mimosa-like flowers orange in colou

CORONILLA GLAUCA.—A popular shrub with bright yellow flowers March. Useful also as a wall plant

BERBERIS JAPONICA, in all probabili sidered by some the best of this lar of shrubs. It is evergreen, with v foliage: leaves some 22 inches early spring it produces handsom flowers.

BERBERIS AQUIFOLIUM, also an e thrives anywhere, irrespective of s not unlike the Holly in leaf, colo autumn. Its golden flowers are by purple-tinted berries, which h used for jam-making.

BERBERIS BEALEI, a 5 feet high slu leaves 2 feet long and drooping c yellow flowers. It is best grown positions.

CORYLOPSIS PAUCIFLORA. — A s dense-growing shrub about 4 feet l slender branches and primrose flowers ¾ inch across which appear l leaves. It does well on a wall.

BRIDGESIA SPICATA.—Evergreen, f growth. In March and April it purple flowers and is a remarkably climber.

CHIMONANTHUS FRAGRANS. — A shrub frequently as much as 8 feet i even higher when grown as a wall s blooms between November and M has dark green leaves and yellow, b scented flowers. It is a good pla prune this shrub immediately aft ing, such treatment being calculat siderably increase the flowering.

CLEMATIS CIRRHOSA, an evergreen

›litary white flowers on 1½-inch stalks. ıber to March.

CHYURUS PRÆCOX is a worthy addition y garden. It is a deciduous shrub of 5 feet. Flowers are pale yellow and ore than ½ inch across. Generally the appears in February, but later in ac- ıce with the weather conditions.

ıGERIA ROSEA.—Quite hardy, although dvisable to plant this climber against a wall. It blooms in mid-winter or, at very early spring. It has rose-tinted s borne very profusely. There is a flowered variety.

HNE LAUREOLA.—A free-growing ever- which does well in shady spots and eneath trees. The flowers, of a yellow- tint, are borne in February.

SYTHIA VIRIDISSIMA, a partially ever- shrub 5 feet to 8 feet high, has erect ıes, leaves 3 inches to 6 inches long, shaped, tapering at either end. Flowers illiant yellow, 1¼ inches across. It is a andsome shrub and flowers at the end rch.

IANTHUS CAMPANULATUS.—A deciduous about 4 feet 6 inches high. Its leaves in clusters at the extremity of a twig t bears pale yellow, almost cream- d, flowers in May. The foliage turns -yellow in autumn.

IAMELIS ARBOREA has a wonderful effect sed. It is more of a tree than a shrub. rs appear in December and February brilliant yellow colour. H. mollis is n attractive shrub with leaves often ıes or 6 inches broad and colouring fully during autumn. Its flowers are than those of H. arborea and are more ely yellow. It is rather scarce.

·DODENDRON DAURICUM is a semi-ever- shrub up to 6 feet high. Flowers, from ıber to April of a purple-rose colour.

:OBLEANUM, the earliest of all the Rho- irons, has very fine rose-coloured s and makes a brave show of colour in hrubbery, whilst R. præcox is very r, blooming February to March. It ac-rose flowers which appear all over ınt, which is dwarf and very compact.

:A ARBOREA, E. carnea hybrida, and E. ›des are very desirable plants for liven- p purposes. The first-named often a considerable bush 5 feet or 6 feet It has very soft, green foliage of a y nature and is very fragrant. Known Tree Heath, it bears almost white s. E. carnea hybrida is usually a great o any garden. It is a foot or so high, rich rose flowers in November, and n blooming till March. E. codonodes ısh 3 feet to 4 feet high; flowers in pro- from December to March.

ıTORIUM WEINMANNIANUM, an evergreen ›id development, bearing clusters of flowers from October or November he end of the year. In Devon, Corn- ›r the southern counties it succeeds ad- y as a bush of some 6 feet in height.

ıINUM NUDIFLORUM, a remarkably good r which gives a good display of yellow vember and December. It is a well- ı plant. Its flowers are ¾ inch to 1 ı diameter and they are produced singly ›rt stalks. I have seen it planted with ·ia to considerable effect, the latter pro- colour just as J. nudiflorum fails.

ICERA FRAGRANTISSIMA, a shrubby ·suckle well worthy of a place; blooms ry and February. It is a slender bush 5 feet high with leaves each 1 inch nches long and some ¾ inch or 1 inch It blooms until March in favoured ons. Colour, cream; length of bloom,

KERRIA JAPONICA.—Who does not realise the beauty of this now popular, albeit old-fashioned shrub? It is an admirable climber and really wants a lot of beating for show. It is known as Jews Mallow. There are both double and single flowered varieties. A splendid specimen of the variety flore-pleno may be seen at Bitton Vicarage. It flowers in spring and in autumn, the colour being golden and the blooms profuse.

MAGNOLIA STELLATA, a really beautiful shrub and the first to bloom of its family, is from 4 feet to 6 feet high. The young bark is very highly scented. The flowers are also scented, in colour pure white changing to pale pink, and produced on the shoots in March and April. They have a wax-like appearance and frequently cover the entire bush.

PRUNUS MUME can be utilised either as a wall shrub or as a tree of some 6 feet in height; leaves from 2½ inches to 4 inches in length, tapering to a point; flowers pale rose, about 1 inch across, and very much like Peach blossom.

In the general make-up of the grounds for winter such valuable plants as Helleborus niger and Iris stylosa must not be neglected, and it is also well to bear in mind some of the very beautiful trees and shrubs which give such handsome effects in autumn, such as Gingingko biloba, Viburnum Opulus, some of the Acers, and Parrotia persica. Among the low shrubs for filling out the shrubberies Andromeda polifolia, Hedera colchica, and Eurya japonica are worthy of mention.

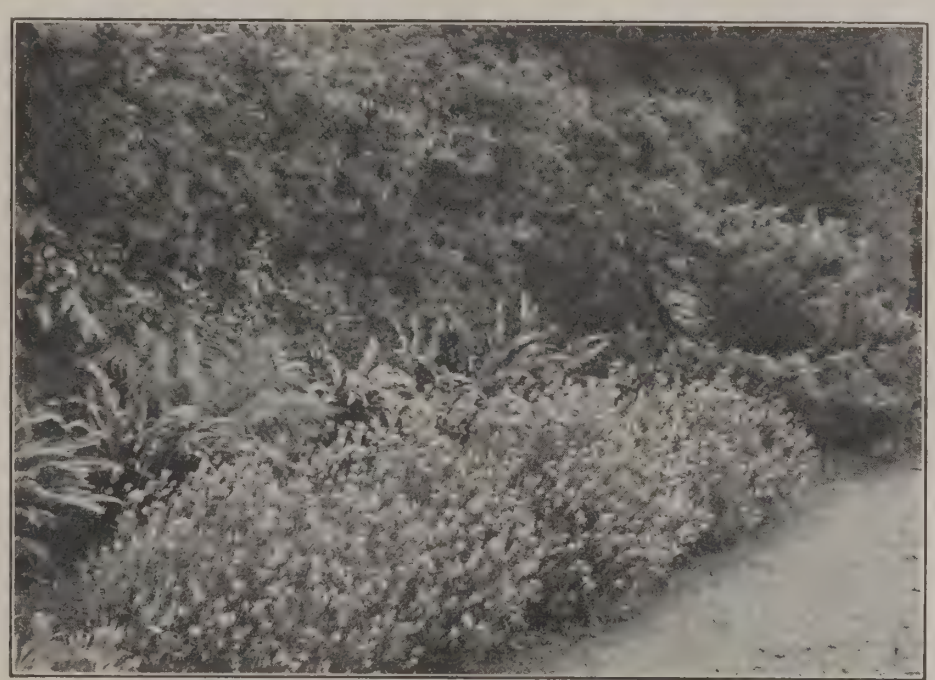
The general treatment of evergreens is simple and does not call for discussion here, although it is a great error to suppose that once planted, they will take care of themselves, for they need regular attention. Transplanting should be effected only during the winter; pruning at the proper times and correct training in the case of climbers are important. Very dry situations must have suitable plants, and for such parts of the grounds, as also for very poor soil, some of these will be found invaluable.

By careful arrangement a garden can be as attractive during winter as summer, for there is a grandeur about some of the trees and shrubs included here that amply balances the show of summer. BRUCE HEWITT.

Dwarf Lavender

QUITE dwarf shrubs of neat habit are none too many, and this good dwarf Lavender is therefore all the more valuable. It stands 1 foot to 15 inches high, with the flower stalks short in proportion. The bloom comes in July, nearly a month before that of the larger kinds. The flower is deeper in colour and more condensed in form, and the scent is powerful. It does well anywhere. Lavender is usually grown in an open, sunny place, but the little bushes shown in the illustration face north, a little west. They are a yard in front of a 4-feet high dry wall that is crowned with a thick growth of Rosa lucida. At the end of the wall top, just before the Yew arch, one side of which bounds the picture on the right, there is a common Juniper of curious habit, quite prostrate when planted on the flat, but so determined that its branches shall lie as low as possible that, though planted at the top, it has flung them down the face of the wall, and their ends now rest on the lower ground.

G. J.



Munstead Dwarf Lavender

The Dorset Heath (Erica ciliaris)

This native Heath is so beautiful during the months of July, August, and September that I would strongly advise anyone possessing a bare piece of open, sunny ground free from calcareous matter to plant it in masses if he would enjoy a charming picture. Its culture is of the simplest, for all that is necessary is to dig over the ground a foot deep, and in order to encourage a free start shake a little leaf-soil or broken peat about the roots when planting. The little plants grow so freely that in about three years those put out at 18 inches apart will have met and completely covered the ground. Up to this time the soil should be stirred with the hoe a few times each year to check the growth of weeds, but once the ground becomes carpeted very little attention is required. In about three or four years the mass begins to form little rills or waves, yet rarely exceeding 18 inches in height. The leaves are of a charming grey-green and hairy at the edges, and the elegant spikes of flowers are of a soft and pleasing rosy-red. Planted in broad drifts in the foreground of flowering shrubs this Heath is attractive at all seasons. E. M.

REMINDERS FOR THE WEEK

Southern and Midland

Leeks

There are several methods of planting Leeks, one by making deep holes in the soil and dropping the plant in practically its full length. In such cases earthing-up is not necessary. The stems will require blanching, and this is best done by placing a few inches of soil around them at a time. This should be done on a fine day when the soil is in a workable condition.

Cauliflowers

The curds of these are liable to be damaged by the slightest frost, so where they are turning in, a few of the outer leaves should be bent over the curds as a protection. This also keeps them in good condition and white. Later on it is advisable to partly lift the plants, letting the heads face the north.

Potatoes and Cabbage

All Potatoes should be lifted and stored for the winter as soon as possible, as autumn rains and early frosts may appear at any time and prevent operations. The ground, when cleared of the dead Potato haulm, which should be burnt up with any weeds that may be on the plot, may be given a dressing of soot, levelled over, and planted with Spring Cabbage.

Border Carnations

The planting of these should be done as soon as possible, as much depends on the plants becoming established before winter sets in. The bed should be made firm and the plants set out in threes 9 inches apart, allowing 15 inches between each three. Plant firmly and keep the soil well up around the collar of the plants.

Spring flowering bulbs

Planting may now be done as the various bulbs come to hand. The soil is now warm and roots will quickly form and give them a good start over those that are planted some weeks later. It is wise to include a few of the beautiful Scillas, Chionodoxas, Crocuses, Dog's-tooth Violets, Snowdrops, and Winter Aconites in the rock garden and on the outskirts of the lawn.

Antirrhinums

Seedlings of the best of these are apt to vary in colour, so where it is necessary to keep the varieties true, cuttings of the young shoots should be taken and inserted in sandy soil in a cold frame or in boxes that may be given the shelter of such. These form roots in six weeks to eight weeks, and when the plants attain the height of 4 inches the tips should be pinched and ample air given to the frames.

Winter flowering Pelargoniums

Plants that have been growing in pots in the open should now be given the shelter of a cold frame, in which they may remain for the next few weeks. All dead leaves should be removed, and it is advisable to pinch off all flower-buds until the end of October. Soot water and weak liquid manure may now be given as a stimulant.

Violets

The plants should now be placed in cold frames to ensure a winter supply of flowers. A bed of sweet and friable soil should be made up and the plants lifted with as much soil as possible. They may be kept close for a few days, afterwards removing them until bad weather sets in.

Tuberous Begonias

Seedling plants of these in flower may be lifted carefully and potted up in a good compost. If watered and kept in a cold frame that is shaded during sunshine until established they may be placed on the stage of the greenhouse in the lightest position, where they will continue to flower freely for several weeks.

Peaches and Nectarines

Where the trees have made extra strong growth at the expense of fruit during this season under glass it is a sure sign that root-pruning is necessary, and this is best done before the leaves fall. Between now and the end of October the work should be taken in hand. A liberal supply of wood-ashes and old lime-rubble applied to the beds at this season is beneficial.

Pears

Fairly good crops of Pears are met with in most gardens this season, and protection should be given to guard against birds and wasps, which are unusually troublesome. Extra large specimens may be prevented from falling before they are ripe by placing small nets or strands of bass to hold them in position. Such varieties as Josephine de Malines, Duchess of Bordeaux, and other late ones may remain on the trees until the end of October if this protection is given in time.

W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Chrysanthemums

The buds on the earlier specimen plants will now be prominent, and there are a few varieties the buds of which ought to be protected from possible danger by wet weather. Feeding will now be necessary, but this, I think, ought to be sparingly done, in the case of robust plants. Regular and sufficient supplies of water, I have found, are better for the plants than gorging them with "artificials" or liquid-manure, both of which may clog the soil and interfere with the proper passage of water. Those who may be intending to exhibit blooms at the early November shows will find that if they house their plants round about September 26th they will, in an ordinary season, just hit the time.

Cold frames

All cold frames ought now to be overhauled and put into order for the many things for which they will shortly be required. Refresh beds for cuttings, seeing that plenty of sand is incorporated on the surface. Glazing, too, should be seen to; drip and damp are always more to be dreaded than frost. The shading ought now to be removed from sashes under which Cyclamens and the earlier Cinerarias are growing. Less water will now be needed in the case of such plants, but ventilation must be as free as possible.

Cuttings

Pelargoniums have been almost superseded by the popular Antirrhinums, but those who still use the former must now be thinking about taking the cuttings which are to provide the plants for the flower garden in the course of next year. Short-jointed, hal wood is, of course, a desideratum, an cuttings should be put fairly thickly boxes in a compost of sandy soil, placed well-exposed place, and watered sparingly until roots are emitted. Some good growers of Violas (Tufted Pansies to get in their cuttings of these po plants during the early part of Septe and while I have no fault to find with procedure I think the cuttings do better, more quickly, and come through the w better if they are taken at quite the e the month. Calceolarias, Pentstemons, Antirrhinums are soon enough if the cut be put in during October.

Cucumbers for winter

Where Cucumbers are in request d the winter a small, easily-heated span sl be cleaned down and planted without d Vigour counts for much during the months, so that plants ought to be more space than they usually receive d the summer. Cucumbers certainly warmth, but the temperature need not e 60 degs. at night, always provided there comfortable bottom heat. A good compo which to grow winter Cucumbers ma composed of two-thirds of good, old, rotted loam and one-third of decayed ma

Strawberries for forcing

Young plants which were specially sel early in the season should be put into fruiting pots round about this time. See drainage is ample and free, and use a post consisting of two-thirds of a good and one-third of soot, bone-meal, and w ashes in equal proportions. Potting oug be very firmly done, leaving, of course, cient space for an ample supply of w Everyone appears to run on Royal Sove or King George V. for forcing, but I ve to suggest that some of the old varieti equally dependable and quite as managed.

Climbers in plant houses

Where there are climbing plants in ho which are shortly to be occupied by C anthemums and other winter-flowering p the summer growths of these must be tailed with a free hand. Drastic treat ought to be given in the case of such th as Tacsonias, Passifloras, and the M villas. Those who have Cobæa scande its variegated form will be well advis get rid of this rampant grower, whic times, is but a tangled mass and mer breeding ground for many noxious pests

Kitchen garden

A sowing of Turnips to stand the w can yet be made. Good varieties for su late sowing may be found in the old C Castle Blackstone, and in Red Globe. former is very hardy and rarely succu even during a severe winter, and if indiv bulbs are not large the flavour is very When the soil is dry the hoe should be at work, and vacant ground, espec ought not to be permitted to become w Spinach is a very useful standby in sp and if a good breadth of the Prickly va or of some good Spinach substitute has been sown the omission should be rem at once. Spinach Beet is perfectly h and although the seedlings may, throug winter months, almost disappear they come away freely in the spring, just at a when green vegetables may be scarce a request.

W. McGUFFO.

Mabie Gardens, Dumfries.

FRUIT GARDEN

Melon culture

ERESTING to grow, and not difficult cultivation, the Melon is worthy of e attention than it receives, for it sible to successfully grow it in ordi- houses, provided they face south and her lean-to or span buildings. Melon- ormed of meadow loam, preferably where cattle have been kept, may be wide and almost as high, ridge style. eds should be sown in January in light loam and leaf-mould, using a 3-inch d placing therein one seed only some deep, the pots being then plunged in a gistering 75 degs. Cover the pots in manner as to keep away mice, and, howing growth, put on shelves near ss. Keep them perfectly clean, water y, repotting directly they are fit into pots, and from these in due course to uiting pots. If the single cordon is dopted the plants must be 1 foot be- if double cordons 2 feet must be . Water well on planting. The occupied generally between sowing ting the fruit is four months. Heat- st be carefully attended to, as Melons in high temperatures, and the ther- r may not register less than 70 degs. early stages, 75 degs., 80 degs., and 5 degs. as time goes on. During ot weather a little air should be left ight. Syringe the plants daily in the and at closing time.

single cordon method previously re- is recommended, especially for early and consists in allowing a good run th and then stopping. Fertilisation be carefully attended to, although weather is such as to allow the ad- of plenty of air during growth the blooms usually become fertilised. It however, to distribute the pollen by of a camel-hair brush in the usual s the fruit progresses support will be in the shape of nets. Red-spider prevented at all costs, for if it does is a very difficult matter to destroy s also green-fly. Fumigation with compound, judiciously performed, is e best remedy, but great caution must ised. BRUCE HEWITT.

Gumming in Plums

ou tell me why Damsons and Plums garden (which is light loam) exude a their fruits when ripening? Can anything to the soil, or prevent it by it? M. V. R.

case is one of many in the cultiva- his fruit, and evidently your trees are with a fungus, causing an exudation to the branches and frequently ap- on the fruit when nearing the ripen- e, although you do not say that you ticed such on the wood. If you the trees carefully you will no doubt this is so. In the case of the fruit, ved to proceed from the stone, work- ay to the outside of the skin, which Eventually gum exudes, pervading rendering it hard and useless. It mostly on trees that are gross, ve have found it on weakly ones at Your soil appears of a rather light r fruit trees, especially stone fruits, would advise you to work away the rling the roots to a depth of 18 ith the garden fork, replacing the rt of it with soil of a heavier texture, clay marl if procurable, mixing with d percentage of lime-rubble or old roken to about an inch square, do- towards the end of October, making the fresh compost fairly firm, watering to settle the whole. Guard against any animal manure except as a light mulch during the summer, and as soon as the trees are leafless thoroughly examine all branches and twigs, cutting clean away any particle of gummed wood found, then paint over with Stockholm tar.]

Wasps eating fruit

I am troubled greatly by wasps and flies of various kinds this year attacking my Peaches (a good crop). Plums also suffer the same way, and now they are attacking my Grapes, especially Foster's Seedling, although not ripe. I have muslin hung over the door, but not the lights. Can you suggest any efficient mode of stopping them? If so I should feel greatly obliged. J. H. ANDERSON.

[In the majority of cases where large soft fruit in the way of Peaches, Nectarines, Plums, etc., is being eaten by wasps and flies it will be found it has been previously "tapped," giving an opening for the insects, this being the work of either birds or earwigs. The preventive to the first is, of course, netting, but the earwig is a troublesome and insidious enemy. It will hide in any small crevice and behind tiny bits of foliage, and will tap the fruit when only in a half-ripe stage. The only remedy or, rather, preventive is to place Bean-stalks or a similar hollow receptacle among the foliage and examine them every day, having something handy into which to blow the insects. Wasps and flies do not take the initiative in tapping until the fruit is nearly ripe enough to gather, but as they are at the destructive work it only remains to hang bottles half-filled with some attractive liquid, as beer, about the trees and search for and destroy nests as soon as possible. In the case of fruits under glass there are one or two liquids recommended to be placed about the house in saucers that will attract and kill the wasps, but experience proves there is nothing more to their liking than ripe fruit, and they will pass the tempting saucers to attack it. The only plan where this is consistent with facility for ventilation is to tack tiffany along both at the top and front of the house. It should be of fairly open texture, that is, to enable the passage of air and yet prevent ingress of insects. Are the Foster's Seedling berries cracking, as the wasps have attacked them when only partially ripe?]

Plum rust

I send herewith samples of foliage from three of my Plum trees, two Victoria and one River's Early. They are wall-trained trees in garden soil. The younger Victoria is heavily cropped, and, although fruit has been thinned, is not making much progress in size. I should be glad to know what is the cause of the foliage being in this condition and the treatment recommended.

JOHN GARDINER.

[The Plum trees are affected with Plum rust, which is caused by the fungus Puccinia pruni. This disease is best controlled at this time of the year by collecting all the affected leaves and burning them. If all the leaves are affected like those you have sent to us you cannot pick them all off. In this case the leaves, as they fall, must be collected and burned. Early next spring the trees should be sprayed with lime-sulphur before the buds break and again at intervals afterwards. Keep a careful watch for the outbreak of rust next year, pick off the leaves affected and carry on with the spraying. If your wall trees are not making much growth you should prune them a little harder, and do not allow them to carry much fruit. You cannot expect young fruit trees to carry fruit and at the same time to make wood. Get rid of the Plum rust, do not crop too heavily, and the young trees ought then to grow.]

VEGETABLES

Potatoes failing

PLEASE tell me the cause of the indifferent growth of Potatoes enclosed? The green-topped one, you will see, made a start, died off, then started again. The enclosed are the best of the patch planted; all new seed. The ground had chickens on it for six months. When they were taken off it was limed; then, about a fortnight after, it was planted. A third of the seed never started. EAST BERKS.

[Your Potatoes are affected with several diseases. First of all the green-topped one is affected with late blight, sometimes called the Potato disease. This disease is caused by a fungus (Phytophthora infestans). The disease first shows itself in the foliage, where little dark-brown spots appear, these later turning black. The spots gradually grow bigger, until the whole leaflet has been killed. You will always find the blight spots are dark and shrivelled where they are oldest, gradually shading off towards the green portion of the leaf through brown and yellow. Just inside the yellow portion of the spot you will find on the under surface of the leaf a band bearing a very minute grey tinge. This grey band is the fungus in its fruiting stage. Spores given off from this portion will infect other Potato leaflets, and also are said to be washed down to the soil and to eventually infect the tubers. The disease in the tuber is too well known to need description. Spraying the Potato foliage early in the season does much to prevent the spread of this disease. The fungicide generally used for this purpose is Bordeaux mixture. In your district spraying should be done about the second week of July and repeated three weeks later. The foliage is now too far advanced for you to do any good by spraying, and we should advise you to lift the crop as soon as possible. Try and get your crop well dried before storing, and look them over from time to time and pick out any showing further signs of the disease. Secondly, the plant that has died down entirely is affected with "blackleg." This disease is caused by a bacterium called Bacillus atrosepticus. You say that your tops first died off and then started again. We think you are mistaken. It appears to us that the original set planted became infected with blackleg and that a self-set plant grew so near it that you thought your original plant had started again. We have never known of a plant whose stem had been killed with blackleg start again and the second lot of haulm being killed with blight. The green haulm you sent us had blight present and the dead haulm had blackleg. The sets not starting in the spring would be due to either leaf-curl or blackleg. We should think you got hold of a bad sample of seed. It would be better another season to get your sets well sprouted before you plant them.]

Radishes for autumn and winter

(R. F. A.).—For autumn and winter use these must be sown at intervals from the beginning of August until the middle of September. To produce a crop fit for table at Christmas they must be, in October, sown in a frame that has been used for Cucumbers or Melons. This should be filled to within several inches of the glass with light soil. Sow the seed thinly and give plenty of air when the weather is mild. Protect from frost by covering and mulching round the frame, and there will be plenty of Radishes for salad on Christmas Day.

National Dahlia Society

September 8th, 1926

IF proof of the increasing popularity of the Dahlia were needed, this was forthcoming at the annual exhibition of the National Dahlia Society held in the hall of the Royal Horticultural Society, Westminster, S.W., on Wednesday, September 8th, when this commodious building was filled to its utmost capacity. With one or two exceptions, where the trade included in their groups a few hardy flowers, the exhibition was exclusively composed of Dahlias of every known form and colour. Progress was noted on every hand. The newer forms of the Dahlia, of which there are now so many, contributed very materially to the beauty and attractiveness of the show, and it is pleasing to record that the setting up of the blooms in the formal, inartistic method of earlier days on boards and wire framework is at last almost a thing of the past. A more natural way of setting up the blooms of all types of the Dahlia is now practised, and this is something to be thankful for. The decorative side of the Society's operations was well represented by no fewer than 15 table decorations, and there were many smaller classes for smaller subjects, all well filled and most interesting. In the amateur classes competition was keen, proving that the Dahlia has again "caught on" with these growers. The Dutch Dahlia Society sent a splendid lot of blooms of high quality, which were much admired. The newer miniature-flowered Pæony, Mignon, Star, and Charm Dahlias were freely shown in the decorative classes, and in this way proved their value. Viscount Ullswater opened the show at 1 o'clock, when there was a good number of persons present. He referred to the Dahlia as he knew it when he was young, and mentioned the great advance that had been made in late years. His speech was listened to with the greatest interest as many interesting facts were disclosed.

As usual the trade set up groups of varying size around the walls of the building, making a most effective framework to an exhibition that must rank high in the history of this special society. It was remarked by an authority that the Dahlias this year were not of so high a quality as last year. This was attributed to the somewhat trying and difficult climatic conditions that had prevailed of late, and to the exceptionally heavy rainfall recently experienced after a somewhat prolonged period of dry weather. One grower stated that he had lost 1,000 plants and another grower 200. Still the show was a great success, and it is gratifying to think the National Dahlia Society is now doing so well.

Trade exhibits

Premier honours rested with Messrs. Dobbie and Co., Edinburgh, for a really magnificent group largely comprised of Collarette and Decorative Dahlias. There were also beautiful examples of Pompon, Charm, and single Dahlias, all lightly and most artistically arranged. Holyrood, Strathmore, Scarlet Queen, and Tuskar were especially good Collarettes. Large gold medal.

Mr. J. B. Riding, Chingford, also set up a beautiful group, in which the latest and better sorts were well shown. Good large decorative sorts were Beau Brummel, Jersey Beauty, Cigarette, Uncle Dick, Verdun, Reg. Godfrey, and Pride of San Francisco. There were also charming single and small-flowered Pæony sorts in abundance. Gold medal.

A gold medal was also awarded to Mr. H. J. Jones, Lewisham, who had a beautiful group of Dahlias and a few hardy flowers such as Delphiniums, Tritomas, and Heleniums. Striking Dahlias of the decorative types were Jersey Beauty, The Clown, Mrs. de Van Waarner, Reginald Godfrey, and Andreas Hofer. The arrangement of this group left nothing to be desired.

Mr. J. T. West, Brentwood, also obtained a gold medal for a group of well-grown Dahlias in which all types were well represented. Of Cactus varieties, Tiara, Silverhill Park, Essex, Miss Ekhert, Ballet Girl, and Grasmere were all good sorts. Decorative varieties such as Shining Sun, Bobbie, Show Bunting, and other types were well done.

Messrs. J. Cheal and Sons, Ltd., were, as usual, well to the fore with their display, for which they were awarded a gold medal. Large and small-flowered decorative sorts were well shown. The Mignons arranged in baskets fronted the group and were very striking. We noted especially Lancer, Ethel, Grace, Albion, Louise, Kathleen, Daffodil, Julius, Etna, Dazzler, Daphne, and Kingcup as especially striking. They are ideal plants for edgings to large borders. Their Star sorts were also very good. Hindhead Star, Gatton Star, Yellow Star, Harrow Star, Haslemere Star, and White Star were some of the better Star sorts.

A silver gilt medal was awarded to Messrs. Jarman and Co., Chard, for a good group arranged in one corner of the hall. Cactus, Decorative, Charm, Collarette, and other types of the Dahlia were well arranged.

As usual, Messrs. Carter Page and Co., London Wall, E.C., put up a group of Dahlias for which they were awarded a silver gilt medal. Bowls, stands, and vases were used to display the flowers, and the various types of the Dahlia were shown. Mr. Hemsley, Crawley, Sussex, gained a silver medal for a group of Dahlias in which were represented most types of the Dahlia in pleasing variety. A silver-gilt medal was also won by Mr. J. Emberson, Walthamstow, N.E., who had well-arranged stands of the new and better Dahlias of most types. This group was most tastefully arranged and was much admired. Mr. Chas. Turner, Slough, had a very bright table group of Dahlias, all well grown and embracing many beautiful types of this extraordinary flower.

The Dutch Dahlia Society staged a group of Dahlias showing high culture, for which they were awarded a silver-gilt medal. A few good Dahlias were Rose Tendre, Clown, Pink Favourite, Freedom, Pourpre Koning, Mrs. Crowley, Locarna, Secretary Voors, Early Gem, Jersey Beauty, and Betsy Majoor, all grand decorative sorts.

The competitive classes generally were well filled and the competition keen and interesting. We are unable to mention each competition, but have to content ourselves with a reference to some of the leading classes.

In Division A, for show and fancy Dahlias, the competition was poor and the flowers of little interest, their less pleasing character no doubt being responsible for this change.

CACTUS DAHLIAS.—The leading class in the open division was for six blooms each of 12 varieties. Messrs. J. Stredwick and Son, St. Leonards-on-Sea were the only exhibitors and were awarded first prize. Their varieties were F. W. Fellowes, Mrs. W. Jackson, Harry Strutt, Chas. Dickens, Supreme, G. H. Barlow, Thos. Want, Rev. H. C. Weaver, Miss Jean Fry, Doris Gillatt, Trophy, and Elsie Prior. Messrs. Stredi and Son were also first in the class fo blooms distinct shown on boards. The b sorts were Mrs. Stredwick, Mary Segar, Harvey, Herbert Blackman, G. H. Ba Mrs. W. Jackson, and Trophy. In the a for 12 blooms distinct Mr. W. J. Cr Streatham, S.W., was placed first with a handsome lot of blooms, and Messrs. Treseder and Co., Ltd., Cardiff, were a good second.

GARDEN CACTUS.—The only competit the class for 12 varieties, six flowering s of each variety, was Messrs. J. Cheal Son, Ltd., Crawley, who staged a u series of blooms. Homer, Mrs. F. P White Ensign, Mary Purrier, Edgar Jac and Edith Page were the better sorts.

POMPONS.—For 12 varieties Pompon blooms of each variety, staged without ficial supports, for prizes offered by Mr. I Crane, Messrs. Cheal were again first. flowers were arranged in vases with l foliage in variety and looked quite pi Adelaide, Ruby, Bacchus, Clarissa, Darkest of All, and Daisy were charmin

SINGLES.—Singles were well show Messrs. J. Cheal and Sons, Ltd., in a for 12 varieties, 9 blooms of each va The flowers attracted much attention better sorts being Owen Thomas, Duchess, Mamie, Beacon, Lady Bounf and Brenda. First prize was awarded t exhibit.

SMALL PÆONY-FLOWERED.—The four hibits in the class for six varieties, six bl of each variety, revealed some dainty flo The first prize went to Messrs. D. Prior Sons, Ltd., Colchester, for the follo varieties:—Tangerine, Beatrice, Ch Miss M. H. Hay, Our Annie, and M Mr. A. J. Cobb, Reading, was a spl second. His flowers were beautifully s and looked very pretty. His varieties Pearson and Cintra are two beautiful s

COLLARETTES.—The chief class was f varieties, 10 blooms of each, set up in v The first prize was won by Messrs. J. G and Sons, Ltd., their better sorts being Whiter, Ustane, Jean, Mrs. F. C. S Glen, Devon, Mrs. C. Smith, Rhoda, Mabel Mary. In the class for six vari six blooms each, arranged in vases, Beatty (gardener, Mr. A. Barratt), Rei was first with a pleasing series, and M W. Treseder, Ltd., Cardiff, second.

Table decorations

There were seven table decorations of Dahlias and they were all very dainty. ing honours were secured by Miss E Jones, 16, Milton Road, Highgate, N., pretty decoration in which she used Prir Star and Crimson Star very effectively, a finish of lovely fronds of Asparagus pl sus. Mrs. C. A. Tisdall, Woodford G was second with a light arrangeme Charlwood Star, and with the same va Miss Woolven, East Grinstead, was t There were eight entrants in the class table decoration from which blooms o Star Dahlias were excluded and in which hardy foliage could be utilised. First was awarded to Mrs. L. Courtney Page field, for a pretty decoration in which she the smaller-flowered Pæony Picture tively. Mr. A. J. Cobb was placed se with a pretty little small-flowered Pæo his own raising; it made a charming de tion. With the variety Norah Bell Mrs. dall was a good third.

Other decorative exhibits

There were six competitors in the clas three vases or bowls arranged as a side decoration, and they were all good.

awarded to Mr. J. Emberson, Wal-, who had a charming decoration in used Cactus Joyce Goddard most . Second prize was secured by Mr. ell, Maidenhead, and Mr. D. B. ighgate, was placed third. There y other decorative classes, such as nd baskets, and bowls. The last- class was responsible for a beauti- n in which flowers of varying tints nd bronze, tinted rosy-cerise and nes of colour, were arranged most . This exhibit won first prize and n by Miss Woolver, East Grin- Second prize was won by Mrs. Page, Mrs. Tisdall being a good

Munro Challenge Cup

This cup is given to the winner of the first prize in a class for the best floral design to illustrate the decorative capabilities of the Dahlia. The exhibit of the winners, Messrs. Treseder, Ltd., Cardiff, was a useful illustration of the decorative value of the Dahlia. Baskets, bouquets, chaplets, lyres, harps, etc., made a display well meriting the challenge cup award, and much credit is due to the exhibitor for the many items comprising the exhibit.

In the smaller classes for cut blooms there was much to interest and please the Dahlia enthusiast, and the rivalry was generally very keen.

National Rose Society

utumn Rose Show of this Society year was held in the hall of the Horticultural Society, Vincent Westminster, S.W., on Friday and September 10th and 11th. We ss a preference for an autumn show is hall, having in view the uncer- our English climate at this season. was well filled on the present occa- exhibits that appeared to have the somewhat trying climatic con- perienced of late, and the Society ve every reason to be gratified with ful display. It was conclusive proof eat hold the Rose has upon the ing community.

isses of the nurserymen's section course, the chief feature. The nked the walls to some 8 feet in e tall stands of flowers making a ckground to the smaller stands, nged in the front of the respective

OF ROSES.—The leading class was sentative group of cut Roses 15 feet . There were no fewer than nine rs in this class and all were good. ze was awarded to Messrs. S. and Son, Portadown, Ireland, for a gnificent display. Pillars, stands, ets, etc., were arranged artistically rb Roses of wonderful colour. The worthy sorts were Betty Uprichard, lmiration, Mabel Morse, Margaret Christine, Mrs. H. Morse, Norman Mrs. Barraclough, and Mme. E. Messrs. A. Dickson and Sons, Ltd., ards, County Down, Ireland, were ond, also with a really handsome We noted Lady Inchiquin, Mme. Richard E. West, Shot Silk, Betty l, and Margaret Dickson Hamil. e was well won by Mr. C. Gregory, Notts, for a beautiful exhibit. K. t Silk, Emma Wright, Roselandia, Charlemont were noteworthy sorts. class for a group of cut Roses 8 feet t produced six excellent displays, onours going to Messrs. R. Hark- Co., Hitchin, for a magnificent lot n the best condition. Three arches, stands, and hand-baskets were most artistically with such well- rieties as K. of K., Los Angeles, Mme. Butterfly, Ophelia, Mabel rs. Henry Morse, Betty Uprichard, Henry Bowles, a really superb cond prize followed the first very This was secured by Mr. John Mat- adington, Oxford. Isobel, Red ay, Betty Uprichard, and Lady were noteworthy sorts.

e lots of four baskets of cut Roses made a most interesting and pleas- y. Messrs. Wheatcroft Bros., Gedling, Notts, were a good first with beautiful examples of Mme. Butterfly, Shot Silk, The Queen Alexandra Rose, and Mrs. Herbert Stevens. Messrs. T. Smith and Sons, Stranraer, were placed second, a basket of British Queen in their set being noteworthy. The five exhibits in Class 4 for three baskets of Polyantha Roses were quite attractive. Leading honours were won by Messrs. D. Prior and Sons, Ltd., Colchester, who had Kirsten Poulsen, Elsie Poulsen, and Orange King. Second prize was secured by Messrs. R. Harkness and Co.

ROSES IN VASES AND OTHER RECEPTACLES.—Class 5, for 24 distinct varieties, found three exhibitors. A bright display of good-quality Roses placed Mr. John Mattock first. Los Angeles, Hadley, Shot Silk, Lady Inchiquin, Mrs. H. Morse, Padre, W. F. Dreer, Betty Uprichard, Golden Emblem, Innocence, and Mrs. H. Bowles were especially noteworthy sorts. Second prize was awarded to Messrs. A. Warner and Son, also with a charming series.

EXHIBITION ROSES IN BOXES.—In Class 6, for 24 blooms distinct, there were only two exhibitors, a splendid exhibit from Messrs. T. Smith and Sons easily winning first prize. Geo. Dickson (best Rose exhibited by a nurseryman), A. Hartman, Mayford, and Chas. K. Douglas were a few of the better blooms. Messrs. D. Prior and Sons, Ltd., were placed second with an interesting series. Class 7, for 18 blooms, distinct varieties, produced three competitors. Mr. G. Prince won first prize with a bright, even lot of blooms. Caroline Testout, Shot Silk, Mabel Morse, and H. V. Machin were his best flowers. Mr. G. Burch, Peterborough, was placed second.

There were three lots of two baskets each in Class 8. Leading honours easily fell to Messrs. T. Smith and Sons, who had superb examples of Mrs. John Laing and Earl Haig. Mr. G. Burch was awarded second prize with Frau Karl Druschki and George Dickson.

OPEN ARTISTIC CLASSES.—There were five beautiful table decorations in the open class, first prize deservedly being awarded to Mrs. L. R. May, Waltham Cross, for a charmingly-arranged table of Mme. Butterfly. Second prize was secured by Miss M. G. Archer, Ashford, Kent, for the single Dainty Bess neatly disposed. In Class 10, for a bowl of Roses, there were four entrants. First prize was awarded to Mrs. A. R. Bide, Farnham, Surrey, using Phyllis Bide and Angele Pernet. This was a flattish, formal bowl arrangement. We much preferred the second, a beautiful bowl of Mme. Butterfly from Mrs. L. R. May.

NEW SEEDLING ROSES.—Messrs. S. McGredy and Son won the gold medal with a Hybrid tea Rose named Patience. The colour may be described as carmine-rose flushed orange. The plant is said to be free and bushy. It has no scent, however, but it is an attractive Rose. A Certificate of Merit was given to James Ferris, a large Hybrid Tea Rose of a rich cream colour. This was shown by Dr. Campbell Hall.

THE CLAY CHALLENGE CUP.—Messrs. A. Dickson and Sons, Ltd., with the Hybrid Tea Rose Dame Edith Helen, won the Clay Challenge Cup. This is a large, full Rose, beautifully scented and of a glowing pink colour. This cup is given for the best new scented seedling Rose of the year. There is no question about its merit, and there is little doubt it will become very popular.

AMATEUR SECTION.—As usual, this section was well contested, and the interest at this show was as keen as ever. Class 13, for one basket of cut Roses, found Mr. H. Mitchell, Bradford, leading the six competitors, with a very charming basket of pale-coloured Roses. Mr. J. N. Hart, Little Heath, Potter's Bar, was second with a pretty lot. Class 15, for a basket of cut Roses, not more than 12 stems, was represented by seven exhibits. Mrs. H. Cribb, Northwood, Middlesex, was a good first with Hugh Dickson.

EXHIBITION ROSES IN BOXES.—Class 20, for 12 distinct varieties, was represented by five good exhibits. A grand lot of blooms won first prize for Mr. H. Mitchell. Second prize went to Mr. J. N. Hart for a good series.

There were five entrants in Class 25, for six blooms, not less than four varieties. Mr. A. Norman Rogers, East Putney, S.W., was first.

LADIES' ARTISTIC CLASSES — AMATEURS.—There were no fewer than eight exhibits in the class open to ladies only for a dinner-table decoration on a table space 6 feet by 4 feet. Mrs. Courtney Page, Enfield, won first prize with a charming table in which she used well-coloured blooms of good quality of Roselandia most effectively. Trailing growths of rose foliage added materially to a beautiful finish in a lovely table decoration of Mme. Butterfly from Mrs. F. Charlton, Yiewsley. Both quality of bloom and arrangement left nothing to be desired. The seven entrants in Class 28, for a bowl of mixed cut Roses, was a very interesting competition. Mrs. Courtney Page was again first with a light arrangement of Roses charmingly disposed.

Class 27 was represented by six good exhibits, a beautiful vase of Mme. Butterfly winning first prize for Mrs. Courtney Page.

Each of the other classes not described in detail above were well contested, and the keenest interest was taken in these competitions by the participants and their many friends.

CATALOGUES RECEIVED

Orpington Nurseries Co.—The Orpington Irises.

Hewitt and Co., Ltd., Hull.—Bulbs, 1926.

Laxton Bros., Bedford.—List of new fruits.

Ant. Roozen, Overveen, Haarlem.—Catalogue of choice Dutch and Cape bulbs.

Hampton Plant Co., New Malden, Surrey.—Guaranteed Roses, fruit trees, and hardy plants.

Chaplin Bros., Ltd., Waltham Cross.—List of bulbs.

R. Wallace and Co., Ltd., Tunbridge Wells.—Irises; bulbs.

Dobbie and Co., Edinburgh.—Autumn catalogue of bulbs, etc., etc.

Barr and Sons, King Street, Covent Garden.—List of Flag Irises; gold medal Daffodils; list of bulbs and tubers for 1926.

Webb and Sons, Stourbridge.—Bulbs for 1926.

W. J. Unwin, Histon, Cambs.—Autumn list of Sweet Peas, bulbs, Gladioli, and Roses.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

TREES AND SHRUBS

Beech hedge

(C. Ashwin).—No. 1, five or six years. No. 2, in autumn, as soon as they are ripe, but they must be protected from birds and mice. The soil in which the seeds are sown should be fine where it is in contact with the seed and thoroughly drained. The seeds should not be buried more than their own depth, and never be permitted to become dust-dry, just a moist but not saturated condition being most favourable to seeds. They may be scattered broadcast or sown in shallow drills, or, if only a small quantity is required, boxes 3 inches deep will answer, and germination will be facilitated if these can be placed in a cold frame. Do not sow thickly, and transplant the seedlings when 4 inches to 6 inches high, repeating this in successive years. This will prevent the formation of tap roots. The Purple-leaved Beech reproduces itself from seeds, although different shades of purple will appear in the seedlings. Any rampant side shoots should be stopped and the top taken out when the plants are within a foot of the height finally desired.

Trees for a garden in North Oxfordshire

(A. Dillon).—All the trees you mention would be quite hardy in your district, and the following are the best suited to your purpose:—Catalpa bignonioides (25 feet to 50 feet), Ailanthus glandulosa (Tree of Heaven), Paulownia imperialis.

The Silver Tree (Leucodendron argenteum)

I brought over some cones of the Silver Tree (Leucodendron argenteum) from South Africa some months ago. I planted some seeds in pots in a cool greenhouse. One has germinated after two months and formed a nice sturdy-looking plant 2½ inches high. I should like to know whether I should keep it where it is—a cool greenhouse. In winter, in spite of heating, the heat sometimes gets down to 40 degs. Would it do better if planted out of doors for a time? W. S.

[Your seedling of this plant should be kept in the greenhouse for the winter and potted on next spring. This plant is not hardy.]

Climbing plants for Chestnut pale fence 8 feet high

(R. W. Kingham).—Yes, such a fence would provide an effective screen if planted with evergreen climbers. Ivy (Hedera colchica), with leaves 6 inches across, planted alternately with Ampelopsis Engelmanni, forms a most effective screen, the Ampelopsis intermingling with the Ivy, providing a fine colour effect in autumn. The long shoots must, however, be cut hard back each year. Whatever you use should be planted at 4 feet apart, in which case you require 15 plants. Of course, deciduous climbers are vastly more effective and provide a screen even when devoid of their foliage, and if this appeals to you plant the following in the order named:—Lonicera etrusca var. gigantea, Vitis vinifera purpurea, Clematis Jackmanni superba, Rose Zephirin Drouhin, Pyrus japonica splendens, Clematis La France, Actinidia arguta, Ceanothus Veitchi, Rose Paul's Scarlet, Clematis Ville de Lyon, Rose Mme. Hector Leuilliot, Cratægus Pyracantha Laelandi, Jasminum nudiflorum, and Vitis Coignettiæ.

Syringa suckers

(Enquirer).—Your Syringas are probably grafted plants, and the suckers you refer to are those of the Privet, which must be removed otherwise they will kill the shrubs. Cut them away as close to the ground as you possibly can and do not allow others to develop.

GREENHOUSE

Wintering half-hardy annuals in a cold frame

(John Adams).—The following would probably succeed in a cold frame from which frost was excluded:—Acroclinium roseum, Abronia umbellata, Anagalis grandiflora, Browallia speciosa, Calceolaria chelidonioides, Campanula macrostyla, Phacelia campanularia, Dimorphotheca aurantiaca, Rhodanthe Manglesi, R. maculata, Gypsophila elegans, Helichrysum monstrosum, Cupid Sweet Peas, Linum grandiflorum rubrum, Lupinus nanus, L. albus, Nolana atriplicifolia, Statice Suworowi, Tropæolum canariense, and Verbena hybrida Rose Queen. Zinnias are native of Mexico and Texas, and we do not consider them sufficiently hardy for your purpose. They revel in sunshine, but cannot endure the slightest degree of frost. If you have a slightly-heated greenhouse into which they could be placed early in October you may grow them with a fair measure of success. The seeds of Zinnias and all those mentioned above may be sown in pots filled with good loamy soil and leaf-mould to which has been added a free sprinkling of sand. The top ½ inch should be of fine sifted soil. On this the seeds should be sown thinly and covered very lightly, and after watering with a fine rose stood in a cool frame and shaded from bright sunshine until germination takes place, from which time until the end of September the sashes may be removed altogether. Admit plenty of air on all favourable occasions and thin the plants when 1 inch high, leaving about seven to a 6-inch pot. Water must be applied with care.

Injury to Begonia leaves

I am enclosing a few Begonia leaves of Gloire de Lorraine for your inspection. Kindly tell me what is the matter with same. I have grown them successfully for several years, flowering in 6-inch pots by Christmas, but have never had a failure with them before. J. R.

[The rusty-looking appearance of the leaves enclosed is caused by some slight error in cultivation, and it is quite possible the Begonia mite has had something to the trouble. Employ a proprietary insecticide in which sulphur forms part or Gishurst's Compound, and plants. Use the insecticide in strict ance with the maker's directions. the worst leaves and burn them.]

Pelargoniums

(G. G.).—Several of our ad specialise in these plants, and they wo ward you a priced list of varieties, bably suggest the best for your purp fine half-dozen would include Aldenha crimson), Scarlet King, Bombay (brig red), King of Denmark (salmon Speaker (fiery salmon), and Mrs. W. (white).

Clivias not flowering

(G. G.).—These plants flower be more or less potbound condition, and your plants, now they are planted growing too vigorously, and, conse fail to bloom. When thoroughly est this fault will be remedied, provided not growing in too dense shade. watering is the cause of the shoots d Keep the roots on the dry side, and winter little moisture is required. powdered charcoal or a little air-slak round the plants.

Acacia (Mimosa)

I have half-a-dozen seedlings of (Acacia) from a plant brought from th of France three years ago. The plant come very large. It was planted out greenhouse and flowered and seed February very freely. The seedlin 4 inches to 5 inches high and see spindly, with stems like threads. Wou be better out of doors for a time in a sl place? V

[Remove the centre of your s Acacias and keep them near the glass they will soon become sturdy. It is late in the season to transfer gree plants to the open.]

FLOWER GARDEN

Verbena Chamædryoides

Will you kindly tell me if I am righ method of propagating this plant? I hardy with me, and I lost all my plan winter. The fresh ones which I bough flourished and have put out countless ing stems or runners from 6 inches to 3 feet in length. These are rooting fr the joints and I have taken several sho pegged the joints down into 2-inch and pots, without removing the pair of le the joint and leaving in some cases te flower-buds. Is this correct? If it be, I nip off the pair of leaves at the p down joint? Should I leave the run flower, and when should I separa runner from the parent? One other Should they be left in 2-inch to 3-inc as if happy they make considerable g before winter? W.

[Yes. Your method of propagatin delightful plant, if unusual, is quite and should result in your getting strong, and well-established plants winter. Keep the soil from getting d when you find that the joints have freely into the pots the runners m severed. Pinch the tips out of the run the second joint beyond the pot and again any growth which follows. Th no necessity to remove the leaves at The plants will winter all right in 3-in if not placed in a high temperature, cool frost-proof structure being all t necessary. Cuttings taken at the p time and inserted in pots of sandy soil

kept in a cool, closed frame, dewed · daily and shaded from bright sun-

ɡ Lilies

esirous of growing some Lilies simi- ıose one sees in florists' windows. kindly give me the names of a select eral cultural notes, whether grown ɔts or ground, and time of flowering? cool-house in which I wish to grow G. F. B.

Lilies to which you refer are all L. speciosum (syn. lancifolium). e one is known as L. s. album and ed varieties L. s. roseum, L. s. and L. s. Melpomene. These Lilies ırive in the open ground, but they lent for pots, and suitable for your se. Secure the bulbs in the New hey should be in bloom from July to r, according to the heat in your se. Good loam, leaf-mould, and suit them, and when potting the ve 2 inches or so of space for top- when growth is well away and roots the base of the stem. Afford water ·ation until the roots are active. es for the border embrace L. regale, ɔoms in July, L. sulphurgale a few :er, L. elegans (June and July), L. August and September, a Lily that a loamy soil), L. Martagon (July), :um (June and July), the Tiger Lily ıum) (August and September), and flowering L. umbellatum. L. regale ulphurgale hybrids are fine for pot Lilies enjoy a cool root-run and a de from hot sunshine. They will n almost any good soil, and when h is well through the ground a top- ɔf soil and well-decayed manure will cial. During the growing period :d plenty of root moisture. Spring s best for the border.]

Dahlias

. L.).—Cut off the stems when frost 9 inches from the ground, h a fork lift the roots care- ıake out some of the soil or re- ·ith the aid of a pointed stick, turn bottom upwards to allow any sap that may be in the hollow stems to and when the roots are fairly dry n into shallow boxes as close to- they can be stored, and cover them ine dry soil or ashes, well shaken ıen place them where the tempera- not fall to freezing-point, and where dry, not under drip. So cared for, should keep well all the winter.

: maritima

Deem).—This is a fine-leaved, half- ɔerennial from the Mediterranean ere it grows from 1½ feet to 3 feet with much cut silvery leaves and heads of yellow flowers late in It is tender in many gardens, in cold, wet soils, but is useful for ness in summer when planted out ɔr June. Cuttings taken in the vill root slowly on a greenhouse need careful watering in winter. : best means of increase, as though ed from seed, the seedlings are very ·. There are several good garden : best of these being C. m. can- We are sorry we fail to trace the a blue border. An article recently ·e a red border.

ias turning brown

K.).—Your Montbretias are in need soil. Dig up the border and work ıyer of farmyard manure into the before replanting divide up the corms, planting each one separately and at 9 inches apart. They will then regain their former vigour and provide stouter leaves and flower-spikes.

Raising Antirrhinums

(W. Smith).—The finest plants are obtained from seeds sown in autumn. From such a sowing we have had them 6 feet high when in bloom. The seeds should be sown in well-drained pans of fine soil early in September, pricking off the seedlings when large enough to handle. The plants should be put out at 14 inches apart on ground in good heart, and every endeavour made to get them established in their permanent quarters before actual wintry conditions arise. Cuttings are necessary when certain colours must be rigidly adhered to, but these never make such fine, vigorous plants as those raised from autumn-sown seed.

Cutting plants down

(Mrs. H. Graham).—If the Lavatera is one of the herbaceous kinds you may safely cut it down to within 9 inches of the ground at the present time, but if it is Lavatera Olbia you refer to, which is a shrub, then shorten back weak shoots in April and not before. You must not cut this right down at any time. The flower-stalks of Morina and Gaillardias may be safely removed at the present time. Place a little protecting material around the crowns of Gaillardias during the winter. Your plants were probably destroyed by frost.

ROSES

Spots on Rose leaves

(Roses).—This has been very troublesome this year, many of the bushes, even at this date, having lost their leaves entirely. It usually occurs during August, and following a period of hot, dry weather. No reliable remedy is so far known for this, and you have acted as others have done in using liver of sulphur wash, but this does not arrest the trouble. Spray your bushes with the following, which should make 6 gallons of wash :—Boil 1 lb. of resin and 1 lb. of washing soda together in 1 gallon of water for 10 minutes; then add 2 ozs. flowers of sulphur, and when thoroughly mixed add 5 gallons of water.

Paul's Scarlet Thorn unsatisfactory

(Inquirer).—It is just possible that your tree is grafted on a standard of the common white Thorn, in which case the shoots appearing are those of the latter and should in any case be removed. Examine the upper branches to see if they are green when scraped with a knife, as if so your tree is alive and your best course is to reduce its top to less than half its original size. Do not be afraid to cut through even large branches in order to accomplish this, as it will probably save the tree, and it may be done at once. Mulch the tree with some kind of litter and rub all stem growths off as they appear. Should you find the branches dead then your only course is to cut back practically to the main stem. We have saved two large standards by carrying out this treatment this year.

Black spot of Roses

(Mrs. Basil).—Your Roses are affected with black spot, which is caused by the fungus Actinonema Rosæ (Fr.). This disease attacks the foliage of the Rose, causing the leaves to drop early in the season. Other leaves are then produced which often become infected with this disease and also mildew. Black spot weakens Rose plants very much and would account for the failure of your plants. We should advise you to collect and burn all the affected leaves. Be careful to look after those leaves which fall off and collect in odd corners of the Rose-bed or near by. When you prune the plants they should be very hard pruned. All the wood made this season should be cut down to within two buds of the base, and you should cut out diseased wood from the older portions. Next spring you should spray your Roses with a solution of lime-sulphur. They should be sprayed once before the buds begin to break and several times afterwards at intervals of three weeks. Do not do your pruning too early, but when it is completed spray with the lime-sulphur. You have to be careful with the lime-sulphur. Use it weak at first, gradually increasing the strength if you find the foliage will stand it.

VEGETABLES

Preserving French or Runner Beans

(E. Malcolm).—Bottling is one of the most satisfactory methods of preserving a supply of French or Runner Beans for winter use. The Beans should be very young and well shaped. Cut off the stalks and ends. Place them in a large sieve and plunge for five minutes into a pan of fast-boiling water in which a small quantity of bicarbonate of soda has been dissolved. This sets the colour. Have ready some large screw-top or other wide-mouthed bottles, and sterilise them by holding the mouth over some burning sulphur. Wipe the Beans and pack them carefully in the bottles, arranging them endways, as this is the easiest method of packing. Finally sprinkle a teaspoonful of salt into each bottle and fill with clear water. Place the bottles in a boiler and fill this with cold water. Bring to the boil and simmer gently for half an hour. Take up the bottles and see if the tops are quite secure, and when cold store away for winter use. These Beans only want reheating as they are already cooked. The best way is to drain off all the liquid and place them in a small saucepan with a piece of butter and toss them until very hot.

CONTINENTAL METHOD OF STORING BEANS.—Take some large jars and scald them well. Gather the French or Runner Beans as soon as they are fit for eating and remove the ends and the stalks. Place them in the jars and pour over them a very strong brine, and cover the top with a layer of melted tallow. The jars must be stored in a cool, dry cellar away from the fumes and steam of the kitchen. When any are removed the tallow must be re-melted and poured over the top again. To use, boil in the usual way after soaking them for some hours in clear, cold water.

Clubbing in Cabbages

(W. R. Ponting).—We take it you refer to "clubbing" in Cabbages. The best remedy for clubbing, whether it be engendered by slime fungus or by the club-beetle, is without doubt gas lime. That should be applied to vacant ground in the autumn, at the rate of 2 bushels to 3 rods if clubbing is bad. If it be not, then put 1 bushel to 2 rods of ground. After lying on the ground from four to six weeks dig the dressing in. Even a dressing at the same rate of fresh lime is good also. Rather than plant any of the Cabbage tribe, plant Potatoes, Seakale, or Rhubarb, or sow Onions, Parsnips, or Beet—indeed, anything other than Cabbage. By doing so for a couple of years the club trouble may disappear. Peas or Beans also may be sown with advantage. Of course, you must understand that ground dressed with gas lime cannot be cropped for three months after the dressing has been applied.

MISCELLANEOUS

Violet leaf blotch

(J. S.).—The plant labelled No. 4 (a Viola) is affected with Violet leaf blotch. We should advise you to do away with the stock you have at present and obtain a clean supply. It

would be best not to grow Violas for at least one season in the beds where the present plants are growing. You have undoubtedly done much to improve the Violas by removing the old soil and replacing it with fresh material, but you have not succeeded in getting rid of the spores of the disease. The easiest way to do this would be to start with clean stock on new ground.

Boxes for Chrysanthemums

(Beginner).—You will be well advised to use two flat boxes, each to hold nine blooms. The dimensions might be about 36 inches long, 24 inches wide, and 10 inches deep. Line these with tissue paper and then fix cross sticks inside to fasten the blooms at the neck—this to keep the petals from being pressed. Put cross sticks to hold the stems as well. Cut the flowers a day before a show. Take away the leaves and then just chip the bark in places. Afterwards immerse in water as high as possible without touching the bloom. This moistening is sufficient to carry the flowers in a fresh condition to an exhibition, when, of course, the stems will be placed in water. It was a custom to allow water even for travelling, but those who exhibit found the cases were cumbersome and quite unnecessary.

Measuring the contents of an aquarium in inches

(E. C. Eden).—Multiply the length by the depth, and the result by the average breadth in cubic inches. This should give you the approximate measurement of the water in your aquarium. There are about 264 cubic inches to a gallon, and 1,728 cubic inches to 1 cubic foot.

Various queries

(F. E. Stokes).—(1) You cannot do better than procure young, vigorous seedlings of Holly that have been moved two or three times. Dig the soil in which you wish to plant the hedge deeply and manure it freely. Water well if the coming spring should be dry and mulch with well-decayed manure. (2) Any loamy soil would do to fill the holes from which the weeds have been removed. Make the soil firm after you have filled up the holes and next spring scatter some good grass seed over the spaces.

Pear scab

(W. P. P.).—Your Pears are affected with Pear scab, which is caused by the fungus Venturia pirina. If you follow the advice given to "G." on page 544 of our issue of September 4th you should have no difficulty in controlling this disease. The variety of Pear you have sent is Williams' Bon Chrêtien.

Treatment of Asparagus Sprengeri

I would like to know treatment required by enclosed Asparagus. I have a plant in 7-inch pot, 20 inches high and bushy, just showing tiny pink buds which open white. It has been in same pot two years and looks rather yellow. It is growing in an unheated greenhouse somewhat shaded from sun now, but not much heat in winter. B. B.

[The flowering sprays of Asparagus Sprengeri have almost reached maturity, and after the flowers berries may appear, and the sprays will then begin to turn yellow. They have completed their cycle of growth and will be followed by new growth. The plant is undoubtedly in a starved condition, and this is the cause of other sprays turning yellow. A. Sprengeri is a gross feeder, and needs plenty of water and liquid manure during the summer months, when the pots are filled with roots. Your plant needs repotting in good fibrous loam and a little leaf-mould. If it is a large plant we should divide it next spring.]

SHORT REPLIES

Sussex.—Impossible to say what is wrong with the Grapes as they came to hand a mass of pulp.

J. H. Hammond.—Kindly send us a few pieces of branch of the Currants to which you refer.

F. R. Rustall.—Kindly send us a small bunch of the Grapes you refer to. The best book is "Vines and Vine Culture," which, unfortunately, is out of print, but it is possible you may pick up a copy of one of the editions on a bookstall.

Catherine Hiles.—See reply to "H. C." in our issue of September 4th, middle column.

NAMES OF PLANTS

N. Anderson.—Crinum capense.

Beta.—The seed-pod was that of a Pæony. Your letter was, unfortunately, mislaid.

E. W.—Allium sphærocephalum.

E. L. C. Ede.—Allium sphærocephalum.

S. M. Poland.—Salix alba argentea, from Wood and Ingram, St. Neots, Huntingdon.

No name or number.—Hibiscus Bleu cœleste; Hypericum Androsæmum.

M. C.—Santolina chamæcyparissias.

W. H. Chambers.—Stapelia Asterias, native of the Cape of Good Hope.

H. Broadbent.—Lotus tetragonalobus.

W. H.—1, Sedum Ellacombianum; 2, Euphorbia cyparissus.

Miss Dee, Devon.—1, Muehlenbeckia varians; 2, Zauschneria californica; 3, Teucrium Chamædrys; 4, Epimedium, species, flowers required for fuller identification.

G. P., Oxon.—1, Calamintha alpina; 2, Scutellaria alpina; 3, Zauschneria californica; 4, Stachys coccinea; 5, Pelargonium tomentosum; 6, Convolvulus Cneorum.

P. F., Claygate.—1, Choisya ternata; 2, Lonicera, next week; 3, Viburnum, send in flower; 4, Lonicera nitida.

W. J. J.—1, Pyrus Aria; 2, Taxodium distichum; 3, Cotoneaster frigida.

Dublin.—Senecio tanghuticus.

B. C. Thomasset.—1, Apera arundinacea, 2 feet to 5 feet; 2, Aria cæspitosa, 4 feet to 5 feet.

NAMES OF FRUITS

H. D. Smith.—We regret being unable to identify the Apples sent, owing to their immature condition. Please send again when the varieties are properly mature. It is very difficult to name fruit unless we have typical fruits that must be quite ripe. As fruits vary so when they are quite ripe we must always have not less than two samples of each variety. (See our rules to correspondents as to naming of fruits.)

J. A.—Apples: 1, Lord Suffield; 2, White Juneating; 3, Beauty of Bath. Pear: 3, Fondante d'Automne.

(*Further replies see page xi*)

GARDENING APPOINTMENT

Mr. A. J. Cook, late head gardener at High Legh Hall, Knutsford, Cheshire, as head gardener at Shortgrove Hall, Newport, Essex.

R.H.S. new hall

The Council of the Royal Horticultural Society wishes to announce that the contract for the erection of the new hall in Greycoat Street, behind the site of the present Hall, has been let to Messrs. Foster and Dicksee, of Rugby, for completion within 16 months. Messrs. Easton and Robertson, of 36, Bedford Square, W.C., are acting as the Society's architects, and Dr. Oscar Faber, O.B.E., of 37, Duke Street, Oxford Street, W., as Consulting Engineer for the reinforced concrete work. F. R. Durham, Secretary.

National Rose Society's Ju Banquet

A MEMORABLE event in the a the National Rose Society w brated by the Jubilee banquet he Savoy Hotel on Friday, September 1 attended by a large company, which many noted rosarians and guests Society. The President and Mrs. Williamson received the guests, and enjoyable dinner and music were l After the usual loyal toasts, when it nounced that Queen Mary had gi consented to become Patroness of the oratory of the Rose flowed in earnes number of speakers, all in brief, pi reminiscent vein. It began with Mr Darlington's toast of the Nation Society, and he gave an interesting s the Society's work from its comme as a small group of specialists to following of many thousand member Mr. C. C. Williamson, replying, ann total membership to date of 14,000. that the Society's success was largel many rosarians who have passed av famous Dean Hole, Edward Mawl gave devoted service for 40 years, Melliar, whose book is loved and th Herbert Molyneux, for many yea Treasurer, and the Rev. J. H. Pe probably the greatest rosarian of the years, whose book he thought wo standard work for generations.

Followed a few witticisms from Mr and then the toast of "Our guests" livered by Mr. H. Oppenheimer, specially appreciative words for played by the ladies in the developme Society and the Rose, and who pai to the services of many individuals on this occasion and to the Press. Durham, the newly-appointed Sec the Royal Horticultural Society eloquent expression of his appreciati own Society's "fairest sister." T sperity of the National Rose Society his mind a quotation from Haaji "He cast the anchor of curiosity harbour of expectation." On this it could truly be said that expecta been realised.

Mr. W. Cuthbertson complimen Society on its literary productio National Rose Annual, he thought, finest piece of work done by any society in the kingdom, or even in He made some interesting referenc experiences of Rose cultivators in C and India.

Mr. George Monro (of Covent Ga scribed himself as representing the tween the Society and the public. an idea of the colossal demand for R mentioned that one firm alone had in the past four months over 200 Roses per day at Covent Garden, an cally all for sale in London. He m on the improvements in colour, foli stem, but he wanted to see back a scent of the old General Jacquemin would be a very good thing.

Mr. Donald McDonald, having porting Rose shows for 26 years, h mellow memories to impart whi much to the liking of the compa President then paid his tribute to services of their Secretary, Mr. Page, and to Mrs. Courtney Page, rising to reply, Mr. Page was most hearty applause. He made reference to Miss Willmott's work Society, and, in reply, Miss Willm was warmly acclaimed, made it c her interest in the Society is a real love.

GARDENING ILLUSTRATED

481—Vol. XLVIII. SEPTEMBER 25, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

use of 589
, the 587
s, coral spot 588
ntana ... 583
in poor con- 589
and Glox- *healthy* ... 589
from seed *ving* 583
small bowls. 590
pinosa ... 578
for spring 587
a polyr- 584
Certificates for market plants and flowers 577
Cherry, the Cornelian 578
Cinerarias, treatment of 590
Colchicum Bornmuelleri... 577
Currants on north walls 587
Cyclamens, Persian, from seed 589
DAFFODIL, A NOTABLE DOUBLE-FLOWERED 583
Daffodil names, classified list of 577
DAFFODILS IN POTS AND PANS 577
DAFFODILS TO PLANT NOW, THREE 583
Dimorphothecas, the 578
Freesias 590
Fruit trees, Moss on... 587
Fruit trees, preparing ground for... 588
Garden manures ... 589
Herbage, green, for sun-baked banks ... 578
HYACINTHS AND OTHER SPRING-FLOWERING BULBS IN POTS... 580
HYDRANGEA ARBORESCENS GRANDIFLORA ... 579
Ixias and Sparaxis... 590
Kniphofia Uvaria nobilis 578
Lachenalias (Cape Cowslips) 590
Lettuces for spring planting 587
Lilium pardalinum... 578
Littlehampton and District Horticultural Society 578
Lonicera similis Delavayi 578
Material for propagating frame 589
MICHAELMAS DAISY BARR'S PINK, NEW 584
Oak-leaf, eggs on an... 589
Onion, white rot of ... 588
Œnothera Childsi ... 578
Pæonies, cultivating 584
Pæonies failing... ... 589
Peaches? the best dish of... 579
Pearlwort, destroying 589
Pears falling 588
Plants, bedding, in the rock garden ... 578
Plants for a grave ... 589
Plants, greenhouse, watering 590
Plum, Cox's late Red 588
Plums, wither-tip and brown-rot of 588
Plum trees in pots ... 586
Rose rust 586
Roses, Rambler, pruning... 586
Roses, treatment of newly budded 586
Silver leaf 588
Succulents for the open air 584
Tomatoes in April, ripe 588
Tomatoes, white fly on 588
Tomato rust... 589
Verbena chamædrifolia, propagating 579
Vines for forcing, preparing 587
Wasps 579
Wistaria failing ... 589

Daffodils in Pots and Pans

There are Daffodils for forcing, and Daffodils for the cold greenhouse or Alpine house. No matter whether the bulbs are grown in a heated structure or a cold one, they should be placed in their respective pots or pans as herein described, before the end of September. For the practical cultivation of other spring flowering bulbs in pots see page 580.

bulbs of Daffodils required for early ng must be seen to without delay, is much depends upon their making ts at the right season as upon any s in their after-management. Those ire early Daffodils must allow them tionately longer season to perform er functions prior to being put into ew distinct and well-known Daffodils ng are the old double yellow N. us plenus, Tenby Daffodil (N.), N. bicolor Horsfieldi, N. princeps, Spur, N. Henry Irving, ictoria. All these adapt s to a fair amount of heat—*i.e.*, 50 degs. to 55 d a rather moisture-laden re. The variety King noble and handsome, but mes a little difficult to he top of its form. There at indispensable variety us ornatus, of which lone hundreds of thou- forced annually, its pure agrant flowers always lmirers. We have very an be so advantageously such a great variety of the introduction of suc- batches it is easy to vers of this variety from February till the bulbs turally out of doors—a lvantage, so much so frequently abused, for, ing itself in a free and ble manner to judicious often happens that the forcing is erdone; hence the reason at the nent of these notes for recom- otting the bulbs up early, thereby bundance of roots and a propor- ount of leaf growth long before be put into any heated structure. pany with the foregoing should found some of the Hoop-petticoat d in particular the deep golden N. , a gem both from its free and pro- ing and rich golden flowers, as generally neat and elegant appear- leed, a few pots of its miniature leaves and exquisite flowers en- harms of any conservatory in the hs of the year. These bulbs are l to a Walnut in size, and capable of producing an average of six or eight flowers each.

While speaking of kinds in general which in a greater or less degree are fitted for gentle forcing, it may be equally beneficial, to some at least, to know that the double white Poet's Narciss. will not grow in this manner, other cases in point being our common Lent Lily (N. pseudo-Narcissus), and the lovely, though varied, forms of N. pallidus præcox are but little better. This last, beautiful as it is in almost endless variety, is by no means a valuable or even useful bulb to grow, as it deteriorates very quickly, disappearing entirely in many English gardens.

A pan of the little Narcissus minimus grown in an unheated alpine house

A fairly rich loamy soil will accommodate them well, while the number for each pot will be best regulated by the size of the bulbs themselves. When potted, they may stand outside on a bed of coal-ashes, and be covered either with this or Cocoanut fibre. Here they will be safe for some time to come without further attention. Depending on the state of the soil when potted, and also the weather, water may be given or withheld, but as a rule it is better to give none whatever at potting time, and towards the middle of October there is need for protecting them from too much rain. This is best done by placing a few spare lights over them, beyond which they will be safe till required for placing in artificial heat, which should be gradual at first, and not at any time exceed what is above prescribed.

NOTES OF THE WEEK

Classified List of Daffodil Names

THE Council of the Royal Horticultural Society has decided to revise the Classified List of Daffodil Names and publish a new edition so soon as possible. The latest edition was published in 1923. Raisers of Daffodils who have not yet registered the names of new varieties are requested to do so at once so that these may be incorporated in the new issue. The names, with classification and name of raiser, should be sent to the Registrar, Mr. Charles H. Curtis, 5, Tavistock Street, Covent Garden, W.C. 2. The registration fee is 1s. for each variety.

Certificates for market plants and flowers

We are asked to remind readers that a special committee of the British Florists' Federation is willing to consider the merits of plants and flowers believed to be suitable for market purposes, and to award certificates to worthy subjects. The members of this committee are all connected with the flower and plant trade of Covent Garden, and meet only as necessary. Exhibitors who propose to submit plants or flowers to the judgment of this committee must notify the Secretary, Mr. C. H. Curtis, 5, Tavistock Street, Covent Garden, W.C. 2, of their intention to do so not later than first post on a Friday in the week preceding a meeting of the Royal Horticultural Society. Plants or flowers submitted (after notification) must be brought to Messrs. George Monro's salerooms, 4, Tavistock Street, Covent Garden, by 11.30 a.m., on a Monday immediately preceding a meeting of the R.H.S.

Colchicum Bornmuelleri

Colchicums are blooming early this year, and several good clumps of different species

have been in flower from the middle of August. Of these, C. Bornmuelleri has been one of the earliest and also one of the most effective. It comes from the east of Europe and is nearly allied to C. speciosum, but is not so formal in the shape of its cups as that noble species. It opens almost white, gradually passing off to a fine rosy-lilac. It should, in ordinary circumstances, be planted in July, but it is not every bulb dealer who can supply dormant corms then. Some offer retarded corms which may still be planted for bloom this year, but I have found little difficulty in establishing corms which were showing flower. C. Bornmuelleri loves a good strong soil and may be planted 3 inches to 6 inches deep, the latter depth being the best for light soil. S. ARNOTT.

Littlehampton and District Horticultural Society

The fourth annual show of this Society has been determined for Wednesday, August 24th, 1927. This early intimation of the decision of the Committee in respect of the Littlehampton Society's show for the year 1927 is made for the purpose of enabling other Societies and Committees in Littlehampton and the surrounding district to avoid, if possible, any fixture on that date. The Committee consider that if an endeavour is made by all Societies and Committees concerned to regard fixtures already made and to select an open date for their respective functions it will provide an opportunity for more entertainment to the residents and visitors, be found to be to the mutual and financial advantage of all the Societies and Committees, and tend to a greater success generally.

Kniphofia Uvaria nobilis

I saw a very fine plant of this Red-hot Poker in a suburban garden the other day, and it reminded me of the fact that it is not so widely grown as it should be where bold and effective autumn-flowering plants are desired. The specimen in question must have been of some age, as it had upwards of a score of its fine heads of orange-red and yellow flowers. It is truly a noble plant, well deserving the name of nobilis usually applied to it, and much superior to the ordinary K. Uvaria. It is of considerably taller habit and has longer spikes and larger flowers. It is a really handsome plant for many places and ought to be borne in mind by those thinking of planting bold, showy, and effective hardy perennials. In some wet places Kniphofias suffer a good deal by the early removal of the dead leaves. A good method is to cover up the crowns of the plants with these leaves until spring is on us. S. ARNOTT.

Œnothera Childsi

This, grown here (Sussex) for the first time this year, will be in demand as it becomes better known. In habit it resembles the choice Œ. mexicana rosea, but the flowers are of a rich clear pink and rounded form, and when grown in groups very effective. It flowers continuously through the summer months. G. M.

Lilium pardalinum (Panther Lily)

To those who find a difficulty in the cultivation of Lilies I would recommend this handsome Californian sort, which runs about in warm sandy soil very freely, sending up little forests of stout flower-spikes to a height of 5 feet and 6 feet, occasionally 8 feet each, terminated by numbers of large drooping orange flowers, spotted with maroon, during July and August. In the borders here (Sussex) this charming Lily increased so freely that a large number of roots became available for naturalising. These were planted in the grass by the waterside, where they have become thoroughly established and bloom freely each year. There are several fine varieties, all of which are imposing plants when in bloom. E. M.

Bursaria spinosa

A distinct and interesting evergreen shrub is this, which is now blooming with me. The leaves are narrow, deep green, and not more than 1½ inches long. The flowers are sweetly scented, white, and borne in panicles 5 inches long and 3 inches wide, and appear so freely that the whole bush is almost covered with them. This pretty spiny shrub comes from New South Wales and appears to be quite hardy in the southern counties. I have not yet seen its red fruits, which are said to be very attractive, especially when the plant is grown against a wall. E. M.

The Cornelian Cherry (Cornus Mas)

I have known this tree for many years and had come to regard it as of value for its early flowers more than anything else. Seen as it is to-day, September 10th, one is compelled to admire its wonderful beauty, the branches for 10 feet or more in length being absolutely weighed down by the amazing quantit brilliant red fruits. Never have I see charming tree fruit so freely before; i the fruits appear sparsely in average Happily those of us who see it in its p state can appreciate its true worth ornamental fruiting tree. The trees (Sussex) are about 15 feet high and thr and growing on rather high and poor baked ground, which must be to its l The Cornelian Cherry has for centurie an occupant of English gardens, and sure that it will remain so if it contin bear fruit in this wonderful mann should be interested to hear of its beh in other gardens this year. E. MARKI

Lonicera similis Delavayi

An interesting new Honeysuckle blooming with me is the above. The scented flowers are distinct from those majority of Honeysuckles, white at changing to yellow with age, and 2½ inches long, and borne in panicles 10 long, the elegant cylindrical tubes flowers rendering the plant very interc E

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Bedding plants in the rock garden

THE subject of suitability, or otherwise, of plants for their environment is a thorny one, and, after all, it is mainly a question of personal taste. Mr. McGuffog's advice in a recent issue to fill up empty spaces in the rock garden with spare plants of Lobelia, Ageratum, etc., and the employment of surplus bedding plants in the herbaceous borders, requires a little consideration before following it literally. Whatever sins a rock-garden enthusiast may commit I doubt very much whether bedding out his rock garden would be one. A lot of plants not strictly rock plants can be and are admitted there, but half-hardy annuals must surely be debarred. If Lobelia, why not Geranium Paul Crampel, or even Asters? If the rock garden is of any size reserve plants usually are, and always should be, kept in pots, and can be planted out almost at any time, given due attention to watering. The temptation to stick surplus bedding plants in any blank spaces in herbaceous borders is great, but caution is needed as to what will fit in with the plants already there. Bedding Pelargoniums can be ruled out as quite inadmissible; likewise Lobelia, excepting, of course, Lobelia cardinalis and its varieties. Fuchsias, too, do not fit in except, in wide borders, Fuchsia Riccartonii and one or two other hardy species. Begonias and Cannas are both out of place, being obviously not hardy herbaceous subjects. Heliotropes are debatable, and Salvia patens is quite at home, and S. splendens possibly may do, especially if a bright patch is needed. Stocks, again, fit in well, but I have a personal prejudice against double bedding Asters, though quite willing to admit single varieties. Antirrhinums are quite in character, with the saving clause that if they are used largely for bedding-out and are visible from the herbaceous borders. One can have too much of a good thing. Violas, of course, are quite admissible, and on suitable soils should always be used. Strictly, none of these plants can be called "hardy herbaceous," but the term is a very loose one, and if vigorously applied would bar out quantities of plants usually planted.

The question of what plants are suitable for a wild garden is more thorny still. I once took charge of a large wild garden into had strayed several clumps of Phlox quelicot, and Baron von Dedem. The herbaceous Pæonies seem quite out of yet Epilobium angustifolium, quite a ing, is thoroughly at home. Here the of the inflorescence makes a diff Gunneras, Rheums, Bamboos, Gyn and other obvious immigrants are acceptable. If a plant fits in with roundings then it is right; if it looks gruous, then it is wrong. This on one's personal taste, and tastes diff gardeners also. So it is quite impos lay down any arbitrary rule. OBSER

The Dimorphothecas

In your issue of September 11th yo respondent "M. S." draws atten "the Namaqualand Daisy," which he Dimorphotheca aurantiaca, but as e scribes the flowers as varying from creamy-yellow, and golden-salmon orange, he has evidently grown the that is derived from the deep orange-f Aurantiaca, or Star of the Veldt, pluvialis, which has white flowers ting violet on the outside of the petals. grown both varieties for some years plants like a dry, sunny position, an drought well. They come into flo weeks after sowing the seed in the op continue to bloom up to the frosts, l certainly did better with me in soil fr lime. In addition to its great value ding, the Dimorphotheca makes a cl pot plant, and I have never had it loo than when grown in a window-box south. Should any of your readers obtain the Dimorphotheca with flowe beautiful tints which your corres names they must be careful to ask hybrid strain, but where a bold mass orange is required D. aurantiaca st rivalled. H. I

Green herbage for sun-baked l

With reference to the note (issue J there are in many gardens what can described as arid, sun-baked banks, only to their position but to the natu

For covering these banks, and so way with their unsightly appearance, lants have been found eminently suit- One is Achillea millifolium (the com- arrow). Another is Anthemis nobilis mile). The third is a weed, some- known as Spergula or Pearlwort, the botanical name of which is Sagina pro- s. Seeds of all three may be pur- [There are other readers who would ything to get rid of these plants.—

ner good plant, or rather a good for covering such unsightly banks is m junceum (Spanish Broom), pro- he bank lends itself to such adorn- It thrives well in such soil as d above, and its profusion of yellow ped blossoms is a welcome sight the flowering season, from June to ber. (Captain) E. A. SAUNDERS.

The best dish of Peaches?

provincial show held recently the judges Fruit Section placed what was the dish of Peaches, Sea Eagle, third, the fruits were the best coloured, ed, and in the best table condition. son given by the judges was that a -sized Peach was the more useful one. admitted they had size and quality d. Largeness was all that was them. I should be glad to have your as to the general view on this matter, the view of expert growers through s of GARDENING ILLUSTRATED.

is nothing in schedule other than the H OF PEACHES.

A TWENTY-FOUR YEARS' READER.

are unable to express an opinion on ging of this class; at the same time ot a defect in Peaches so long as the e of uniform size and well finished. oints being equal, large Peaches are l to small or medium-sized fruits. iety Sea Eagle is not of first-class and no doubt the judges, in making vards, were aware of this. More- e fruits of Sea Eagle are subject to itting. In the Royal Horticultural Rules for Judging it is stated, *re* and Nectarines:—"Large speci- e generally of better flavour than uits of the same variety. They display the colour natural to the and be free from blemish of every plit stones are a great defect."—

gating Verbena chamædrifolia

I offer a hint to your inquirer, I.," who wishes to know how to e Verbena chamædrifolia?

found the usual method of layering unsatisfactory on the whole. A that has served me far better is to rgarine box, and after boring holes age fill almost to the top with soil, little sand with the top inch or so. is box transplant your Verbena in as iece as you can make room for, turn- ends which may overhang the box l pegging down every joint that is dy firmly rooted.

s now, or in any case before frosts Vater well and place the box in a corner. Do not place in a frame ally hard frosts may be expected. wth has ceased use no water, or only ingly.

planting out in the spring simply plant into convenient sizes with a nnicky methods do not pay.

come to the conclusion that a plant successfully withstood a winter is n that have been given protection. it will start into growth rather ill make a much better plant in the long run. To effect this I have had considerable success by placing half-a-dozen bricks on edge round the crown of the plant and covering with a sheet of glass.

From three small plants I have in two years got a bed approximately 12 feet by 4 feet a glowing mass of scarlet, and have given away dozens of plants. A. H.

Herefordshire.

Hydrangea arborescens grandiflora

THE type Hydrangea arborescens, a native of the North American States, is not a shrub of horticultural merit, but its variety, H. arborescens grandiflora, is one of the best small-flowering shrubs we have, and all the more desirable because its blooming time is in the rather late summer, during the end of July and the earlier part of August. The advantage of the grandiflora variety over the type is gained by the increase in number of the sterile florets, which fill the whole middle of the flower, just as in our showy Guelder Rose the flower becomes a ball of sterile florets only, the type Viburnum Opulus being a flat bloom with these florets on the outer edge only. The Hydrangea is one of those shrubs that may well be admitted to the flower border, where the mass of pure white bloom and the clear light green of the leaves are seen to the greatest advantage. G. J.

Hydrangea arborescens grandiflora

Wasps

The request for assistance in connection with the attacks of wasps upon fruit (p. 571) moves me to quote from Gilbert White:—"The great pests of a garden are wasps, which destroy all the finer fruits just as they are coming to perfection. In 1783 there were myriads of them, which would have devoured all the produce of my garden had we not set boys to take the nests, and caught thousands with Hazel-twigs dipped in birdlime. We have since employed the boys to take and destroy the large breeding wasps in spring."

No one can improve upon White's advice. This season, following an old practice which I found serviceable elsewhere in a wasp-ridden district, I offered (and paid) a bounty for each nest pointed out to me, and which I very promptly and very effectively destroyed. The "bag," so far, consists of 35 nests within a mile radius of the garden, and I can confidently assert that what was formerly a plague is now little but a trifling inconvenience. The bounty was fixed at 6d. per nest in June and July, and at 1s. in August and during September. It may be considered that the finders of early nests would not report them until they were financially of more value, but in practice this is not so, because the finder is never certain that some other person may discover that particular nest—and a safe sixpence is better than a problematical shilling. Next spring I intend to offer blood money for queen wasps at the rate of 3d. each during April and May. When I formerly adopted this practice I paid out on one occasion over £2 for queen wasps alone during a single month. This, and the payment given afterwards for nests, was a fine investment, and resulted in the damage done to Peaches, Plums, and especially to Morello Cherries being reduced to a minimum. I never tried, however, White's device of birdlimed twigs, fearing that they might capture other things than wasps, or at least prove dangerous to our small songbirds. Nor do I approve entirely of hanging up bottles of sweetened beer, treacle, and so forth. No doubt these account for a considerable number of wasps, but I incline to think that more are attracted to the fruit walls when these traps are used than would otherwise be the case. The sure way is to aim at reducing the queens in spring and afterwards to hunt for and to destroy the nests, and that as early in the season as possible. W. McG.

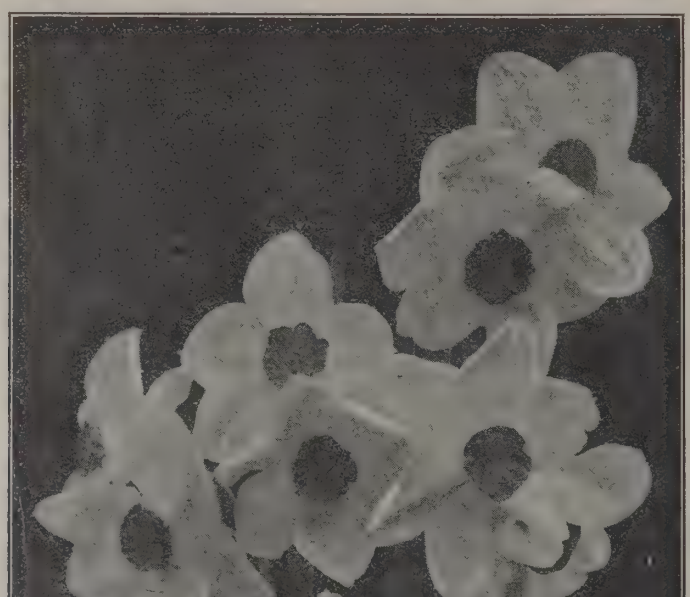
Mabie.

Hyacinths and Other Spring-flowering Bulbs in Pots

NOT the least important of spring flowers is the

HYACINTH. One must be provided with a stock of clean pots. Use old ones in preference to those quite new, as the latter (unless soaked) are apt to dry the earth unduly. Forty-eight, or 4½-inch pots, are the most generally useful. I have tried Hyacinths for exhibition in a size larger, but have had equally fine spikes of bloom in pots of the size named. It is therefore wise for the sake of economy alone to choose the smaller. The soil recommended is composed of rotten turf of a fibrous character, broken up small, manure, preferably cow manure, dried, so that it may be passed through a sieve, coarse sand or road grit, the loam being in slightly the larger proportion. In this compost water will pass through freely, and a rich root-run is also provided. Use the

POTTING SOIL in an even state—neither sodden with wet nor dust-dry. It is advisable to mix the compost a considerable time before required, so that that desirable condition may be obtained. In potting, place one good-sized crock over the hole of the pot, then a handful of the rougher portion of soil; afterwards fill the pot and press down the earth moderately firm, then scoop out a hole with the finger in which to place the bulb. This latter item is of some importance, because, if we press the bulb and soil down together, that portion under the bulb becomes so hardened that the roots, instead of wandering in the earth, will raise the bulb upwards, and perhaps finally push it out of the pot entirely. Take care then to have the soil loose for the bulb to rest on. About one half of the bulb should be buried. A finish is made by pressing the soil down evenly in the margin between bulb and pot. When the compost is in the condition before-mentioned, watering immediately after potting is not required, but if the earth be at all dry one good soaking should be given. Stand the pots close together in any available space that is open, that is to say, free from the drip of



Narcissus Glorious

This was one of the most outstanding novelties so well shown last spring by Mr. J. Lionel Richardson, when it was awarded a First Class Certificate of the Royal Horticultural Society. It is undoubtedly the finest Poetaz yet sent out. The perianth is pure white, very round and flat, about 2½ inches across; the cup is of the most brilliant orange-scarlet. A very strong grower, two and very often three flowers are carried on a stem. It is a magnificent garden plant and has twice been awarded the First Prize Single Bloom Poetaz at Birmingham. Raised by Mr. J. C. Williams, this novelty has also received the Award of Merit at Birmingham.

Put them on a sound bottom of ashes
to prevent worms from entering the pots
place an inverted pot of small size ove
bulb. This detail is perhaps not ess
but it is done with the object of keepin
sequent growth clean; the covering m
is apt to find its way into the centre
new leaves and maybe rot the flower-
Next bury the pots, bulbs and all, in
fibre to a depth of 4 inches. The m
named is light and clean; sand, howeve
answer the same purpose, but, if po
avoid a covering of ashes; the sulphur
contain has sometimes done mischi
would pot Hyacinths in September;
much later roots will have started g
and the bulbs are likely to deteriorate
by. They may be left—forgotten, I
say—for about two months. I would
same time advise that a covering of g
in fact, anything—be provided in c
more than usual rainfall to guard a
the earth in the pots becoming sod
The object of placing the bulbs under g
as it were, is to get them well rooted
top growth takes place to any extent.
item, to my mind, is the most import
all. Without a good supply of roots t
nothing to force the spike of bloom ou
bulb. The bloom is placed there by t
vious season's growth, and we canno
its form, but by good cultivation we m
velop each individual bell, and in t
obtain a spike of bloom apparently dou
ordinary size. Extra large bulbs are n
sirable in producing fine spikes of flow
fact, very large ones usually give mor
one spike, which, for purposes of sh
least, would be useless. Choose, the
medium-sized, firm, well-ripened bulbs
tain the best Hyacinths.

Some time in November, then, we
examine the plants. Roots will be
plentiful, in some cases growing throu
hole at the bottom of the pot, while t
growth will be about 1 inch high a
bloom-spikes visible. Such as these m
taken from their covering and stood in
frame or greenhouse where plenty of
be admitted. For a few days do not r
the pots which were placed over the
the change from darkness to light m
gradual. Hyacinths must grow slowly t
wise the leaves will advance faster th
blooms; the latter, too, will be want
substance, points against them in co
tion.

Keep the plants well up to the glass
times and give air abundantly. Do not
much in dull weather. Keep the soil
dry side until the blooms push well up
the bulb. Use rain water slightly wa
After the spikes of bloom show colour g
is very rapid, and it is then we must d
them to their utmost. By this time we
have abundance of roots; all the stim
necessary may then be given. Soot we
excellent, but I have not myself use
thing to equal sulphate of ammonia.
powerful salt should be given at the r
1 ounce to 2 gallons of water. Use
every watering, which may now be oft
at the final period it is not easy to
Hyacinths with moisture at the roots.
well to shade the flowers from strong
shine, or the lower portion of the spik
suffer before the top bells open.

Hyacinths are not used for pots the
year, but after flowering they may be
in the open and duly watered until the
die down. By planting the bulbs
ground and allowing them to rema
may, however, reap a rich harvest of n
ful spikes of bloom for a considerable n

"FLOWERS THAT BLOOM IN THE SPRING"

Tulipa retroflexa, splendid yellow with elegantly recurved petals form. One of the most graceful of all garden Tulips
Border of Darwin Tulips at Kew
Narcissus Osprey
Muscari or Grape Hyacinth. Very effective in masses in the arden

5. The Bunch-flowered or Polyanthus Narcissus Grand Monarque
6. Narcissus J. T. Bennett-Poë, a great favourite for cutting
7. Spanish Irises
8. The Spring Snowflake (Leucojum vernum)
9. Puschkinia scilloides
10. A Crocus lawn at a spring show

of years. I will name a few of the best varieties: La Grandesse is a very fine white sort, with extra large bells. Mont Blanc bears a splendid spike. Alba maxima is a third good white. In reds there are few

Mary Copeland
A double-flowered variety with a future
(See page 583)

better than Lord Macaulay and Von Schiller. Roi des Belges is a fine red, but generally produces more than one spike. Vuurbaak is an extra fine rich red. Fabiola is a good variety of a rosy-red shade. Koh-i-nor (semi-double) is also extra fine. Another red of a salmon shade is Moreno, one of the handsomest of all Hyacinths. Gigantea is a rosy-white with small bells, and Princess Amelia produces a grand spike of a blush-pink shade. Czar Peter and Lord Derby are both fine kinds of a light-blue shade. King of the Blues is about the best of a dark hue. Another good blue is Grand Maitre. Ida is the best yellow. Distinction, Magnificent, and King of the Blacks are all handsome dark-coloured Hyacinths, but generally the spikes of bloom are small.

Early Tulips, like Hyacinths, delight in a cool, steady growth. Any attempt to force them, except a few of the smaller kinds like the different coloured Duc Van Thols, means failure. Tulips like plenty of room for the roots; they should therefore have larger pots than are required for most bulbs. I would use nothing smaller than 6-inch ones. These may contain four bulbs. Use a compost similar to that named for Hyacinths, but with less manure and grit. When potting, it is well to choose bulbs about equal in size. That is to say, all the larger ones should be potted together, and those smaller be placed similarly, then an even lot of blooms may be obtained. The rule of making a hole for each bulb, previously noted, is also applicable to Tulips, and they should be covered for the purpose of forcing root growth before leaves. The great number of tiny roots that Tulip bulbs send out points to the fact that water must not be given sparingly, and when coming into bloom abundant daily supplies become necessary. I favour a cool stimulant for Tulips. Liquid cow manure is capital, but a watering or two with sulphate of ammonia when the blossoms are opening will aid in giving colour and substance. Light, air, a cool temperature, and abundance of moisture at the roots are the chief elements in the culture of Tulips in pots. A few extra good varieties are as follows: Vermilion Brilliant (scarlet), Joost Van Vondel (dark crimson, sometimes flamed white). A white sort (presumably a sport) of the same name is the finest white to be had. The next best white is Pottebakker. Ophir d'Or (yellow), Keizerkroon (red and yellow), Prosperine (rosy-crimson), Duchess de Parme (orange-red and yellow), Van der Neer (purple), Tournesol (red and yellow), La Candeur (white), Rex Rubrorum (scarlet), are good double sorts, but personally I much prefer the single kinds.

Narcissi are placed next in order. They are nowadays more popular perhaps than any spring-flowering bulbs, not, however, as pot plants, but grown in the open border. I have tried a fair number of the so-called distinct Narcissi. They are perfectly hardy and generally will not stand a forcing heat. I would pot the bulbs in pure loam and grit, and they should be potted firmly. They are better not plunged in the dark, but may be stood under some kind of glass structure to ward off excessive rain. A shelf near the glass of a greenhouse where frost is just kept out is an excellent position for Narcissi during winter, and here they may remain until the blooms are well advanced. A frame in the open border, if protected in severe weather, is an equally good place for their gradual growth, and the needful supply of soft water must not be neglected. Nor should they remain in a close atmosphere whenever the weather is favourable to the glass being open. Bulbocodium (Hoop Petticoat) is a pretty sort for pots. It should be planted thickly—that is, six or seven bulbs in a 6-inch pot. Spur, about four bulbs in a pot similar is makes a first-rate specimen. This will well. Emperor (large yellow trumpet) press (yellow and white), Sir Watkin (y Horsfieldi (yellow and white)—these among the noblest of Daffodils and d in pots. Princeps (yellow) and G (bicolor) are not unlike the above-nam are cheaper. Barri conspicuus is a ver coloured variety. All except the last ma a 6-inch pot for three bulbs. Among d Sulphur Phœnix and Orange Phœn grand; five bulbs in a pot is a good n for these. Van Sion is a fine yellow Then there are the Polyanthus N which bear bunches of small, sweetly-s blossoms. They make handsome pot Grand Monarque (white-lemon cup, what late) is extra good. Gloriosa (a and white), Newton, Jaune Suprême, of the Netherlands, and Her Majes capital varieties. These mostly have bulbs. Three in a pot will therefore ficient. They produce several spikes ea are very showy. There is this Narcissi: When one has once purch stock they may be readily increased by ing them in the open border.

Freesias, now so very popular, are ing, early-flowering bulbs which m grown by anyone with a bit of glass. bulbs are tiny, not expensive, and growth. Well-grown specimens are ingly pretty and the blossoms are scented. This bulb will grow in almo soil, but a compost rich in leaf-mou sand is one to be recommended. P bulbs in autumn, about seven in a 5-in and 10 in the 6-inch size. Slightly b bulbs, then stand the pots in a frame. require no covering—I mean, the pots not be plunged—but need protection severe weather. The best position for perhaps, after growth has started, greenhouse shelf. Here they may rem to the time of flowering. All that is sary is to give plenty of water, air in

Daffodils naturalised in Grass under trees at Kew

Loveliness

a mild stimulant when the bloom is Unlike Hyacinths, for instance, eesias do not lose in value after ; some increase rapidly, so that ce a stock is procured there is no ıy a second supply. After the blooms allow the growth to wither gradu- the bulbs may then be taken from , stored, and again potted the fol- ıtumn. W. S.

ole double-flowered Daffodil

Y COPELAND is the most out- nding of all the double-flowered cissi we have seen. Generally we do not admire the double- Narcissi, but Mary Copeland is ɔtion. Writing of this variety , Mr. W. F. M. Copeland, says :— always considered it a flower that copied. There are a vast family i, Barri, and poeticus which are ly difficult to distinguish. But I could distinguish Mary Copeland . It has had A.M.'s and F.C.C.'s ngham and London, and I have lly believed it to be worth it. To h, the stem is thick and strong. we had a thunderstorm downpour se flowers were out, and after it I m all erect and well. the flower is not too full, not over- The outer row of perianths are at and overlapping and stand up e red is always vivid and keeps its ll, and when it has increased suf- I am convinced it will be a very flower. Unfortunately for this the greater part of the stock has olland. I suppose the Dutch people e alive than the people at home to a good thing when they saw it, or hey had more money to spend."

Arnica montana

ıe who has visited the districts in ɔean Alps where Arnica montana vill, when it is in bloom, speak in erms of its beauty on the turfy pas-

Croesus

tures and among other flowers, where its brilliant gold shows up among the colours of the other plants of the season. Yet this plant, which flowers so profusely in its native home, is a great disappointment in cultivation. The best position for it is in full sun and in dry, stony soil, but even with this consideration it is seldom of much use in British gardens. This is unfortunate, as it is a brilliant plant when it does well, with its rosettes of radical leaves close to the soil, its stem with two leaves, and one, two, or even three golden composite flowers. M. Henri Correvon tells us that while it is generally difficult in culti- vation some report it to flower as freely as a Daisy if planted in pure peat. S. A.

Three Daffodils to Plant Now

NARCISSUS LOVELINESS.—This is a beautiful white trumpet Daffodil of refined form with broad, smooth, snowy-white perianth segments, trumpet white, elegantly expanded at mouth, a good, sturdy, free grower. It received an Award of Merit at Birmingham and Truro Flower Shows. A fine effect is produced by bedding this variety in association with the handsome golden trumpet Daffodil King Alfred.

NARCISSUS CRŒSUS.—A giant chalice-cupped Daffodil belonging to the Incomparabilis division. Flower of firm texture with large rounded imbricated perianth segments of a clear primrose-yellow with a bold, widely-expanded crown of a glowing deep red shade. Height, 23 inches. A strong, free grower. This fine variety was raised by Mr. J. C. Williams, and received a First-class Certificate by the Royal Horticultural Society and an Award of Merit at Birmingham.

NARCISSUS AGNES HARVEY.—This is a dainty chalice-cupped triandrus hybrid, being the result of a cross between Narcissus triandrus albus and an Incomparabilis variety, probably Albatross. The flowers are of a uniform snowy whiteness and produced from one to three blooms on a stem. Height, 13 inches. Received an Award of Merit by the Royal Horticultural Society. Besides being a good garden plant this makes a charming subject for growing in pots or fancy bowls in peat fibre mixture. It will stand gentle forcing.

Moving Biennials from seed beds

There is sometimes a temptation to put off the shifting of biennials out of seed-beds, and plants become large and crowded out. One notices this particularly in the case of Canterbury Bells, Honesty, and Wallflowers. Removing them as soon as they can be handled may not be quite convenient, but the fact that they furnish much beauty in a garden another year ought to be taken into account, and the work proceeded with at the earliest possible date. More than one batch of biennials that germinated quite well has been ruined through being left in their first quarters until they practically smothered one another. WOODBASTWICK.

Agnes Harvey

New Michaelmas Daisy Barr's Pink

OF new Michaelmas Daisies there is no end, and one of the very best is undoubtedly Barr's Pink, of the Novæ Angliæ section. Messrs. Barr and Sons very kindly send sprays of this bright and cheerful variety with the following note :—" We have much pleasure in sending you a bunch of our new pink Michaelmas Daisy Barr's Pink, unquestionably the finest pink Aster yet raised, and which at the present time is making a glorious show at our Taplow nurseries. Unlike most other Michaelmas Daisies it is not inclined to close in artificial light, nor does it lose its unique colour. It is a very free bloomer and the plant is of elegant and graceful habit; height, 4½ feet. It was unanimously voted an Award of Merit at the R.H.S. Wisley Trials last autumn." The flowers are most welcome. As may be seen from the illustration, the ray florets open full wide. The colour is a bright—we might say a lively—rose-pink, with golden-bronze centre. This variety, which has already received high honours, belongs to the same group as the well-known Lil Fardell, Mrs. J. F. Raynor, and Ryecroft Pink. H. C.

The new Aster Barr's Pink

Succulents for the open air

Could any of your readers give me a list of Cacti, Opuntias, Mamillarias, Echinocereus, etc., that would grow out of doors all the year round in south Devon on a wall or a cliff facing south? I have heard there are some North American Cacti that have snow on them part of the year. Z. B.

[I am afraid our climate is against growing any of the true Cacti out of doors all the year round, except Opuntias. A few years ago the public gardens along the front at Teignmouth were planted with various Cacti and succulents in beds, but only for the warm months. The Indian Fig, or Prickly Pear, and the following species of Opuntias might be tried :—O. Tuna, O. fragilis, O. leucotricha, O. microdasys, and O. rufida. Damp and frost are what have to be guarded against with Cacti. But with a really sheltered south wall you might try, also, Echinocactus minusculus, Echinocereus procumbens, or Echinopsis tubiflora. Of the succulents, which are often grown with Cacti, and which differ from the latter in having true leaves, although, of course, they usually are very thick and fleshy, you could try the following :—Agave, often termed American Aloe, although not an Aloe really. They are strong-growing, sturdy plants, and will grow out of doors in this country easily, and often reach a very great size. They are often to be seen in plant urns in gardens. Same soil and treatment as Cacti. The varieties of Agave recommended for outdoor growing are :—Agave americana, A. attenuata, A. Botteri, and A. Victoria. Pachyphytum bracteosum is a striking plant, sometimes seen in plant urns in gardens. The leaves are very thick and " fleshy " and grey-green, and it sends up a spike of curious reddish-grey flowers. The whole plant, blossom and all, has the appearance of having been carved in stone. Sempervivums are quite hardy for outdoor culture. Of the Sempervivums you might try S. globiferum, S. rubicundum, or S. Laggeri. Echeveria retusa is another outdoor plant. Why not try the Agave? The one seen in Cornwall (at Downderry, near St. Germans), described in a recent article, was an Agave. Of course, the Agave is a succulent.]

Calceolaria polyrrhiza

Few indeed of the Calceolarias may be truly called " hardy." Of these the hardiest, in my experience, is C. polyrrhiza. C. polyrrhiza is not only very hardy, but increases so freely that it can be multiplied without difficulty. It is a tiny species, only a few inches high, with small leav " slippers " of quaint design and spotted with red. The flowers are sm are very freely borne, and, left to spreads quickly. I have grown it o work and on the level, and in the fo seemed to delight in growing betw stones, while it was equally at home level border. It may be propaga division. S. Ar

Cultivating Pæonies

Now is the time to plant

The chief point in the culture of Pæ a deep and very rich soil. Under no stances should the plants be surround manure, but, instead, dig in as much like at 1 foot to 2 feet deep, so as t the soil by the time the large fleshy r ready to descend to and receive it, wh quickly will if good healthy plants are to make a start with. Medium-sized with two or three good crown buds and plenty of fresh young roots, ar preferred to much older plants wh large trunk of the root-stock has much cankered. If any such are re recommend the shortening of suc trunk-roots considerably, as well as re any cankered parts that may be visi the planting of any such cankered will be of help to the future progres plants if a niche be cut around the main root at about 2 inches or 3 inch the base of the crown-buds. This wil the formation of fresh roots and m assist in the speedy building up of a more vigorous growth than could ensue where the old and cankered p main. Another good way, if the pl large enough to admit it, is to cut t trunk root in two longitudinally, th shortening of the trunk, being also tageous to the future plant. In plan there be no fear of burying the crow as these when left have a tendency and as roots are freely produced f base of the buds, there is a danger roots becoming parched and destroye weather. It is often recommended baceous Pæonies should be planted spring months just as they are sen their fresh young stems for the seas plant these things at such a time is mistake; in fact, no worse possible ti be chosen, for then the young grow subjected to great risk in transit, and quently entirely lost. Therefore, to wish to have success in growin Pæonies I say do not plant in spring not wait for the appearance of new Such signs as these are all well en the many plants that are continually numerous roots throughout the seaso is another question altogether for s jects as only make one or two sets of each year. The aim of the plante be to snatch the moment between t sets of roots and get the plants i places.

SOIL.—A good moist loam enrich cow manure is the soil best suited to The best season for planting is S and October. New roots are in c formation at that time and the pl more quickly established. In any planting should be completed while remain dormant. To transplant in when in growth, is fatal to success, bad being moving large specimens An open position is best. The Pæo in the deepest and richest of soils, well planted is good for a dozen ye out disturbance. When thoroughl lished apply liquid manure in autu winter.

REMINDERS FOR THE WEEK

thern and Midland

seedlings of this were raised early l now be full-grown, and may be d have the leaves cut off, and the ed in the storehouse in sand until for forcing. This may commence at . A Mushroom-house is the most place in which to force the roots of l salad plant.

es

ise to gather all fruit from the out- ts before frost puts in an appear- damages the fruit. The trusses cut off wholesale, and, if hung up nhouse or sunny window, will soon ll small fruits may be made into or pickles. Plants still bearing he greenhouse may be assisted by ittle warmth in the pipes at night.

there is a demand for this during d a vacant cold frame is to hand, able to make up a bed of good soil with young plants from the July These should be kept well up to the given plenty of air at all times; in lights are only needed during bad

plants

is date all sub-tropical plants that used for filling the beds during the hould now be taken up and potted. ld be done carefully without in- roots, and, after potting, they placed in a shady spot for a few cover.

as

the next two or three weeks is the o sow the seeds of Sweet Peas for ning next summer. These may be r in pots or boxes. The latter I o not over-water the seeds or many All black-seeded varieties should be The seeds will germinate freely in e, provided the glass is shaded for ys.

nemums

growing now in the open gar- not showing flower-buds have chance of blooming out of doors, e lifted and placed in large pots, danger of frost is at hand they ced in the greenhouse, where they at a time when flowers are wel- reful watering is necessary or e leaves will drop off.

plants, such as Pelargoniums and have been rooted in the open, be given the shelter of a cold is not too late to take cuttings of s, Antirrhinums, Violas, and s, but these should be kept close for a few weeks. Cuttings of l Violas that are growing freely e the tops pinched out to cause ak and form bushy plants.

iest batch of these useful plants lled the pots with roots, and may with weak doses of soot-water lower-buds appear, when liquid- y be given. They are best left in me for a little longer, and a care- is necessary to keep down aphis and leaf miner, which soon cause much damage amongst the plants.

Schizanthus

The seedlings that were raised at the beginning of the month and were pricked off into boxes may be potted up during the next week or so into 3-inch pots in a nice open compost. They may be grown on in these until the beginning of February on a high shelf in the cool greenhouse. The soil should be kept moist, but the roots must not be saturated or mildew will attack the plants.

Perpetual Carnations

It is now time that these plants were in their flowering quarters, and where this has not been done no time should be lost, although in some cases these plants are grown successfully in a mixed greenhouse. They do much better when grown in a light, airy house by themselves. The pots should be scrubbed, drainage examined, and all decaying foliage removed. The doors and ventilators should be left open for the first week or so. If the plants show any sign of red-spider they should be sprayed with a solution of salt and water, using 1 oz. to the gallon.

Shadings

It is not necessary to keep the sun-blinds up any longer, and these should be dried before storing away for the winter. All Summer Cloud and other shading should be removed from the glass, as all plants from now onwards will require all possible light and sun.

W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Kitchen garden

September is an important month in the calendar of the kitchen garden. Full plantings of Cabbages for spring cutting ought to be got out at once, using the most advanced plants on a warm border and in drills cut with the hoe to a depth of 4 inches. By and bye the soil can be returned, and it will help to steady the plants during the winter. Harvest the Onions in suitable weather, cut such Vegetable Marrows as may be ready, and continue the earthing-up of Celery. It is wise to lift a few dozen Parsley plants and to put them into a cold frame. These will give pickings throughout winter and are especially valuable during snowy weather. A pinch of Cauliflower seed may be sown in a cold frame, and those who desire early Tomatoes must not neglect the needful sowing at this time. Spare frames may be filled with Lettuces, and a final sowing of a good hardy Cos variety should be made to stand the winter. Endives, too, can be transferred to a frame in which the plants can be blanched. Keep French Beans and Scarlet Runners closely picked and take up all Potatoes which are obviously ripe. The latest varieties may remain until quite the end of the month.

Bouvardias

Those who grow Bouvardias for winter flowering, and who prefer to grow them in pots right through the season, should now have their plants in the flowering pots. At one time I used to plant out Bouvardias on a south border during summer, in company with Eupatoriums and Salvias, lifting them in September and potting them up. When so grown the plants are much more easily kept clean, and after they recover from the trifling check given by lifting they succeed exceptionally well, and have not the somewhat "starved" appearance which is sometimes evident in Bouvardias which have always been grown in pots.

Bamboos

Some of the finer forms of Bamboo are most useful in pots, especially in small pots—those of 5-inch or 6-inch diameter. In such pots the plants must not be starved, and liberal feeding is needed to keep them attractive. All are easily increased by division, which may be undertaken round about this time. When old plants are broken up they soon make good any damage if potted in a sound loam enriched with a little soot and sufficient sand to ensure the free passage of moisture. Although the majority of Bamboos are fairly hardy I prefer to treat those grown in pots as if they were cool-house plants.

Stove

The nights begin to grow cooler, and where such things as Ixoras and the choicer Crotons find a place the fire ought to be started. If only the more accommodating stove plants are grown there is no pressing need for artificial heat yet awhile. Plants from this house which may have been used elsewhere during the summer should now be assembled in the warmer house, strict attention being necessary in respect of cleanliness before they are placed among other plants. A good stove climber at this time may be mentioned in Schubertia grandiflora, which to some extent resembles the Stephanotis, although the flowers are decidedly larger. These are useful in a cut state. Soft-wooded plants for winter flowering ought now to be well established in the pots in which they will bloom. Should there be any shading on the roof of the stove it ought now to be washed off.

Peaches under glass

At times young Peach trees and, more markedly, young Nectarine trees, make too much wood. In such cases it is advised that the trees be lifted during the course of the present month, even although the leaves may not have fallen. Slightly trim any coarse roots, and replant, after adding some lime rubble or some old plaster, and if possible an allowance of wood-ashes in a rough state.

Late Grapes

Conditions during the present season have not been ideal for the ripening of late Grapes. At times the nights have been cold and the moderate allowance of fuel which was in stock has not permitted of much assistance being given. Much now depends upon the weather of the present month, and the heat of the sun must be conserved by shutting the vineries at the earliest possible moment. In many cases such Grapes as Gros Colman, Lady Downe's, and Muscat of Alexandria will require artificial heat in order that they may finish satisfactorily and mature their wood thoroughly. Those who pushed these and similar varieties in their earlier stages are now reaping their reward.

Ripening fruit

Fruit upon walls ought to be inspected almost every day and the ripening specimens should be carefully gathered. The practised eye can soon determine which it will be safe to leave and which are ready for removal. "Windfall" Apples ought never to be permitted to lie beneath the trees, this practice encouraging both wasps and birds to break sound fruits.

W. MCGUFFOG.

Mabie Gardens, Kirkcudbrightshire.

Treatment of Newly Budded Roses

UNDER favourable circumstances, a bud generally gets firmly united in about five or six weeks, and if the growth beyond the bud is not cut in the bud generally remains dormant. Some few buds it is impossible to keep in a dormant state—they will start into growth whether you wish it or not. In this case, when the bud has grown a few inches, it is better to reduce any wild growth from the Briar at once and try to make as much wood as you can from the pushing bud. Some buds grow and only make a few inches of weakly unripe wood. These are in great danger of being killed in winter. The best way is to nip out the top in the autumn as soon as it has grown about 6 inches. This will cause the sap to concentrate about the rings of the bark, and in the ensuing spring it will throw out side-shoots for the formation of a head. It is always best to keep the buds in a dormant state, and this can only be managed by allowing as much wild growth as possible to remain on the Briar until the sap gets down about the end of October or November.

About November 20th, not earlier, all the wild growth of the Briar may be cut away, leaving only about 6 inches of wood beyond the bud. All side-branches may be cut in close. This winter-pruning of budded Briars is necessary, otherwise any weight of snow lodging on the wild growth would break down the shoot and destroy the bud. Budded Briars are very liable to accident from wind, and often break at the place where the cross-cut was made when the bud was inserted. In consequence of having had so many accidents from this cause I have long since discontinued making the cross-cut. I now only make the long incision, and insert the bud with a piece of flat ivory filed down to a bluntish point. Such an instrument can be easily made from the broken handle of an old razor. Since I adopted this plan I have never had an accident from the Briar shoot breaking near the bud.

About the end of March all the budded Briars must be pruned. The portion of wood left in November, when all the wild spray was cut away, must now be entirely removed, except one bud just above the inserted bud. This one wild bud must be left on the shoot which was worked, and this is called the sap-bud, its office being to draw the sap upward, and help the pushing of the inserted bud. When the sap begins to flow freely it is directed to the one wild bud, which hastens the completion of the union where the incision was made, and the inserted bud, which has remained so long in a dormant state, breaks strongly, and soon commences to grow in earnest. If no sap-bud were left, the inserted bud might not start so readily, and the stock, in order to get rid of its sap, would commence throwing out side-shoots and suckers from the root. When the bud does not start into growth after receiving the pruning and treatment above stated, it is a sure sign that some growth is going on underground—probably a strong sucker or two are starting from the Briar root. If anything of this sort is suspected, get the garden fork and loosen the soil a little, when you will probably find the enemy, which must be promptly removed. All side-shoots proceeding from the stock must also be removed. When the Rose has grown 3 inches or 4 inches, a stick about 2 feet long must be tied to the Briar in two places, and it must stand well above the growing bud. To this support the Rose must be tied, as the growth proceeds, with worsted, which is better than bast, as it does not rot in winter and allow the snow to weigh down and break the yet tender growth of the Rose.

Occasionally we find a bud very obstinate, not starting into growth in the spring. Sometimes it will start at midsummer, and I have seen a few cases every year where the bud actually refuses to commence growing until the following year, but these cases are exceptional. It is, therefore, unwise to cut away the sap-bud until after midsummer; but the points of the shoots may be nipped out occasionally, by way of coaxing the inserted bud into growth. Watch the stocks closely until midsummer, and rub away any wild growth that the Briar may make as fast as it appears, in order that the full flow of sap may be directed to the growing Rose.

T. N. B.

Pruning Rambler Roses

Now is a good time to attend to the cutting back of Rambler Roses. The best time for cutting out the old growths and relaying the ramblers is after the leaves have fallen—say October to November. Some people prefer to wait till March, but there is much to be said against this idea. Some advocate thinning and relaying immediately after flowering, but with this I disagree. It is undoubtedly a good plan to cut back all shoots that have already flowered as soon as the blossoms have faded and died off to a crumbly stage. The shoots so treated should be cut back to a short spur, with one or two incipient eyes, from which fresh growths will break in the following season to produce further blooms. In some cases it may be necessary, of course, to cut the flower-stem right off close to the parent bough. Common sense and judgment are the only guides. *Experientia docet.* Ramblers, like other Roses, do best in deep clayey loam—more clay than loam. Where the ground is naturally unsuitable the only possible way to overcome this difficulty is to excavate sufficient of the natural soil and replace with suitable material, imported if necessary from another locality.

The great disadvantage of postponing the pruning, relaying, and cutting out of old wood from Ramblers till March lies in the fact that wrong flowering shoots have by that time started growth, and March is, incidentally, one of the busiest months in the year.

Another point of some importance in connection with the treatment of Rambler Roses must not be overlooked. This is the cutting out during the growing season of any succulent growths which are obviously superfluous. Foreright shoots may also, with advantage, be cut out during the growing season, as they deprive the tree of much vitality. Foreright shoots are, of course, those that stand out perpendicularly, or more or less at right angles, from the parent bough or stem, and are therefore unsuitable for laying-in purposes.

Care should be taken to cut out all suckers from the root-stock (generally Briar) which appear to grow as prolific growths from the base of the tree. These are not the true Rose, but spurious wild suckers, which should be cut off as deeply as one can go with the knife, right down to the basal root-stock below the ground. These suckers are, with a little practice, easily discerned by their leaves and thorns, which are quite distinct from those of the cultivated Rose.

(Captain) E. A. SAUNDERS.

Rose rust

(Dunruadh).—It would have been better if you had sent us in specimens of your diseased Roses. We should then have been certain that we are dealing with the right disease. We think that the disease you refer to is Rose rust, which is caused by the fungus Phragmidium subcorticum. This disease the leaves and wood of the Rose, and not prove to be very difficult to control should continue to gather and destroy all the affected Rose-leaves. When your Roses you should carefully cut a portions of the diseased wood. The winters in the wood, and spores are pr each spring. Up to the present you have been looking after one source o tion only—namely, the old leaves. Y overlooked the most probable source o tion, the wood. If you do not kn disease on the wood get someone w to show it to you. Next spring you spray your plants with a solution of sulphur. You should commence to spr plants before the leaves begin to expa repeat about once a week until you h the disease under control. This dis of course, very common on wild Ro you have any near your garden they be attended to also. The liver of should be used at the strength of 1 3 gallons of water.

FRUIT GARDE

Plum trees in pots

PLUMS from trees in pots are serv coming in as they do after are over and maintaining the until open air fruits get abundant. T way to get good bearing trees in a sh is to buy some well-furnished dwarf p that have been well pinched in at the and furnished at the base with short, spurs. Pot them in 12-inch pots in ber, using good turfy loam, small bones, and a little old mortar rubbi rammed into the pots, which after soaking of water may be plunged into thick bed of dry Oak or forest tree These will keep the roots in a favourab dition for making a vigorous start spring, when the plunging materials reduced down to the rims of the pots venience of applying moisture to the most important item in regard to fruit of any sort in pots. They should be in tion open to the sun, but screened fr winds or draughts, and during the fi they should be grown entirely out-of

The principal labour required will b tion to watering, pinching the s shoots as soon as they have made four leaves, and keeping the foliage syringing. If fly appears use Tobacc or some such remedy. The trees will make wood quite strong enough with stimulant in the way of liquid man wood of medium strength well rip almost certain to produce flower-bu ficient. As soon as the leaves fall may be placed close together, filling and around them with dry leaves. keep the roots in an equable state as moisture and temperature.

Presuming that the trees have h strongest shoots pinched in the s there will be very little pruning nece the winter, and the trees may have a the old surface soil removed, the drain in order, and a top-dressing of fresh a little manure added before they a under glass, a transition which must lated by the time the fruit is require ripe. In the case of trees not pr forced it is best not to hurry them t beyond their natural season. If t brought into a cool house, say in J and started with solar heat, and a li heat on frosty nights, early kinds o will be ripe in June, and later sorts and by introducing them under glass earlier each year they may be safely

same trees will bear good crops for ars.

llowing the above directions, and e third year giving the trees a shift inch pots, and using plenty of weak nanure when heavily cropped, we ne crops of Rivers' Early, Jefferson's, , Kirke's, Transparent, and Green Many other kinds may be added to but the main object of any selection to get sorts that ripen in succession, give as long a season as possible, for ny tree in a 14-inch pot will bear lishes of fruit. J.

The Apple crop

pple crop in this district (Aylesbury) poor one—about the worst for many It seemed difficult at first to account , as there was a very fine lot of but probably a severe hailstorm fol- frost just when this was fully ex- was responsible for the damage, and he more likely because one comes tree on rare occasions carrying a , doubtless the result of an earlier or ansion of blossom. The shortage is ble because, with the exception of , there is no garden product more cottagers than Apples. Mid-Sep- as a rule, sees the last of all other their gardens, but a good crop of n variety keeps the household going ay through the winter until Rhubarb outside, especially where there are hree good late sorts. One often sees liers of Lane's Prince Albert and s of Norfolk Beaufin, the latter good class Apple, but acceptable l others are over. It is noticeable finds some particularly late cooking old standard trees in different dis- re. For instance, we have Norfolk in another place one would find on, in another Easter Pippin, in Hambledon deux ans, and so on. arger gardens most of these sorts n superseded by newer kinds, but still favourites in cottage gardens ards. The same remarks apply to inds, for in one district the Ribston ime favourite; in another the Non- th green and scarlet, whilst in this e favourite late dessert kind is Mab- armain. At its best it is really an Apple, but we are not likely to have is year, for the few on the trees are ecked by birds. E. BURRELL.

Moss on fruit trees

ometimes arises from sluggish root nduced either by too much water ld in the soil, reducing its tempera- t may be due to poverty or, in some , both causes combined. It is, , important before any remedial are taken, to ascertain the cause. if wet, must be drained, and a good of manure will do a great deal of many of the old Apple, Pear, Plum, fruit trees that have ceased to make ble annual growth. The best way ng manure to such trees is to re- surface soil, apply a good layer of manure, and then return the soil. of helping old fruit trees ought to d oftener than it is. Another opera- renovating character should be em- connection with the top-dressing— rifying the trunk and the thick in order to dislodge the Moss and and then on the first damp, calm ny time when the trees are damp, n over with newly-slaked lime, and the lime dusting for two or three as long as it may be necessary to trees back to perfect health, and if there be any trees that cannot be improved by these or other remedial measures, cut them down; they are cumberers of the ground and should not be permitted to exist.

Currants on north walls

No more profitable crop than these could be grown on north walls. It is some time since the fruit was all gathered from our bush plants out in the open, but that on the north wall is hardly ripe yet, and it will be the end of September or into October before it is all gathered. Some people value Currants for dessert, and all like them for tarts, so that a long and constant supply is desirable. One of the best ways to secure a stock of bushes against the wall is to have some suitable soil placed at the bottom, and when the old bushes are being pruned in the winter put a number of the shoots into this, 1 foot apart or so. These cuttings need not be more than 1 foot long, and the buds should be rubbed from the bottom half of each. In spring they will soon root and begin to grow, and as the shoots are formed it is best to reduce them to one or two, which should be trained straight up the wall and kept so on the short spur system. When in leaf and fruit they look well and improve the appearance of bare walls very much. Treated in this way, Currants are more fruitful than when allowed to run up tall in bush form. Against walls they fruit all the way from bottom to top; but some young standard bushes I once allowed to run up without pruning for two years only produced a few leaves and bunches at the end of each shoot, and all the bottom wood remained bare. C.

Preparing Vines for forcing

In cleaning and preparing Vines for forcing it is the usual practice of many to strip off a large quantity of loose bark from the rods, and sometimes to scrape them over with a knife, so that they have more the appearance of walking sticks than living Vines. Having undergone this process they are generally painted over with a mixture of sulphur, soot, lime, Tobacco juice, and soft soap, and a little clay or cow manure is added to make it stick. This cleaning and dressing are intended to destroy any insects or their eggs which may be on the Vines. The removal of the bark would doubtless prove effectual in destroying many, but it would be injurious to the Vines. Such a remedy would, therefore, possibly prove as bad, or worse, than even the presence of the insects themselves. In cases where Vines have been badly infested with mealy bug, and treated as above, I have noticed that as soon as a brisk heat has been applied to the house the bugs have emerged from parts that escaped the eye of the operator at the time of cleaning. Having been troubled with mealy bug on Vines to a considerable extent, I found it far the best plan not to remove the bark, but to take a medium-sized painter's brush, and, with a mixture of Gishurst's Compound or soft soap at the rate of about 4 ozs. to the gallon of soft water, thoroughly wash the rods, working it well into every crevice, and if this could be repeated on some wet days, when work outside could not be done, very few insects would be found to survive after such treatment. If the woodwork could not be painted it should be treated in the same way as the Vines, and the walls should be thoroughly washed with hot lime. If the borders are inside, remove 2 inches of the surface soil and replace it with fresh loam and manure in equal proportions, with an addition of a few ½-inch bones. Should the border be outside, of course it will be quite as necessary to thoroughly cleanse the floor of the house. I also treat Peach trees in a similar manner, but greater care is necessary in using the brush, and the Gishurst or soft soap should not be so strong as that recommended for the Vines. Where Vines are infested with mealy bug, and have been treated as advised, it is necessary to keep a watchful eye on them through the season, destroying the bug as fast as it makes its appearance by touching each bug found with methylated spirit, thus preventing its getting into the bunches. R.

VEGETABLES

Cabbages for spring cutting

IT being the aim of the generality of growers to have heads ready for cutting as early as possible in spring, it follows that planting should be done without further delay, so that the plants may get good root hold before severe weather is likely to occur.

This crop usually follows Potatoes or spring-sown Onions, so that the ground requires no special preparation beyond clearing and levelling in the first instance and forking the plot over in the second case to loosen the hard surface and bury the weeds. If a plot has to be specially prepared it should, of course, be well manured and dug beforehand. In gardens where clubbing is apt to be troublesome the precaution of applying a dressing of lime before planting should not be neglected. This, after being scattered over the surface, may either be raked or pricked in. In cases where the soil is known to be somewhat poor a dressing of a suitable artificial manure, or even common soot, will benefit matters considerably, and enable the plants to get away quick after being planted.

The young plants are this season in a forward condition, very vigorous, and just the right size for transferring to their permanent positions. When a good-sized plot has to be planted it is best to make a start at one end with the earliest variety which finds favour, and follow on with others in rotation to form a succession, and finish up with the latest. The advantage of adopting this rule is that when garden space is limited the ground can be cleared as cutting proceeds, and it thus becomes available in good time for the next crop. For instance, if a variety like Harbinger is put out first, then Favourite or Early April, following with Flower of Spring and finishing with Imperial or a similar variety, they would follow on one after the other, and not only would the ground be cleared in regular order, but the crop would then be a proper successional one.

The first-mentioned variety being small may be planted as close as 15 inches in the rows and the same between the latter when space has to be economised. April and Favourite require to be planted a distance of 18 inches apart all ways, and the others 2 feet, if the best results are wished for.

Should bright weather continue it may in many cases be necessary to afford water after planting until the roots get a grip of the soil.

Lettuces for spring planting

To make provision for a good stock of young Lettuce plants being available for planting out early next spring, a frame, or frames, according to the demand, should be filled with the young plants recently raised with that end in view. Prick these out 3 inches to 4 inches apart each way in good loamy soil, and after the plants have become rooted give them plenty of air and grow as naturally as possible, and afford protection only from frost, snow, and rain.

It is also a good plan to prick out a good number of plants at the foot of walls, hedges, or fences to succeed the frame-protected plants next season. The best sorts for the

foregoing purposes are Hardy Winter White Cos and Bath Brown Cos and All the Year Round of the Cabbage section.

Ripe Tomatoes in April

This valuable fruit is often required early in the year, so a few remarks may be a benefit to the cultivator. To obtain these fruits a sowing should be made in September.

Sow the seed thinly in a pan, covering them with a little finely-sifted soil. As soon as the young plants are large enough to handle pot them off singly into 2½-inch pots, placing them near the roof glass in a temperature of 55 degs. by night to 60 degs. and 65 degs. by day. By this treatment sturdy plants should result and be ready for the fruiting pots by the middle of December. Ten-inch pots are large enough, but if they cannot be given these just when they require a shift, they should be placed into 6-inch pots and then transferred into their fruiting-pots before they become root bound. Plants raised as mentioned should produce ripe fruit in April. The compost should be fairly rich, consisting of two parts fibrous loam to one of partially-decayed horse droppings, adding some charred soil and a sprinkling of soot. Prepare this compost several days before required and store in the house long enough to get warmed through.

When potting press the soil firmly about the roots, leaving sufficient space for subsequent top-dressings. Keep the plants to a single stem by taking out all side growths. To succeed these another sowing should be made in January. Avoid raising more plants than are required, as they only spoil by overcrowding. A. J. T.

Watford.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FRUIT

Pears falling

(E. A. M.).—Your Pears are affected with Pear-scab. Please see reply to "G." on page 544 of our issue for September 4th. This disease spots and disfigures the fruits and also hardens the skin, but it does not cause the fruits to drop off the tree. The real reason of your Williams Bon Chrêtien dropping was that they were almost ripe and required picking. The season of William Pears is from August to September, according to district. We should not consider your district a very late one. Another season you should follow the advice given to "G.," so that your fruits are kept clean. Try your fruits occasionally from the beginning of August onwards, and when they leave the tree easily they should at once be gathered and stored until ripe. You can lengthen the season of William Pears by picking half the crop seven days before the other half. Your Cherry tree on the wall is attacked by wither-tip. For control methods please see reply following to "E. M. C." on wither-tip and brown-rot of Plum. This disease also attacks Cherries, and the control measures are the same in each case.

Wither-tip and brown-rot of Plums

(E. M. C.).—Your Plums are affected with brown-rot, which is caused by the fungus Sclerotina cinera. Its former name was Monila cinera. This fungus attacks shoots, leaves, and fruit of the Plum. If you examine the tree from which you gathered the fruits you sent to us we think that you will find some of the tips of the shoots quite dead, and curved over in a very characteristic manner; probably, too, you will find that little bunches of leaves here and there over the tree are quite dead. If the disease was present in the fruit last season some of the old mummified Plums will be still on the trees unless they have been removed. It is a feature of this disease that many of the attacked leaves and fruit, and all the dead twigs, hang on the tree for at least a year after they have been killed. It is this diseased material that gives rise to the spores the next season which infects the new leaves, fruit and wood. In trying to get this disease under control you should endeavour to remove all the parts indicated above as being diseased, and burn them up at once. Pick off all the rotting fruit if any still remain on the tree. Do not neglect those that lie under the tree, and cut out all the infected wood and bunches of leaves. The control of this disease depends mainly upon the cutting out of diseased material, and the work is best done during the summer months. The best spray fluid to use for this disease has been found to be caustic soda 1 lb., soft soap 1 lb., water 10 gallons. The time to use this spray is just before the buds begin to swell in the spring. Watch carefully for the first signs of attack next season, and again get the diseased portions cut out and burned. The neglect of not thinning the fruit has had nothing to do with the spread of this disease, beyond, of course, allowing the disease plenty of scope to spread.

Coral spot on Apple trees

Would you please name this disease, the cause of it, and how to get rid of it? The bark is Apple. J. H. M.

[The portions of bark sent are bearing the pustules of coral spot, caused by the fungus Nectria cinnabarina (Fries.). This fungus is sometimes saprophytic and sometimes parasitic—*e.g.*, it is one of the most common fungi present in many kinds of dead wood. It can be easily found on old Pea sticks, gate posts, etc. It often gets into Red Currants through dead snags of wood, and after growing all through the dead tissue begins to penetrate the living wood. When it does this the bushes are often killed outright. The fungus often attacks Apples in much the same way. It gets in through dead spurs and often spreads into the healthy tissue, and will sometimes kill whole trees or branches. Without seeing your tree we cannot say whether the fungus is really responsible for the dead portions of your tree, or whether something else has killed the wood a coral spot came along afterwards. not know of any other method of cont cept cutting out the portions affected. cut out the cankered portions do healthy wood you should be able to get the disease. Coat over the cut portion grafting wax when you have complet work of removal.]

Coe's late Red Plum

(O.).—This is a very useful variety very late Plums are required for kitch and when grown and ripened on a w even good for dessert. If netted up a secure from the attacks of insects it wi very late on the tree.

Preparing ground for fruit trees

(D. J.).—The ground should b trenched and liberally manured with well-decomposed farmyard manure. garden which has produced good veg will also produce good fruits, but takin consideration the enormous weight c taken off the ground, it is not reason suppose that the ground will continue such crops unless mulching or top-d with manure is resorted to.

Silver leaf

(E. M. C.).—Enclosed in your box Peach-shoot which was infested with leaf, caused by the fungus Stereu pureum. If only certain branches are ted you should cut them out to the mai and burn. Paint over the wounds mad white-lead paint. If the whole tree is the safest plan would be to grub it burn. The caterpillars enclosed are th the scalloped Hazel moth. Please see to W. Preston on page 558 of our iss September 11th.

VEGETABLES

White fly on Tomatoes

(Mrs. B.).—Your Tomatoes are undo badly attacked by white fly. The sticky material which is present on the is due to one of the sooty moulds whic as a saprophyte upon the honey-dew by the white fly. When white fly gets hold upon plants in a greenhouse a appear to have done in your case it is cult matter to control them. There a ways of controlling white fly—viz., gating with tetrachlorethane, or c The first is rather costly, but it is ea fairly safe to use. The latter is very but it is a dangerous operation in perienced hands. Much disappointme been caused in the past with both above insecticides, because neither ol will kill the egg stage, so that it is sible to kill off the whole of the white f one fumigation. At this time of the least 25 days should elapse between t and second fumigations; even then, b there is so much overlapping betwe generations, some of the eggs usually the second fumigation. If your hous small we should advise you to use tetr ethane, which you can obtain from an horticultural sundriesman, and you m low the instructions sent with the ma If your houses are large you shou calcium cyanide, which, although dangerous to use, is very much cheaper should be careful to notice what pla injured by the fumes of tetrachlorethan to remove such plants from the house using the fumigant.

White rot of Onion

(W. A. Wood).—The Onions sent affected with white rot of Onion, wh caused by the fungus Sclerotium cepiv This disease is extremely troublesome

dens all over the country. The fungus the disease forms resting bodies, which remain in the soil. If Onions vn in the infested soil the next season ome infected. If, on the other hand, her crop is grown the nesting bodies to remain dormant, and to wait for Onion crop. How long they can re- rmant is not known. Up to the time of there is no known effective method of the nesting bodies in the soil. We dvise you to try an entirely new site Onions next season, and to keep away from the site where they have owing this season for as long as pos- ome varieties of Onions seem to be ible to white rot than others. Try A1 or Up-to-Date for spring work, nt Zittau for autumn sowing. The of your Onions appears to be correct. uld give the whole garden a good of quicklime this autumn. It will y reduce the clubroot of Cabbage.

o rust

iffiths).—Your Tomatoes are infected mato rust, which is caused by the Cladosporium fulvum. This disease lt to control once it gets a hold upon its. We should advise you at this he year to cut out and burn as much isease as you can find. When your finished remove every bit of Tomato you can and burn it. Spraying nts with a weak solution of liver of now would help to check the further f the disease. During the winter give se a thorough clean out, washing the d woodwork and whitewashing the k. If you plant Tomatoes next year sharp look out for the disease, and u find it pick off the infected leaves y the plants near by with the above e. In fact it would be well to antici- disease and spray before it appears. ally commences in certain parts of se first—usually the warmest end. ge is the part attacked first, and at e the rust spots are very small. As s become older they increase in size en in colour.

GREENHOUSE

s and Gloxinias unhealthy

C.).—The injury to your Begonias xinias is due to thrips and the mite, both so small that it is very to see them. The damage is done leaves are young, and as the leaves trouble develops. A too dry atmo- the chief cause of the trouble, and remedy is frequent vaporising and ing a fairly moist atmosphere. It is attempt to restore any plants whose e in the condition of those you send. plan will be to dry off the plants, up and burning all the affected

Cyclamens from seed

P.).—August is the best month to of these in, but if done now it will late. There is nothing like shallow which to sow the seed, and the soil a fine, free, sandy one. The pans placed on a gentle bottom heat if , and a piece of glass should be er each pan. The seed, if full and ned and kept moist after sowing, minates, and when the plants are ugh to have put forth three leaves should be pricked off into 5-inch ut a dozen plants in a pot, in a rich, . The pots should be well drained. its should afterwards be potted on required and grown on in a genial throughout the winter and spring.

Material for propagating frame

Having just finished constructing a deep propagator at one end of my greenhouse (enclosing the hot-water pipes) I am undecided as to the best propagating material to use for the purpose of conserving the heat. Will you advise me on the following:—(1) What to use. (2) Where best to obtain it. (3) What would be the cost of, say, enough to fill 2 cubic yards of space. (4) Should it be put in loosely or tightly. F. WHITCHURCH.

[(1) Cocoanut fibre. (2) Willis Bros., Harpenden, Herts, or Wm. Wood and Sons, Taplow, near Maidenhead. (3) The cost is about 7s. per bag of 3 bushels, and there are about 9 bushels to 1 cubic yard. (4) Tolerably firm but not made solid. For plunging pots in, and cuttings generally, no such depth of material is necessary. All you require is to fix a grating at about 16 inches below the sashes. Slates placed upon supports answer quite well, and thus you have a platform upon which to place your plunging material. The latter may be of Cocoanut fibre, or sand will answer quite well; but whatever is used a depth of 6 inches or 8 inches is quite sufficient. The advantage in using slates for a platform is that they retain the heat for a considerable time, even when the outside temperature is down from boiler troubles.]

FLOWER GARDEN

Pæonies failing

(E. M. C.).—There was plenty of saprophytic fungi present on the Pæony foliage sent to us, but we could find nothing that would account for the foliage failing so early. The late frost mentioned in your letter would certainly cause the trouble. We should advise you to cut off all the dead foliage and burn it up out of the way. Watch carefully next season and if the foliage begins to go again send us some more specimens. If the foliage is still alive it gives us a better chance to determine the cause of the trouble.

Black spot on Rose foliage

(E. M. C.).—The one Rose-leaf sent in your parcel was affected with black-spot. Please see reply to Mrs. Basil on page 575 of our issue for September 18th.

Cosmos bipinnatus

(John Reade).—This is the name of the specimen you send. In some gardens this half-hardy annual refuses to bloom. There are now early-flowering varieties, the one you send being evidently one of these. The non-flowering of the type lies in not having the plants strong enough to allow of their flowering while summer weather is yet with us. By raising the seed early in March and growing on the resulting plants after they have been pricked off into boxes or potted singly they make nice bushy plants by the third week in May or at planting time.

Plants for a grave

(Sussex).—Any of the green Stonecrops would do. Before you plant the Sedum put in some Crocuses, Grape Hyacinths, or Winter Aconites, breaking up the Sedum afterwards and planting in patches all over the empty space. The Sedum will make a fine carpet for the bulbs and will be effective when in bloom. For the summer white Pelargoniums planted among the Sedum should answer.

TREES AND SHRUBS

Wistaria failing

(E. M. C.).—We have carefully examined your specimen of Wistaria and can find nothing to account for the plant going yellow. We are inclined to think that the root action is wrong. If the roots have got down into very wet subsoil it might cause the plant to fail, but from the appearance of the specimen it appears more likely that a portion of the root-run is very dry. Is the plant growing on a wall? If so, make sure that the soil is not too dry at the base of the wall. You should certainly try a dressing of sulphate of iron, at the rate of 2 ozs. per square yard. Spread the crystals on the top of the soil and lightly fork them in. Sulphate of iron is best applied in spring. We should think that Lupins and climbing Roses going yellow is due to some other cause. If they do so next season send us along some specimens early in the season and we will try and find out what is the cause of the trouble.

Beech tree in poor condition

(T. W.).—Judging from the pieces of bark you send us there is no doubt that the tree is dying, and there is nothing you can do to revive it.

Eggs on an Oak leaf

(E. M. S.).—The little egg-like bodies which you found on the Oak leaves are not eggs, but the galls formed by one of the gall-flies (Neuroterus ostreus). There is a great number of galls found on Oak leaves, buds, etc., by various gall-flies belonging to the family Cynipidæ.

MISCELLANEOUS

Destroying Pearlwort

(A. B.).—The only thing you can do is to spud it out. Being an annual you ought to take care that it does not seed. In the case of the carriage drive the best remedy would be weedkiller, which you can get from any horticultural sundriesman.

Garden manures

(Rex).—In a general way you should remember that manures are divided roughly into two classes—(1) organic manures; (2) inorganic manures. A general supply of any organic manure will usually ensure good crops. Inorganic manures, on the other hand, will only ensure good crops as long as there is a supply of organic material left in the soil. Then again, most organic manures are known as complete manures because they contain a supply of three main ingredients required for plant food—namely, nitrogen, phosphates, and potash. Some inorganic manures contain only one kind of plant food, others are complete. Of the manures you have mentiond in your letter, farmyard manure and Hop manure are complete organic manures. Adco is a substance which is added to certain kinds of garden rubbish. Adco hastens the decay of the rubbish and also improves the rubbish from a plant food standpoint. Bone-meal is really an organic manure, but only contains one kind of plant food—phosphates. Clay's Fertilizer is a complete inorganic manure and may be used with every confidence provided your soil contains plenty of organic material. We will keep your query in mind for the coming winter.

The use of Adco

Would any of your readers who have used the manure made from cuttings of grass and Adco kindly tell me whether it encourages weeds? E. M. L.

Devon.

[There is no danger of encouraging the growth of weeds through the use of adcoised heaps of refuse if the heaps are thoroughly controlled. In collecting various refuse there is sure to be mature weed seeds among it. Those inside the heap are sure to be destroyed by the heat set up in fermentation. There is the possibility that some seeds on the outsides of the heaps remain dormant, and we advise taking a few inches off the top and sides of a heap about to be used and throwing it into the next heap.]

INDOOR PLANTS

Lachenalias (Cape Cowslips)

DURING August and throughout September is the best time to start these beautiful South African bulbs. The bulbs should be graded into sizes and potted into from 5-inch to 8-inch pots, according to requirements. They are also very effective if grown in pans or hanging baskets. Efficient drainage must be provided. They will be found to succeed best in a compost of fibrous loam and leaf-soil, and sufficient sand to keep the soil open. In

POTTING, the bulbs should be placed 2½ inches to 3 inches below the surface, surrounded by sand, and from 2 inches to 3 inches apart, according to the size of the bulbs. After potting they should be placed in an airy greenhouse or frame, on a bed of moist ashes. Give them plenty of air at all times, excluding frost, and at the same time avoiding cold draughts, as these will disfigure the foliage. Air should be given on all favourable occasions. The aim of the cultivator should be to obtain as sturdy a growth as possible. Give a little manure water about once a week, when the flower-spikes become visible, at the same time being careful not to allow this to get into the axils of the leaves or on the foliage. The strongest of these bulbs will produce from one to three flower-spikes, and if kept in a cool house will last in good condition for about two months. When the flower-spikes begin to fade gradually withhold water, placing the bulbs in full sun to ensure them being properly ripened. When the leaves have died down store away in a dry, frost-proof place until they are required for starting into growth again. Lachenalias are very useful for house and table decoration, and look well under artificial light. The following six varieties will be found to be among the best now grown:—Goldfinch, Leiden, Nelsoni, Rutland, Siam, and Thibet.

E. BAKER.

The Gardens, Garston Manor, near Watford, Herts.

——These are interesting as pot plants. They are a bit heavy-looking when cut, probably, yet are sometimes used for that purpose, and in the case of the Freesia new varieties varying in colour have lately been introduced, and very charming they are in both instances. Pots from 4 inches to 6 inches in diameter are large enough for the largest bulbs, while five to nine will be ample, according to size of pot, which should be clean and, above all, well drained, covering the bulb with ½ inch of soil. A mixture of loam and well-decayed leaf-soil, the former predominating, with a dash of soot and bone-meal, with sufficient sharp sand to ensure porosity, will answer for potting. Sort out the bulbs so as to have uniformity in each pot, and water in with a rose-can, keeping them in a shady position until growth appears, when move into a lighter frame with an ash base near the glass until frost threatens, when remove to the greenhouse shelf.

J. MAYNE.

Watering greenhouse plants

This is far more important than is usually allowed, for without the right method grievous damage can be, and often is, done. Generally speaking, no plants should be watered very early in the morning. When it is necessary to water only once daily it should be carried out about 10 o'clock. If another application is required, mid-afternoon, or even later, should be the time chosen. Houses should not be closed after watering, nor should water be spilt on hot pipes, causing steam. It is equally important that water be not slopped about either on the staging or floors of houses, unless, of course, essential to the well-being of the plants, such as Cucumbers.

Water from taps should, as far as possible, be avoided, rain-water being more natural, and even this should be a few degrees warmer than the atmosphere of the house. It is fatal to give plants cold water.

Considerable havoc is wrought by inadequate watering on the one hand and flooding on the other. Newly-potted plants, for example, should be given an ample supply immediately after potting, and then treated very carefully so that the roots be not harmed by drenching. A rose should be used where the plants allow of it, for it is most harmful to apply water "all of a rush" from a water-can spout. One so often sees Tomato plants in pots with their roots exposed simply through the application of water in this way. The undue withholding of water from any plant is equally harmful, and it is imperative that regular watering be done, as there is nothing so damaging as spasmodic watering. Cucumbers should receive liberal spraying two or three times every day, and more often on very sunny days, for their success depends almost entirely on a moist atmosphere. T iniquitous system of spraying all and sa plants in conservatories cannot be too h condemned. I have seen in one of the establishments in Hertfordshire Cr Azaleas, Begonias, Chrysanthemums other flowering plants simply ruined b idiotic spraying. So, too, the meth cleaning conservatories. To throw down by the pailful, on flagged floo example, is in itself ruin to many plants in the house, but this is even when the hot pipes are beneath the floo gratings above them. Water slopped in such a case causes all sorts of diseas

Small bulbs for small bovs

It is a curious thing that very man who plant bulbs in bowls and pots for home decoration confine their att mainly to Hyacinths, Narcissi, and and seem to forget the claims of bulbous plants that are of service for small bowls and other receptacles. M us are considering what we shall put fibre we have recently obtained. May a word for little bulbs that give little and make very charming a room wh flowers appear. Such are Chionodox Scillas, Snowdrops, Crocuses, and Aconites. They should be got in early flowers are wanted for the new quartered in a dark place where it is that root growth may take place grad Where failure to bloom bulbs in pot fibre occurs it may generally be trac pushing them into heat before they made proper root growth.

MIDLAN

Freesias

No one having a greenhouse need hi about cultivating Freesias, as their re ments are far from exacting, and th artificial heat they are subjected to the the results. A few points must be s adhered to. These are supporting the growth with a few twiggy shoots or stick or two with bands of raffia to p the foliage being crippled, abundance of air, but avoiding cold draughts, feeding an approved stimulant twice weekly as as the flower sheaths can be seen, and allowing the plants to suffer from the of water after growth has once commi Green-fly will sometimes attack the fo but a light fumigation will dispel them. spider is liable to appear on dry shelv less lightly syringed daily during very weather.

J.

Ixias and Sparaxis

These are very suitable for pots, and t they lack the sweetness of Freesias atone for this by their bright colour length of time they continue to flowe Ixia being very serviceable for cutting. well grown by some of our market me should be afforded similar support adv for the Freesia.

J.

Treatment of Cinerarias

(C. O. T.).—Attend well to those wh rapidly filling the pots with roots, as a ficiency in the way of water will so far them as to cause the loss of their leaves, and when that happens, howev flowered they may be, they lose half beauty. Let the plants be looked over 10 days or so, in order to see that gre does not get a lodgment on them, or loss of leaf will be the result. If the be fumigated with Tobacco to destroy a it should be done lightly or the foliage liable to injury. The safest course watch closely, and immediately a pl affected with either green-fly or thrips gate with XL All.

The wonderful collection of vegetables for which Messrs. Sutton and Sons received a Gold Medal and the congratulations of the Council at the Royal Horticultural Society's recent Vegetable Show

THE ROYAL HORTICULTURAL SOCIETY'S GREAT AUTUMN SHOW

great autumn show of the Royal icultural Society was held at the and Park Hall, London, W., on r 21st, 22nd, and 23rd. It was a eral show, characteristic of the best n nurseries and gardens at this sea- ere were grand displays of Dahlias, hemums, Roses, Delphiniums, nas Daisies, and even one group of as. Summer and autumn flowers wn side by side, interspersed with inted trees and shrubs and a great f ornamental berries.

ncheon on the eve of the show Lord ne, President of the Royal Horticul- iety, paid a touching tribute to the eorge Holford, who for many years n prominently associated with the n the Council of which he served. hibitor of Orchids, Hippeastrums, as he has had no equal. Lord Lam- oke also of rare and magnificent the beautiful pleasure grounds at rt, and he referred to Sir George s a great example; one of the most and genial personalities he had ever one who would be greatly missed hibitor at the Royal Horticultural meetings.

h the exhibits on this occasion were hole of a very high standard, there ne group that stood out from all the cial reference should, however, be ngelmann's Carnations, McGredy's obbie's Dahlias, Hillier's trees and unyard's fruits, Forsyth's Chrysan- Jones' Michaelmas Daisies, and ardy plants and Lilies. We were pressed by these exhibits, but they nbeatable, and to the astonishment s and the disappointment of ex- he Coronation Cup for the most is exhibit was not awarded.

opinion of the Council the exhibits casion, and for the first time in the this event, were not of a sufficiently dard. It is with mingled feelings ook back upon the Holland Park recall the winners in past years :—

L. B. May & Sons	1919 Messrs. Armstrong & Brown
ames Veitch &	1920 Messrs. Allwood Bros.
ander & Sons	1921 Messrs. R. Wallace & Co., Ltd.
. Wallace & Co.	1922 Messrs. G. Bunyard & Co. Ltd.
Blackmore &	192 The Hon. Vicary Gibbs
Perry	1924 The Hon. Vicary Gibbs
ffered owing to	1925 Messrs. Dobbie & Co., Ltd.

IDS AND GREENHOUSE FLOWERS

er of beautiful hybrids of Cattleya e shown both by Messrs. Cowan and Black and Flory, while the Cypripedium Fairieanum was one ures of the Orchid group shown by tuart Low and Co.

nations from Allwood Bros. were l well arranged, while the group of oured Crotons and other foliage Mr. A. P. Brandt, of Bletchingley, pleasing.

The new and promising Carnation Ruby Glow was shown by Stuart Low and Co., while the pick of Engelmann's fine group included Laddie (pink), Saffron (yellow), Dorcas (deep crimson), and Evelyn (a new rosy-pink).

The tree Ferns from Russell, of Richmond, gave quite a tropical touch amid a feast of colour, while Blackmore and Langdon's Begonias were more gorgeous in colour than ever. The latter exhibit contained the new single Begonia crispa marginata, with golden-coloured crimped petals and crimson Picotee edge.

Alternating groups of Lilies, Gladioli, China Asters, together with Ferns and greenhouse flowers, were admirably arranged in a circular group by Messrs. James Carter and Co. This group contained well-grown specimens of the very handsome Clerodendron fallax, with heads of orange-scarlet flowers.

HARDY FLOWERS

A particularly fine purple Phlox named Border Gem was shown by Messrs. E. F. Fairbairn and Sons, Edentown Nurseries, Carlisle. We thought it one of the finest novelties among hardy flowers, and it has been awarded honours both at Southport and Shrewsbury this year. The variety Vivid was also well shown. The new Aster Barr's Pink, illustrated and described on page 584, was well represented in various exhibits. It was outstanding as the finest pink variety of the Novæ Angliæ section. It was shown in good form from the Taplow Nurseries, and it was also conspicuous in the Michaelmas Daisy group by W. Wells, junr., of Merstham. Other notable varieties from Merstham were Wells' Favourite, the best rosy-pink in the Amellus section, Little Boy Blue, and Little Pink Lady. The new Gypsophila Bristol Fairy and the two Gentians Farreri and sino-ornata, both flowering well, were noted in the same group.

Lilies grown from Indian bulbs were admirably shown from Perry's Hardy Plant Farm, Enfield. There were fine examples of Lilium nepalense (rich sulphur-yellow with deep crimson purple, almost black, centre), and the very large, late-flowering Lilium sulphureum, syn. L. Wallichianum superbum. Lilium regale, cut from the open, and the lovely Watsonia Adelaide were worthy of special mention in this interesting group.

Mr. Clarence Elliott had a rock garden of Westmorland stone planted with some unusual Alpines and small Conifers. There was not much room for the making of rock gardens, but small examples suitably planted were put up by Lt.-Col. Gavin Jones, of Letchworth, Maxwell and Beale, Broadstone, Dorset, and Mr. W. E. Th. Ingwersen, who is making progress at East Grinstead.

Mr. Isaac House's Scabious were the source of great attraction. As so many people experience difficulty in growing them it should be pointed out that these varieties of Scabiosa caucasica must have good drainage, especially during winter. As Mr. House explained, the species is a mountain plant from the Caucasus. It is hardy and must not be treated as a valley plant. It will not tolerate excessive moisture under any circumstances.

Mr. J. L. Gibson was not in his usual good humour, as his best Gladioli had been stolen from his nursery by a thief in the night. However, he was able to show good Delphiniums, the spikes being cut from spring-planted clumps from which the first spikes had been removed.

Mr. F. G. Wood, Ashtead, had many hardy plants, among which we noted Veronia akansana, with purple heads of Eupatorium-like flowers. He was also showing in flower Fuchsia pumila, Primula capitata Mooreana, Verbena chamædrifolia, and the beautiful but scentless Cyclamen neapolitanum and its white form.

Messrs. Sutton and Sons made a big display of Zinnias, the exhibit taking the form of a large circular bed 22 feet in diameter, comprised of a number of panels of various types of these valuable flowers. The plants, seed of which was sown in the first week in April in a cold frame, were grown without heat or any special attention, and gradually hardened off by the end of May. The seed may also be sown in the open ground, and this method will be appreciated by the many thousands of garden lovers who do not possess the necessary glass to bring them to perfection at an earlier date.

The giant double varieties, of many colours, are perhaps most popular for cutting, while for beds and borders the double, double Cactus-flowered, double dwarf, and miniature Pompon are of exceptional value, especially in a very hot season.

DAHLIAS

Groups of Dahlias in this huge hall were largely responsible for the glorious array of colour which did so much to make this vast show bright and attractive. All the well-known Dahlia specialists were in evidence with large and striking groups, in which the many types of the flower which now find favour were exhibited.

A wonderful group was set up by Messrs. Dobbie and Co., Edinburgh, which must be accorded the premier display. Here were to be seen Cactus, large-flowered decorative, Pæony-flowered, Collarette, Pompon, and other interesting types of this richly-coloured subject. A few of the better sorts were Cactus Amos Perry and Mary Purrier; large decoratives Mr. H. C. Dresselhuys, Arthur Twichett, and President Wilson; miniature-flowered Pæony Our Annie, Joyce Healy, White Dot, Dazzle, and Lucina; and Collarettes Glengarry, Clyde, Taskar, Linnet, Arran, Dunrobin, and Lochnagar—truly a grand exhibit. Mr. H. J. Jones, Ryecroft Nursery, Lewisham, had an interesting display in which were seen tall stands and baskets filled with an up-to-date selection of the more noteworthy varieties as Jhr. G. F.

Van Tets, Jersey Beauty (grand), My Lady, and a host of other decorative novelties.

A table group of well-grown Dahlias was shown by Mr. H. Woolman, Shirley, near Birmingham, arranged in stands, etc., in most imposing fashion. The best large decoratives were Mrs. C. Dresselhuys, Secretary Voors, Elinour Vandervaer, Mabel Lawrence, Berengaria, Henry Carter, Fireflaire, Porthos, and others; Cactus Mrs. W. Jackson, Sydney Jones, Ballet Girl, Doreen Woolman, Richard Troughton, and Joyce Goddard (a beauty).

The Dahlias from Mr. J. T. West, Brentwood, are always worthy of inspection, and, as usual, he had a most interesting display. This grower has raised many very fine Dahlias, such as Dazzle, well represented on this occasion. Other small-flowered Pæony Dahlias in this group were Chic, Lilian C. Page (grand orange), Sunrise, Beacon, Winter Sun (glorious), and Evening. There were also beautiful Cactus, large decoratives, and charming small-flowered decoratives such as White Tip, Bobbie, My Fancy, Brilliant, Pink Pearl (a gem), Shining Sun, and Snow Bunting, all combining to make a fine exhibit.

Manchester growers were well represented by a very handsome group set up by Messrs. Dickson and Robinson, who excelled with a somewhat unique arrangement in which baskets were suspended above the group, in which were stands arranged effectively with all the better types of the Dahlia in pleasing variety. Good Collarettes were Arran, Scoot, Glencoe, Military Medal, Scarlet Queen, and Goldendale, and large decoratives such as President Wilson, Insulinde, Augustinus, Enchantress, Turenne, Pax, and Ben Lomond. All the different types were beautifully represented in this splendid exhibit.

Mr. J. B. Riding, Chingford, well sustained his reputation as a leading Dahlia expert with a large, bright, well-arranged exhibit of standard sorts and sterling novelties. The various stands of Dahlias were arranged artistically and in a manner that all the flowers could be inspected with ease. Some of the more noteworthy large-flowered decorative sorts were Millionaire, Kitty Dunlap, La France, Geo. Mastick, Menny Carlee, Talisman, Jersey Beauty, Paul Marshall, Tommy Atkins, Mabel Lawrence, Rookwood, Andreas Hofer (charming Cactus-like), Couronne d'Or, Cigarette, Canary, and quite a host of other good things. Those on the lookout for the better novelties would find them here.

Messrs. W. Cutbush and Son, Ltd., Barnet, had a series of vases of some of the more noteworthy Dahlias in their group of miscellaneous flowers. Such sorts as Marie Houtman, Porthos, Polar Bear, Gloire, da Stamhuis, Raspberry (unique), Artis, Delice, and Secretary Voors were the better decorative sorts worthy of mention.

The show would be incomplete without a display of Dahlias from Mr. Chas. Turner, Slough. As usual, he showed a table group of beautiful Dahlias in which many types were represented. We liked Glut (small decorative), Primrose Queen, Mesha, Peggy, Vesuvius, and Camille Frachon (Pæony-flowered), and a number of pretty Stars and Pompons.

Messrs. James Stredwick and Son, St. Leonards-on-Sea, made a unique display of Dahlia blooms of high quality, which is quite characteristic of groups set up by this firm. Large decoratives were well represented by Berengaria, Daily Mirror, Alan Cobham, Evelyn Hancock, Titan, Josephine Adair, and Hyde Park Beauty. Cactus Dahlias, for which this firm are famous, were well represented by such sorts as Thos. Want, Mary Segar, Mrs. Harvey, G. H. Barlow, Mrs. A. T. Barnes, and Rev. H. C. Weaver. With the aid of New Zealand Flax a very pretty effect was gained.

Messrs. Carter Page and Co., London Wall, E.C., put up a capital exhibit of Dahlias of many types and varieties, utilising stands, vases, and bowls in which the best sorts for the garden were freely displayed. This garden side of the Dahlia is studied very carefully by this firm, so that the sorts represented by them were just what should be grown by garden lovers. Dazzle, Denys, Nutfield Priory, Mrs. Skevington, Chrissie, Fairy Charlotte, Daydream, and Norah Bell were a few of the better small-flowered Pæony sorts. Of course, there were other types exhibited.

A most attractive exhibit was staged by Messrs. Jarman and Co., Chard, remarkable for the freshness and brightness of the flowers, set up in stands, baskets, and vases most attractively. Emma Groot, Barbara Jacobs, Jubilee, Vunbaak, Coronach, La Lorraine, Lenny, Mr. H. C. Dresselhuys, and Secretary Voors were the better large-flowered decorative sorts, and Cactus sorts were beautifully represented by Edgar S. Jackson, Mary Purrier, Champion, A. E. Amos, and Sydney Jones—a really fine exhibit. A few stands of Dahlias were also shown by the Central Garden Suppliers, Kenton, Harrow.

Messrs. W. Treseder, Ltd., Cardiff, exhibited Dahlias in splendid form and condition, showing the more popular types in charming variety. We had a preference for the large-flowered decoratives and the small-flowered types of this flower. Unfortunately this exhibitor had not named his flowers when we were noting this group.

CHRYSANTHEMUMS

There were several exhibits of Chrysanthemums of outstanding merit, which contributed in no mean degree to the attractiveness of this fine show.

Messrs. Keith Luxford and Co., Harlow, Essex, had a very large exhibit of early-flowering varieties, disbudded and undisbudded, in which were shown standard sorts and several excellent varieties. Disbudded varieties were excellently represented by Pink Profusion, J. Bannister and its parent, Perle Chatillonaise, September White, Armorel, R. A. Roots, Cranford, Elsenham White, Almirante, Belle Mauve, and others. The better undisbudded sorts were Cranford (a glorious yellow), Cranford Cream, Auburn Beauty, Phœnix, Harvester, Mary Mason (mauve-pink), Messrs. Mattie (yellow), Horace Martin, Lichfield Peach, and J. Bannister. This was a very handsome and striking exhibit.

Mr. J. W. Forsyth, Putteridge, Luton, also set up a grand group of disbudded and undisbudded Chrysanthemums, large masses of the respective sorts making a striking effect. Pink Delight, R. G. Collicot, Almirante, September Glory, Hollicot Yellow, Bronze Early Buttercup, and September White were the better disbudded varieties. There were also masses of free-flowering sprays of such varieties as Phœnix, Betty Spark, Roi des Blancs, Mrs. Jack Pearson, and Harvester among others. The group was nicely finished.

Mr. W. Yandell, Maidenhead, exhibited a table group of early Chrysanthemums in baskets and stands, showing Dick Barnes, Mrs. J. Pearson, Dorothy Ashley, Goldfinder, Harvester, Almirante, Pink Delight, Phœnix, Red Almirante, and September Glory satisfactorily.

Messrs. Daniels Bros., Ltd., Norwich, set up a few stands of Chrysanthemums, showing Roi des Blancs, Harvester, Debutante, September Glory, and September White.

Quite a number of new Chrysanthemums were placed before the Floral Committee of this Society on the 21st inst., when the varieties Madeleine, Janet Wyber, and less, described in detail in the report National Chrysanthemum Society's Committee, each received an Awar Merit.

OFFICIAL LIST OF AWA

WIGAN CUP for the best exhibit of Roses.—S. McGr Son.

SHRUBS.

SILVER CUP.—Hillier and Sons.

SILVER GILT FLORA MEDALS.—J. Cheal and Sons, G. I J. Waterer, Sons, and Crisp, Ltd.

SILVER GILT BANKSIAN MEDALS.—A. Charlton and Sc lamby's Nurseries, R. C. Notcutt.

SILVER FLORA MEDALS.—Fletcher Bros., Ltd., Or Nurseries Co, Maxwell and Beale.

SILVER BANKSIAN MEDAL.—J. Klinkert, for Topiary.

FLORA MEDAL.—Harrods, Ltd., for Bay, Box, an Trees.

BANKSIAN MEDALS.—J. C. Allgrove, for Berried S Robert Green, Ltd., for Bay Trees.

GLADIOLI.

SILVER GILT BANKSIAN MEDAL.—Austin and McAslan

SILVER FLORA MEDAL.—Alfred Edwards.

SILVER BANKSIAN MEDALS.—R. H. Bath, Ltd., Lo Gibson.

BANKSIAN MEDALS.—Orpington Nurseries Co., Daniel Ltd.

CARNATIONS.

SILVER CUPS.—Allwood Bros., C. Engelmann, Ltd.

SILVER BANKSIAN MEDAL.—Stuart Low and Co.

FRUIT.

GOLD MEDAL.—G. Bunyard and Co., Ltd.

SILVER GILT HOGG MEDAL.—Bardham Nurseries, Lt

BRONZE HOGG MEDAL.—Daniels Bros., Ltd.

MICHAELMAS DAISES, ETC.

SILVER CUPS.—J. W. Forsyth, for Chrysanthemums H Jones, for Michaelmas Daises and Helianthus.

SILVER GILT FLORA MEDALS.—K. Luxford and C Chrysanthemums; W. Sydenham, for Michaelmas Dai

SILVER GILT BANKSIAN MEDALS.—E. Ballard, for Mic Daisies; Barr and Sons, for Michaelmas Daisies; W. Y dell, for Chrysanthemums and Violas.

SILVER FLORA MEDAL.—T. Bones, for Michaelmas Di

FLORA MEDAL.—Maytham Gardens, for Michaelmas

BANKSIAN MEDAL.—G. Bunyard and Co., Ltd., for M mas Daisies.

ORCHIDS.

SILVER GILT FLORA MEDALS.—Black and Flory, Co Co.

SILVER GILT BANKSIAN MEDAL.—Stuart Low and Co.

CACTI.

FLORA MEDAL.—S. Smith.

GREENHOUSE PLANTS.

SILVER CUPS.—A. P. Brandt, Esq., for Stove and Gree Foliage Plants; L. R. Russell, Ltd., for Tree Ferns an Foliage Plants.

SILVER GILT FLORA MEDALS.—Stuart Low and Co.; a more and Langdon, for Begonias.

SILVER GILT BANKSIAN MEDAL.—John Peed and Son.

MIXED GROUPS.

SILVER GILT FLORA MEDALS.—M. Prichard and Sc Herbaceous Plants; R. Wallace and Co., Ltd., for r Herbaceous and Bulbous Plants; J. Carter and C Lilies, Gladioli, and other Flowering Plants; Amos for Hardy Ferns and Bulbous Plants, G. Jackman a for Herbaceous Plants and Clematis; Clarence Elliot for Rock Garden; Gavin Jones, for Rock Garden Pla Dwarf Shrubs; Maxwell and Beale, for Rock Garden and Dwarf Coniters.

SILVER GILT BANKSIAN MEDALS.—Amos Perry, for e ceous and Bulbous Plants; L. R. Russell, Ltd., for Cha W. E. Th Ingwersen, for Rock Garden Plants and Dwa fers; Blackmore and Langdon, for Phloxes and Delph Hewitt and Co., Ltd., for Delphiniums; E. F. Fairba Son, for Phloxes; John Forbes, Ltd., for Phlox Pe stemons, and Dahlias; James Macdonald, for "Gra-s G Lil

SILVER FLORA MEDALS.—W. Wells, Jun., for Herb Plants; F. G. Wood, for Rock Garden Plants and Shrubs; Isaac House and Son, for Scabious and Knip

SILVER BANKSIAN MEDALS.—W. Artindale and So Herbaceous Plants; R. and G. Cuthbert, for Cif Lilies, and Nerines; R. J. Case, for Pelargoniums a baceous Plants; B. Ladhams, Ltd., for Lobelias and Plants.

FLORA MEDALS.—Bakers, Ltd., for Herbaceous G. Bunyard and Co., Ltd., for Herbaceous Plan Dahlias; J. Waterer, Sons, and Crisp, Ltd., for Her Plants; W. H. Simpson and Sons, for Antirrhinums, M mas Daisies, etc.

BANKSIAN MEDALS.—Bowell and Skarratt, for Herb Plants; Sutton and Sons, for Zinnias; H. Hemsl Shrubs, Dahlias, and Herbaceous Plants; G. Gibson for Herbaceous Plants: Central Garden Supplies, fo Garden Plants; W. H. Rogers and Son, Ltd., for Herb and Rock Garden Plants.

DAHLIAS.

GOLD MEDAL.—Dobbie and Co., Ltd.

SILVER CUPS.—Dickson and Robinson, Jarman a H. J. Jones.

SILVER GILT FLORA MEDALS.—J. B. Riding, J. Str and Son, J. T. West, H. Woolman.

SILVER GILT BANKSIAN MEDAL.—Carter Page and Co.

SILVER FLORA MEDAL.—W. Treseder, Ltd.

BANKSIAN MEDAL.—C. Turner.

ROSES.

GOLD MEDAL.—S. McGredy and Son.

SILVER GILT FLORA MEDAL.—T. Robinson.

SILVER GILT BANKSIAN MEDALS.—Alex. Dickson an Ltd., John Mattock, George Prince.

(Continued on page xi.)

GARDENING ILLUSTRATED

82—Vol. XLVIII. OCTOBER 2, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

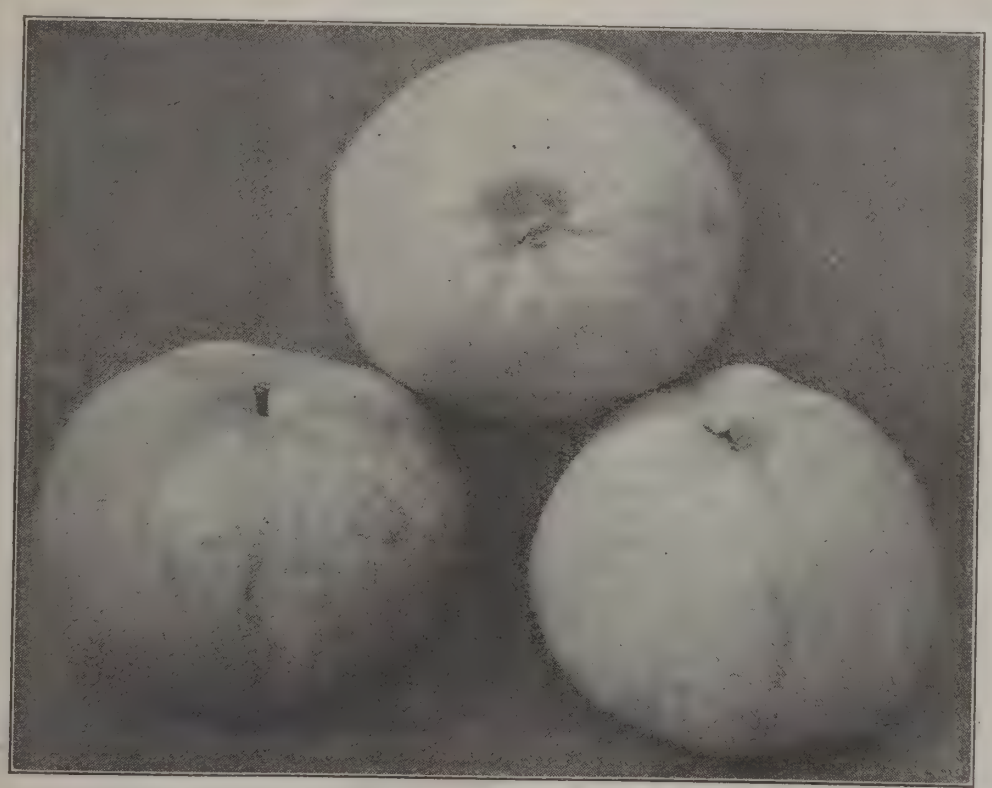
INDEX—Illustrations in Capitals

SEUM ... 596
lanuginosa 600
Watkinsi 600
GLAUCO- 600
white Jap-
ning pink 594
not flower- 604
the 593
LANE'S
ALBERT 593
AMELLUS
ORGE ... 595
DOPSIS
NA 596
Biennials for town gardens 599
Buddleia variabilis seedlings 604
Bush fruits: Propagation by cuttings... 606
Campanula Hallii ... 601
Carnations, border ... 603
Carnations, Tree ... 604
Celsia Arcturus 603
Ceratostigma Willmottiæ 594
Chrysanthemums for cutting... 598
Clematises which are hardy 596
Clematis tangutica ... 597
Dahlias, the newest... 600
Flowers, butterflies and 595
Flower seeds, saving 603
Fruit tree planting ... 606
Fruit trees, grease-banding 593
Fuchsias, mealy-bug on 604
Gladiolus seed, sowing... 604
Gloxinias, propagating... 604
Gooseberries and Currants, late 606
Golden oriole, the ... 595
Greenhouse, plants in a cold 604
HEATH GARDEN, IN THE 597
Heliotropes and Verbenas, striking ... 604
Hydrangeas, blue ... 595
Lavender back, cutting 604
Lavender, dwarf ... 594
Leaf-mould 601
Lilium for name and treatment 604
National Chrysanthemum Society 598
Olearia Gunnii 595
Ourisia coccinea ... 600
Ourisia macrophylla 600
Pear crop, the 593
Petrocallis pyrenaica 601
PLANT HUNTING IN SIERRA NEVADA 598
PLANTING, NATURAL 601
Polygonum Baldschuanicum, pruning ... 604
POPPIES, ICELAND 603
Prunus nana (the dwarf almond) ... 597
Roses, black spot on... 605
"Roses, some old" ... 594
Sagittaria japonica... 599
Saponaria officinalis 594
Shrubs, flowering ... 597
"Sit down and travel" 594
Spiræa Lindleyana ... 605
Succulents for the open air 595
Tritoma Uvaria ... 595
Tulipa sylvestris ... 594
Vallota purpurea, treatment of 604
Verbena chamædrifolia, propagating... 594
Veronica spicatarosea 600

Grease-banding Fruit Trees

The time for that most essential operation, namely, grease-banding, has arrived, and all the bands should be in position by the first week in October

alue of this precaution is immense eping trees free from the cater- of those wingless female moths ate in the soil. Naturally it will effect upon the wingless female moth, which pupates in the tree, ll it account for the majority of the male moths. In putting grease- a tree there are one or two details st not be overlooked. In the first most important that grease-proof used on every occasion in place of application of the banding mix- g to the danger of stopping up the breathing pores of the tree. These ich should be at least 5 inches t be tied absolutely flush with the —as otherwise the insects will rneath. If the trunks are too un- e levelled down the intervening ld be filled with clay or com- cotton vo bands rs better since the moth is carried ale when so many may be the first heir dead a bridge later ay safely er. The he bands circum- ut they at least m the en culti- at the nches to in the sh trees s. The Horticul- y carried experi- grease- naterials y, and phasising ssity of ll stan- d half- es, they at it is not an economic proposition with bush trees unless grown on grass. This is due to the fact that when these trees are grown on cultivated soil and only a small leg is provided the soil is splashed up on to the bands and fallen leaves stick to them and form bridges by which the insects cross. It is, therefore, not enough to put the grease-bands on at the beginning of October and think no more about them till March. If the greatest benefit is to be obtained the bands must be inspected from time to time, and where it is found that leaves, soil, or insects have formed bridges a fresh coating of grease must be applied. Although October to March is the vitally important time, it is of benefit if the bands, preferably new ones, are allowed to remain through the summer to catch any pests that may be prowling around. During this period it is possible that migrating woolly aphides, leaf-eating weevils, and caterpillars of winter and green pug moths will be found trapped. As with all material used on the farm, only reliable brands will give efficient results, and in purchasing grease-banding material chief attention should be directed towards the question of whether it will remain sticky all through the winter and spring. If it freezes during a frost or runs during hot weather, the maximum benefit will not be obtained.



Apple Lane's Prince Albert
Indispensable for garden and market culture on account of its regular cropping

NOTES OF THE WEEK

Apple Lane's Prince Albert

In a season when the Apple crop is almost a failure it is interesting to note that the variety Lane's Prince Albert is yielding well in many districts. This variety is living up to its reputation of being extremely fertile and quite indispensable for garden and market culture on account of its regular fruiting. The trees are of weeping habit, and for this reason it is not recommended. for planting in orchards where cattle graze.

The Apple crop

Not only is the crop very light, but considerable dropping is reported in some districts, and crops are being picked and marketed earlier than usual. Lord Derby is fairly good generally; Bramley's Seedling and most other culinary varieties are poor. Amongst dessert varieties James Grieve is fair generally; Allington Pippin fair in some districts and in others poor.

The Pear crop

The crop is now reported above average in Kent and Essex generally, but

below average elsewhere. Conference and Fertility are excellent in Kent, and good elsewhere. We have observed heavy crops of Beurré Bosc (Calebasse Bosc) on or near the chalk in Berkshire, though this is not regarded as a good Pear county.

Saponaria officinalis

This is a handsome border plant about 2 feet high, with a spreading habit and bearing handsome heads of pinky-white, semi-double flowers. As the individual flowers when fully open are a shade larger than a shilling, and borne in loose clusters of from 16 to 30 on each stem, it is an attractive plant. The flower-stem is clothed with tiny leaves from top to bottom, which sets off its showy flowers. The plant is particularly suited to the roughest parts of the rock garden and for positions where a rich effect is desired. In some wide, vertical fissures into which it can root deeply it is very striking. It blooms for a long time. S. C.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

"Sit down and travel"

I SHOULD like to congratulate GARDENING ILLUSTRATED on publishing what, to me, seems to be the most interesting, inspiring, and delightful article that has appeared in the Horticultural Press for many a long day. I refer to Mr. T. Hay's article headed "Sit Down and Travel." It is sincerely to be hoped that Mr. Hay will carry on the good work and give us a whole series of further articles on the same lines. This is not merely extremely interesting and entertaining reading, but it is calculated to bring to our gardens, in one way or another, many beautiful plants which we or our fathers and grandfathers once had, but "which we have loved long since and lost awhile."

The title to Mr. Hay's article is, however, a trifle misleading. I wonder how many folk who read the article "sat down" quietly from beginning to end of it without once getting up to consult Curtis, Nicholson, or an atlas. Mr. Hay left me, at the end of the third reading of his article, in a perfect chaos of books and maps, and with a mind roving out to Chili and Peru, the Andes, and the Falkland Isles. I turned in that evening—or rather next morning—composing, in my mind, letters to shipping companies; letters which, I am ashamed to confess, have since actually been written. Second thoughts tell me that Mr. Hay is a most dangerous man, a writer of inflammatory and unsettling literature. I trust, however, that he will continue in these evil courses and that the Editor will not only aid, but will even go so far as to abet him in them. CLARENCE ELLIOTT.

Stevenage.

[We have pleasure in announcing that Mr. Hay has kindly promised a further article on this subject, which we hope to publish in the near future.—ED.]

Ceratostigma Willmottiæ

As a plant for a dry, sunny situation I can recommend thoroughly Miss Willmott's Plumbago (Ceratostigma Willmottiæ). Two tiny plants put out in spring, 1924, in a narrow border at the foot of a south wall now form a mass 6 feet across and nearly 4 feet high. The soil is shallow and sandy, and the border always becomes parched in summer. These conditions appear to suit the Plumbago admirably, and for months it is completely covered with its pretty blue flowers. These are of a true blue with no trace of mauve or purple. The clump is fringed by a planting of the herbaceous Plumbago C. Larpentæ, and where the blossoms of the two plants mingle they can hardly be distinguished, so alike they are in form and colour. The shrubby growth of my plants survived the first winter, but last winter we had some exceptionally hard frosts and the plants were killed almost to the ground-level. The flowering has been, in consequence, rather later, but the growth made during the summer is stronger than ever. Blue flowers are rare in late summer and autumn, and for this reason alone the little shrub is valuable. Judging by my experience I should consider it quite hardy in warm soils. I can endorse all that Mr. Clarence Elliott says of Phygelius capensis coccinea. I have it on a wall, which is, I think, the only satisfactory way of growing Cape Figwort. It makes a splendid mass of scarlet against the old greystone, and is a great improvement on the ordinary plant.

Wilts. B. C. T.

Tulipa sylvestris

It is unfortunate that so few of the species of Tulip lend themselves with success to their naturalisation in grass. There are many of them which would be much more valuable did they establish themselves in grass land. One of the most accommodating of these is Tulipa sylvestris, which has been claimed to be a native plant, as it is found wild in certain parts of England, frequently in chalk pits. This would suggest that it would be benefited by the inclusion of lime or chalk in the soil. It is a very pretty, though not extremely large Tulip, and grows to a height of from 1 foot to 2 feet. It has grey-green leaves and bright yellow flowers, which are dowered with the gift of fragrance. It is quite hardy, and, when established in quantity, is very pleasing indeed. There are some local variations which some authorities rank as species. S. ARNOTT.

Propagating Verbena chamædrifolia

With reference to the articles on the "Propagation of Verbena chamædrifolia," appearing in GARDENING ILLUSTRATED dated September 18th and 25th, I have three large beds which have been planted out in these gardens for the past six years, having had no protection whatever, simply being cut back yearly. These plants are in an exposed position, having stood the severe test of 25 degs. of frost. Perhaps this will also interest other readers of your journal, and will save them, to my mind, lots of trouble and time having to lift them and propagate a fresh stock every year. These plants, I may add, produce a wealth of flowers annually. E. BAKER.

The Gardens,
Garston Manor, near Watford, Herts.

White Japanese Anemones turning pink

"E. N." is puzzled by the fact that almost all her white Japanese Anemones are turning pink, whereas they were originally white and have never been disturbed. They are allowed to grow almost wild in some parts of the garden, and are not nearly so effective in their present ugly, dull pink. There are no neighbouring gardens to affect them.

[We have heard of this change taking place in other gardens. It may be brought about by the soil in which they are growing becoming impoverished. It would be advisable to lift them during autumn, give the dressing of rotted manure, which sh dug deeply in, afterwards dividing planting the roots. Failing this, g beds a good soaking of liquid-manure quent intervals during the summer, a dress the surface, after cutting do foliage in autumn, with a compost leaf-mould, and old manure. The may then return to their normal co ED.]

Dwarf Lavender

I was much interested in reading appearing in the issue of GARDENING TRATED for September 18th on the mentioned subject, particularly so gard to the variety portrayed on pa I unhesitatingly agree with all that is its favour. It is, indeed, a most and highly decorative plant either flower border or wall garden, and if g good-sized clumps the effect, when th are in flower, is delightful and comma miration, especially from those wl never seen it before. The latte the numerous inquiries made of the appear to be in the majority, and it fore not so widely known as it sh It is perfectly hardy, very compact of growth, and does not get leggy i of time like the ordinary Lavender; clumps five years and six years of ag dense and as vigorous as possible, likely to continue so for some few come. Propagation is easily effecte by cuttings or division of the older

"Some Old Roses"

It is interesting to read the notes F. A. Hampton and Mr. A. Pilking appear under the above heading on p It brings to mind the laying out of Rose garden some years previous to It was especially requested by my that one large border should be plan all the oldest varieties and species that could be obtained. Amongst odd Roses that I secured from growers and planted were: -Mm Periere, Mrs. Paul, and Souvenir de maison, a glorious old Rose of colour. These three old favourites the Bourbon species. La France classed as a Hybrid Tea, is statee Paul to be a seedling from Periere. York and Lancaster, of fused with Rosa Mundi, a larger a conspicuous form of the striped Rose. Mme. Hardy (pure white), de Brussels (early pink), and Damask were the representatives species. Amongst the French or species were Rosa Mundi, Surpa (cherry-red), Letitia (rose), and Du Buccleuch (crimson). These Re creased quickly by underground sucke Roses were in evidence by the follo Blanche Moreau, Crested Moss, Moss, Crimson Globe, and James Another old family was the Prov cluding the old Cabbage Rose so we by everyone, and White Provence, b be the true York Rose. Two smal varieties of this class that were plan edging were De Meux, a pretty White De Meux, white with pinkis The Scotch Roses, which are ver customers, are very strong grow formed quite a thicket of growth. were Stanwell Perpetual, the bes blush pink, and one of the first to the border and also the last, th yellow Scotch, and several seedling white and pink. Amongst the o were:—Macrantha (a giant wh yellow stamens), Paul's single whit

hite, edged carmine), Janet's Pride striped pink), Bardou Job (practically and Moschata alba. In the Musk were Mme. d'Arblay, Eliza Very, Musk and Nivea, Polyantha, Celise , Perle des Rouges, Etoile d'Or, ine de Chatellier, Perle d'Or, and Macartney Rose and Microphylla o distinct species. It would be inter- o hear more of the older Roses of species and where they can be ob- o-day. I well remember having to nany catalogues of Rose growers be- ining the majority of the above.

rth Gardens, W. E. WRIGHT.
igiau, near Cardiff.

Butterflies and flowers

arden gains in interest and beauty ightly-coloured butterflies flit amongst ers, and no plant attracts them so s the Japanese Stonecrop or Sedum e. On September 18th no less than iseshell butterflies and two Painted were to be seen on the pink flowers plant. Red Admirals are happy reat blooms of the Sunflowers. Early ear Buddleia globosa is very attrac- utterflies, many of which must have ed through the winter, but there is which gathers them together in such as Sedum spectabile. It takes up room and is worth growing for this alone, although its glaucous, fleshy ave a decorative value of their own en the plant is not in flower.

H. H. WARNER.

Aster amellus King George

HOUGH this handsome variety has n in commerce for a few years it is grown nearly so freely as its un- merits deserve. When first intro- became possessed of one or two nd in the second season increased my plants by inserting a large number igs in the succeeding spring. Each cuttings rooted and soon made ex- lants from which a beautiful display ms was obtained in the autumn. At nt time I have a row of plants some in length which have developed so gorous growths that the display made is fully 4 feet across. It has been a ight to me and my friends.

dividual blossoms of the variety are nches in diameter, and as there are ls of them, readers will appreciate ty and floriferous character of their The florets are about ⅛ inch across evenly arranged around a nicely-pro- l golden-yellow disc which, in the sun, gives off a most potent scent. l butterflies find the flowers a great n, quite an animated scene present- with the presence of Red Admirals r butterflies and bees. The height plant is from 18 inches to 2 feet. ver of the hardy flower garden should plants of this handsome Amellus

D. B. C.

Blue Hydrangeas

been greatly interested in reading us articles in your paper on the ubject, but, like the Yankee, have ving low and saying nuffin." The s, I wanted to be sure of my recol- before saying anything. I have again rned from a visit to the nurseries l farms of Belgium, where the above grown to perfection. I always make of visiting "Kiel" Cemetery, just Antwerp. This place is noted for its statues and monuments, but mostly uge bushes of Hydrangeas, all of of a most lovely blue colour. One particular is very fresh in my It stands on the grave of one of Antwerp's great men of bygone days, and when I saw it last August it was weighed down with huge heads of lovely bloom of a beautiful true blue, just as I saw it 20 years ago. I have seen it several times since and the colour has never changed. Seeing that these plants have kept their colour for so many years, and all the relatives departed and no one left to "doctor" them with anything, I think, proves that there is a true blue variety in existence. Unfortunately, the day that I was there the Curator was away from home, or I should have tried to secure some cuttings.

W. C. KING.
West Hartlepool.

Succulents for the open air

I suggest to "Z. B.," issue September 25th, page 584, that the nearest approach to his desire to grow Cacti in the open in South Devon is to devote his attention to growing Mesembryanthemums. Many of these do well in the open in Cornwall, Devon, and, in fact, all along the south coast of England. I even noticed M. falciforme growing and flowering in a garden vase on the top of the Aquarium at Brighton—evidently forgotten and neglected, but flourishing. Once you have taken to collecting these plants, of which there are about 300 varieties, it will become one of the most fascinating hobbies ever indulged in.

REGINALD DICK.
Penzance.

Æthionema schistosum

Judging from the name it would appear as if Æthionema schistosum was not a lime-lover, but belonged to the schist formation and might object to lime. This may be, but it does not resent lime, as the writer has found when growing it in a moraine in which there was a large proportion of old mortar. Here this delightful little plant grew and flowered and seeded well, and was only lost in the inevitable disastrous removal to another garden at an unsuitable time of the year.

S. ARNOTT.

Olearia Gunnii

This early free-flowering shrub is usually grown in beds and borders, where it makes a very effective display in April or May, according to the locality and the nature of the season. There are, however, but few who realise its value for planting and clothing the face of a rough stone wall. Once planted, the roots get good hold between the joints of the stones, and it gives no further trouble beyond trimming them back after they go out of flower every year. This keeps them dwarf and compact, and close to the wall when the latter is nearly vertical. Of course, when grown in such a position it does not grow so vigorously as when it has a more free root-run, but is equally as free-flowering.

A. W.

The Golden Oriole

I am obliged to Mr. A. L. Butler for pointing out that it is the green woodpecker that bears the provincial name of galley bird. However, both the golden oriole and the green woodpecker appear as regular visitors in my own district, and apparently build quite near my home in the Weald of Sussex. I have also seen the oriole at a spot some seven miles distant. For obvious reasons I forbear to give a more precise indication of the locality.

There is no mistaking the brilliant flash of the oriole's wing, and more than once I have heard the comment of visitors or others who have chanced to see a brilliant yellow bird they have surmised may have escaped from some aviary.

F. H. C.

Aster amellus King George

The source of great attraction to Painted Ladies, Red Admirals, and other butterflies

Tritoma Uvaria

Never, perhaps, has the "Red Hot Poker," to use the more popular name for this particular species of Tritoma, flowered more abundantly and made a more imposing display than is the case this season. In the grounds at the King Edward VII. Sanatorium, Midhurst, there are to be seen at the present time hundreds of spikes of bloom in full beauty, these being furnished by plants grown in large beds edged with the giant-leaved Saxifrage and in narrow borders. These Tritomas always form a conspicuous feature in the grounds at this time of year, but on this occasion they have produced more flower-spikes than usual, and, as a result, the effect is of a very brilliant and attractive nature, and excites general admiration. The mistake so many make with these Tritomas is in not affording them sufficient nourishment in the shape of well-decayed manure. Established plants should have a good dressing of this at least every other year, and if poor soils annually.

W.

Berberidopsis corallina

TREES AND SHRUBS

Berberidopsis corallina

THIS beautiful Chilian evergreen climber is often met with in mild districts and is worthy of trial and protection during winter where less-favoured conditions prevail. It is one of the most handsome climbers. When in bloom during August and September it is a gorgeous sight with its terminal racemes of waxy coral-red blooms against its deep green Barberry-like foliage.

A wall with an eastern or western aspect will be found most suitable, but I have seen it rambling up through the branches of a tree of Arbutus Menziesii, where the effect was very striking when the drooping racemes of flower were peeping through the glossy green foliage of the Arbutus.

Young plants can be raised from cuttings or layers and should be planted out in spring. Plant in peat and sandy loam free from lime. As the plants become established an annual top-dressing of peat and leaf-soil will be beneficial. R. FINDLAY.

Wisley.

Acer griseum

THIS is a new Maple received from China during the early years of the present century. It is distinct by reason of its curious habit of shedding its old bark after the manner of the Plane tree. As yet, it is too early for us to appreciate this character very fully, and we have to rely upon travellers' descriptions of the curious and picturesque effect made by large trees when throwing off their outer bark in large flakes and revealing the young orange-coloured bark beneath. A curious character possessed by the species which is very noticeable in young trees, however, is the intensely hairy character of the young shoots, leaves, and fruits. The leaves are three-parted, the terminal leaflet being 2 inches to 2½ inches long and 1 inch wide, the other two being much smaller, the three terminating a very downy stalk. In autumn they assume brilliant orange and crimson shades before falling. The fruits are very downy and the wings are a little over 1 inch long and ½ inch wide; they are often brightly coloured during summer. A. griseum grows 40 feet high in Central China, and will probably attain a similar height here. Its proper place is the garden or park, but during early life it should occupy a position where it will not be likely to be overcrowded by coarser subjects. D.

—— This, introduced by Wilson in 1901, is a native of Central China. It belongs to the trifoliolate section of Maples, and is very distinct because of the large blunt teeth on the leaflets. Its nearest ally is Acer nikoense, but in this the leaflets are twice as large and scancely toothed. It is, according to Bean, the most striking of the trifoliolate Maples, especially on account of its e bark, which hangs on the stem in largl flakes, revealing the orange-coloured bark within, while the leaves in the a take on a rich red or orange.

Acer griseum

Clematises which are har

LET no one despair of growing Clem in spite of "C. T. K.'s" statem page 499 of GARDENING ILLUST issue August 21st, that they are too and require special culture, for the op The majority of these magnificent cl are not only easy to grow but quite and those few which are not are described as such by reputable nurse Out of 200 species known to exist "C. selects half-a-dozen kinds which, accor his experience, are popular and hard this trio represents the value of Cle for open-air culture.

The Clematis, as I have proved over years, is not only hardy but easy to g almost any position if a little commo is used when planting and in after m ment. It is one of the easiest of pl increase, and should always be obtaine its own roots. Anyone may be sure of ing such plants by layering them. no more difficult than layering Carn The flowers of plants grown in pots glass, such as we see at the London from time to time, are beautiful in the but no guide whatever to those who di use them exclusively in the open air, reaching out in all directions, their trailing, and flower-laden growths wil an area of 8 feet by 20 feet, or ever with a stem at their base approachi thickness of a man's wrist. C Clematises must possess a good cons and be able to withstand wind, frost, a shine. I can assure "C. T. K." tha looks a little further he will find material for all purposes. It is n which kills the Clematis. There ar reasons for this, and they are pret known among growers.

Of all the true species I have ever p and these are considerable, I cannot r single loss, and if the species thrives way the hybrids should at least equal What happens to the thousands sent o nurseries every year? They certainly destroyed by frost. I have had plants choicest kinds growing on expose fences which, during March, have young growths 1 foot to 18 inches They have not suffered in the least fro sharp frosts.

As regards beauty of the smaller-fl kinds I quite agree with "C. T. K." are very graceful when used in the rig making up for lack of size of ind bloom by the profusion of flowers thousands of blooms being often open same time upon individual plants. W gracing a pergola, tumbling throu branches of trees, garlanding huge ro on strong tripods, the effect is often su

The following are a few which occur at the moment of writing:—I (vigorous constitution, flowers 4 inches white inside, pale rose outside); Velours (flowers 4 inches across, deep crimson); Campaniflora (myriads o blue flowers); Armandi (creamy-whit green); Chrysocoma (fleshy pink); mula (white, sweetly scented); C. m C. montana rubens, C. montana Wils Rehderiana (cowslip yellow, deli scented); C. Viticella kermesina, C luxuriana alba, and a host of blue an shades; C. tangutica (rich yellow); C d'Lyon (a grand red, curtaining 20 feet high as I write, with its bl

1. Erica arborea and E. lusitanica

; C. Mme. Grange (large flowers, violet, red bar).
ollowing large-flowered kinds I have slightest hesitation in recommending 's of this charming genus:—Alba (pure white); Henryi (immense white flowers); Miss Bateman (white, e-red anthers); Belle Nantaise (deli- nder); La Lorraine (rose pink); Lord avender); Perle d'Azur (azure-blue); ice (violet-purple); William Kennett r); Nelly Moser (light mauve, red larie Boisselot (pure white); Lady Neville (French white, mauve bars); ope (mauve); Lanuginosa candida white); Otto Froebel (white); Com- Bouchard (clear rich pink); Mme. Veillard (rose, a valuable late ; Mme. Edouard Andre (velvety- ne. Van Houtte (white); Jackmanni (deep violet-purple); Rubella (claret Tunbridgensis (mauve); Jackmanni ue); Purpurea elegans (violet- Blue Gem (blue); Collette Deville ermine). E. MARKHAM.

Clematis tangutica

s a graceful twining plant without pant growth of many of its fellows. s up long, wiry shoots clothed with e Fern-like foliage and yellow which are produced in pairs at the the leaves and distributed well over mbling shoot. The flowers, each e size of a shilling, are borne in and last well into September. It is advantage rambling over a worn-out dorning a south wall or pergola. It used for draping huge rocks or over a miniature precipice. The els in good open soil which may be l by a good mulch of well-rotted E. D. V.

Flowering shrubs

s a suitable season to propagate shrubs by means of cuttings. may be taken from well-ripened There are two methods, namely:— -cuttings, and (2) tip-cuttings. For ings one should select short, sturdy simply torn off gently so as to leave a natural "heel." Insert these cuttings in good loamy soil (three parts), with finely-sifted leaf-mould (one part) and silver sand (one part), in suitable flower-pots. This compost should be well moistened some hours before use, so as to be neither too moist nor too dry when used. The depth to which the cuttings are inserted varies with the length of the cutting, and should be just sufficient to hold the same firmly in position. The cuttings are best placed close up against the side of the flower-pot (five to a 6-inch pot), the soil being carefully firmed. Tip-cuttings are dealt with in much the same way, the only difference being that the cuttings, from 3 inches to 4 inches long, are taken from the tips of selected branches or twigs and neatly cut with a sharp knife just below a joint. Common sense will dictate the after-treatment. Mild heat is necessary to establish some, while the protection of a cold frame or greenhouse is sufficient for others.

(Captain) E. A. SAUNDERS.

In the heath garden

A CLEARING in woodland, sheltered and sunny, is given to a group of Heaths. The ground had naturally a clothing of Whortleberry, some of which was left in wide strips and wedges when the place was prepared; its bright green now forms a pleasant setting to the whole. The main group is of the large-growing Erica arborea and E. lusitanica, forming a dense, dark-coloured mass on which the many spikes of white bloom show finely. On the outskirts of this group are some bushes of the lovely pink E. australis, of a lighter, more open habit. These important Heaths are at their best in the last two weeks of May. Looking beyond them, in a further part of the same clearing are some clumps of Azalea pontica, flowering at the same time and forming a kind of sunny background to the sombre masses of the giant Heaths. Lower-growing kinds are in fair breadths; the Cornish Heath in varied colourings, the white Irish Dabœcia, several varieties of Calluna, the pretty trailing E. ciliaris and its beautiful Portuguese congener, E. Maweana, of larger bloom, stronger colouring, and more bushy habit. G. J.

Prunus nana (the dwarf Almond)

This distinct and bright little shrub is a native of Southern Russia, and rarely exceeds 5 feet in height; indeed, it is more often met with as a spreading and rather elegant bush from 2 feet to 3 feet, ungrafted plants throwing up suckers about their base which flower the following season and which can be removed when an increase of stock is desirable. The flowers are rosy-red and quite freely borne during March and April. Although rarely met with, it has been in cultivation in this country for centuries. A sunny and sheltered position should be provided, for although the plant is very hardy, its flowers, arriving early, retain their beauty longer when sheltered from biting winds. It is quite a desirable shrub for the large rock garden. Grafted plants, however, should never be chosen.

2. Erica australis

Chrysanthemums for cutting

Lifting and housing

Chrysanthemums can no longer be considered as safe in the open air. The end of September is here and we have reached the danger zone. Already frosts have made their appearance in low-lying localities, though not sharp enough to cause damage. Danger will increase, and it is only necessary to say that we can easily recall occasions when, by a sudden and sharp frost at the equinox, growers have suffered considerable loss. It can scarcely be necessary to insist on care in lifting and housing. In some parts of the country rains have made the soil adhesive, and this is all to the good. Better still for those who prepared the roots by cutting around them a week or more ago. As much soil as is practicable should be carried with the roots, for this alone can reduce the check given them to a minimum. Open planting in the inside borders should be the rule rather than crowding, for every grower knows that a clothing with healthy foliage increases the quality of the blooms, and this, when unduly crowded together, is really impossible. To minimise the risk of this the rows should be in "open order"—that is, at least 1½ feet apart. Light and air can then play about and around the plants. This is of further advantage later on when dull, wet weather comes, for it prevents so much of that damping-off which, as a rule, does infinitely more harm than the cold. Indeed, it is quite an economical proposition to go even farther, and to loosely secure the growths in each row in position by the running of a string up either side. Care in watering is essential, for it should be the aim to keep the roots only healthily moist and the foliage quite dry. The next thing that matters is the ventilation, which should leave the houses wide open in favourable weather and a sufficient circulation of air even in the worst of weather. If the houses are only a trifle close green-fly will soon invade them. Chrysanthemums in the autumn and winter present no difficulties in their successful cultivation if these commonsense and simple rules be carried out.

National Chrysanthemum Society

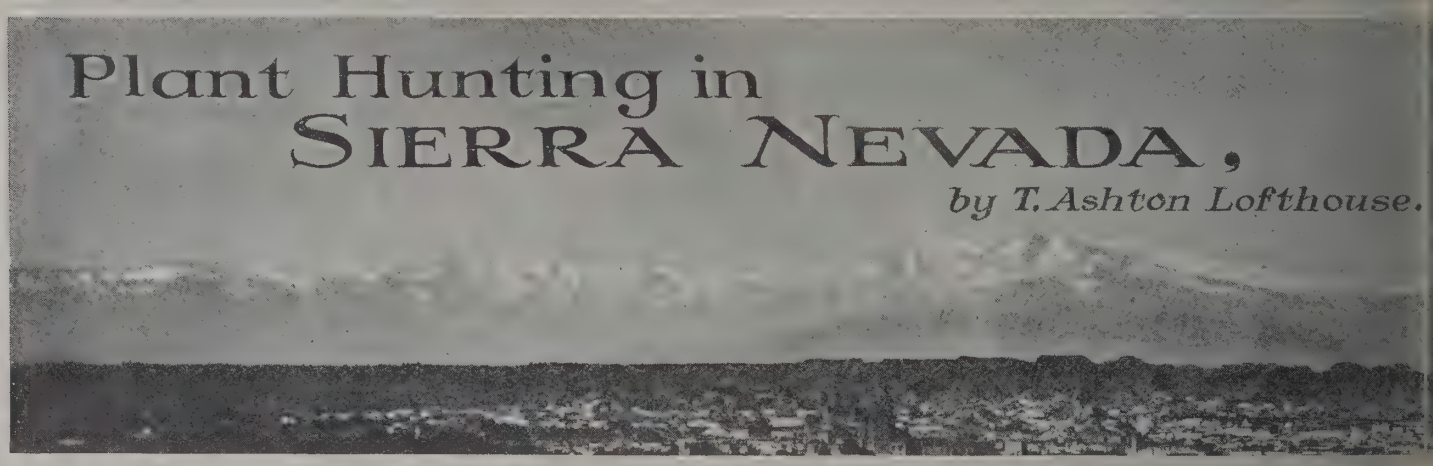
A meeting of the Floral Committee of the above-mentioned Society was held at Holland Park Rink on Monday afternoon, September 20th, when among the many novelties submitted the following new varieties of Chrysanthemums were recognised by the Committee :—

RICHARD HOLDING.—A single-flowered variety having three to four rows of florets of medium width, fairly evenly ar around a fair-sized golden disc, buil flower about 3½ inches in diameter. chestnut-crimson with golden-yellow round disc. Height of plant, 4 feet. class Certificate. Shown by Mess. Woolman and Son, Shirley, near B ham.

PEERLESS.—A most promising flowered single about 3 inches in di borne on slender flower-stems. The have several rows of florets of medium and the colour is a bright golden- Height, 3 feet. First-class Certific Mr. A. W. Thorpe, Lichfield, Staffs.

JANET WYBER.—This is a rather s primrose-coloured sport from the Silver Lining, which, it will be remer was a sport from the white variety G. K. Thorpe. The flowers are bo wire-like stems, and the florets, wh rather narrow and reflex, build an at flower. First-class Certificate also A. W. Thorpe.

MADELEINE.—An attractive flower of ing form some 4 inches in diameter, medium florets reflexing in even f Colour, canary-yellow. This flower borne on wiry stems. Height, 3½ feet. class Certificate to Mr. A. W. Thorpe



Plant Hunting in SIERRA NEVADA,

by T. Ashton Lofthouse.

AFTER spending some days at the eastern extremity of the Sierra Nevada in June, 1924, a journey was made to Granada from Almeria by the motor mail, "Correos." Leaving Almeria about 5 p.m., we arrived at Berja, up in the vicinity of the Sierra de Gador, about 9 p.m. The "Correos" left Berja the following morning about 6 o'clock. After dropping down from Berja the road for some time was along the coast by Adra, where, owing to the magneto going wrong, we were held up from 7.30 a.m. to 4 p.m. in the blazing hot, dusty, burnt-up seaport. A place of importance in ancient times, it is apparently not of much consequence now, owing to the fine quay accommodation provided at Almeria, a little further to the east.

My reason for taking this route was to get a view of the country and of the Sierra Nevada mountains on the south or seaward side. The breakdown, however, shattered my plans, as, by the time we attained Orgiva, where you are nearing the giants of the range, it was almost dark. Leaving Orgiva at 10 p.m., Granada was reached shortly after 3 a.m., 11½ hours after scheduled time. A dusty, tiresome, and disappointing journey.

Unfortunately, it was Festa week at Granada, a time in which the hotels add 50 per cent. to their bills and for which you get half the usual attention.

Granada is both very ancient and very modern, the latter including a new thoroughfare recently driven through the old part in which new buildings have been erected, overloaded with restless and meaningless ornamentation. Such buildings are being erected at the present time in other Spanish cities, regardless of all local tradition. Worse still, a hideous hotel has been recently erected in a dominating position on the Alhambra hill, which destroys the historic view from portions of the city below.

In the city the cathedral is a fine building, and the Royal Chapel which adjoins is probably one of the finest late Gothic buildings in Spain.

On the hill above, dominating the city and the plain (Vega), is the incomparable Alhambra and the interesting Generalife Gardens, lovely and restful even in the hottest part of the day. The Alhambra, an exotic, grown naturally in a tropical climate; Moorish at its best.

Wandering in and about the patios, with their beautiful arcades, and from them into the lovely apartments leading off from them, was like entering into fairyland. Apartments with superb domed stalactite ceilings like iridescent bubbles suspended in mid-air.

The delicate traceried windows frame magnificent views over the city and the fertile Vega beyond. The fertility is due to the skill and industriousness of the Moors harnessed and used the waters fro Sierra Nevada mountains to the ful vantage.

It was interesting to find avenues o which provided welcome shade to the part of the climb up to the Alhambra, know that the trees were provided great Duke of Wellington.

Trachelium cœruleum, with its h blue flowers, was noticed in the vici the Alhambra. Beautiful flowering bagos were in the garden leading up Alcazaba and the shrubby Antirr glutinosum was growing freely in the part of some of the walls.

No tourists were seen in my visits mountains. The Spanish do not s climb mountains for pleasure. No p is made for visitors into the highe although I heard that an hotel wa built some little distance from Gran the mountain slopes south of the Valley, opposite Guejar, at a height o 4,000 feet. This hotel has been open my visit in 1924.

During my stay in Granada two visi made into the Sierras above. A region to get well into owing to the to be travelled and the height to be c Starting at Granada, at a height o 2,000 feet, it is hard work getting

t or 7,000 feet and back in the day, ; time spent in botanising. The heat at the lower levels is somewhat t times and enervating.

early hours of June 20th I set out to route indicated in Murray's guide o the Dornacho and the Picacho de The track was not found at first, wandering across some farms and r directions a well-used mule track tually reached.

rst part of the way was very dusty tanically uninteresting, especially ssing through the zone of red soil, a prominent feature of the lower

sheltered hollows at an altitude of ,000 feet fine rounded plants of calabrica were frequent, with fine f trumpet-shaped pink flowers not some of the elongated Asperula such as A. arcadiensis. It is a plant ld be well worth a place in the gar- were not for the putrid odour of its

pretty grasses were seen, including h white fluffy flower-heads with d inflorescence, possibly one of the ms. A little higher was Stipa a feather grass, that I had previ- n in the Alps and the Maritime Alps, h has been a welcome occupant of n for some years.

la ragusina and A. integrifolia at- ttention growing in very dry posi- ith grey flanelly leaves and dense yellow flowers. Phlomis lychnitis y frequent with its whorls of bright yellow flowers in the axils of the grey woolly leaves which provide a pretty contrast. Another Phlomis-like plant was seen with similar woolly leaves and whorls of white flowers, which may have been the rarer Phlomis crinata, a plant belonging to this region.

At about 4,000 feet, after being four hours on the way instead of the two hours allowed in Murray, the track entered into the limestone zone. Growing in the powdery blue limestone grit was Anthyllis vulneraria Webbiana, a silvery-grey-leaved form of this widely distributed plant, peculiar to this part of Spain, with its not unpleasing purplish-red flower-heads and Linaria villosum granatensis, a tiny greyish-green, villose-leaved, prostrate plant with sprays of pretty lilac-blue Snapdragon flowers. Two or three small plants that I brought home are at present flowering in the garden. It is a pretty dwarf plant if it will only stand our winter. Astragalus nevadensis, with its spitefully hard prickly mounds and inconspicuous whitish woolly heads of flowers, and Centaurea granatensis, with white tomentose leaves and bright orange flowers, and reticulated involucre, one of the prettiest of the genus, were in the same area.

(To be continued.)

The Sierra Nevada from Granada
The prominent building on the hill in the centre is the Alhambra

The Generalife Gardens, Granada
Restful even in the hottest part of the day

Biennials for town gardens

In transferring plants to their final place in the garden in October or November it is well to bear in mind that at this time of the year they are best got up with a minimum of root disturbance. They should be dealt with separately, lifting each with what soil is possible. This method obviously means more work, but I am convinced that it is work which brings its reward. I have seen Wallflowers taken from a nursery bed in November with scarcely any soil, packed in boxes and carried to beds to be planted. Before the operation could be completed most of the soil had dropped away from the roots, and not infrequently, when frosty weather followed a few weeks after, these plants were the first to succumb, although up to the time of removal they were in splendid condition. It is the last stage in the shifting of biennials, especially in town gardens, which means so much.

WOODBASTWICK.

Sagittaria japonica

This during the summer bears bold spikes of creamy-white flowers that are almost globular in shape. The foliage, too, is large and handsome, the points of the triangular-shaped leaves being much attenuated. It is suitable for growing in boggy places, by the margins of pools and streams, and in shallow water that is comparatively stationary. When once established the plant spreads quickly and it is necessary to curtail it. S. E. V.

Anemone glaucophylla

THIS very distinct Anemone obtained an Award of Merit four years ago when brought before the Royal Horticultural Society by Col. Stephenson Clarke, Cuckfield. The specimen here illustrated bore a large single pale mauve flower of great beauty and two buds on a long flower-stalk. The deeply-divided leaves, pale green in colour, did not appear in keeping with the specific name of the plant. It was raised from seeds collected by Forrest in China.

The newest Dahlias

The Joint Floral Committee meeting of the Royal Horticultural Society and National Dahlia Society was held at Holland Park Rink on September 21st, when only five sorts were selected for trial at Wisley from a very large number of novelties submitted to the Committee on that date. The following varieties received the above-mentioned recognition :—

TIBOTHE.—An attractive small-flowered Pæony Dahlia, having fairly broad, pointed florets, building an even flower. Colour, rose on bronzy terra-cotta ground. The flowers measure about 4½ inches across.

HETTIE.—Another small-flowered Pæony Dahlia, rather more than 3 inches in diameter. The florets are broad and pointed and of good substance. Colour, tinted rose on terra-cotta ground.

MAGGIE.—A rosy-bronze coloured small-flowered Pæony, about 4 inches in diameter, having broad, pointed florets of good substance, and in the autumn sun most attractive.

IRMA.—This is one of the most attractive small-flowered Pæony Dahlias submitted to the Joint Committee during the present season. The florets are broad and pointed and build a flower about 3½ inches to 4 inches in diameter. The colour may be described as a glowing rose with a reddish-maroon base to the florets. All four shown by Messrs. Burrell and Co., Cambridge.

ARTHUR J. COBB.—A very large Cactus-like decorative Dahlia of good substance and attractive form. The colour may be described as rose-pink. Shown by Messrs. J. Stredwick and Son, St. Leonards-on-Sea.

Anemone glaucophylla

The large flower is pale mauve in colour

ALPINES

Androsace Watkinsi

IT is impossible to speak too highly of this, so distinct in colour and habit from the familiar members of the family. For density of bloom it rivals Androsace Chumbyi. It is one of the prettiest plants and one of the easiest to grow on an open spot in the rock garden in well-drained light soil, the surface nearly covered with broken stones, with abundance of sand, and exposed to the full sun in a slanting position. The plant forms neat little cushions. The blooms, borne on stout little stems from 1 inch to 2 inches high, are rose in colour, with markings at the base of the tube. The flowers, almost as large as the rosette from which they have arisen, and nestling on the mass of greenish leaves, have a charming effect. It should be planted in limestone grit, loam, and sand, in a slanting position in deep fissures of the rocks where the water would not be so liable to damage them during the winter. The plant will be improved by a top-dressing of sand worked well about the plants in early spring and autumn and is easily increased from offshoots pressed into sandy soil in pans or boxes and stood in dry quarters in a cold frame.

Androsace lanuginosa

This has trailing shoots clothed wit hairy leaves, and flowers so freely that grown clump is very effective. The are borne in trusses on slender stems well above the dense foliage, and sight resemble those of a rosy, yello Verbena. Though reputed to be diffi cultivate, success may be ensured by p it in broken limestone mixed with loam and grit in a spot in the rock where it will be fully exposed to the s where the roots will be near masses buried rock to the sides of which t light to cling. It is seen to the b vantage in a somewhat raised positi that it may crawl some little way o face of surrounding stones. In such tion it will not be so liable to be over- strong plants. The chief enemy to thi is dampness in winter, therefore it sh planted in sunny seams where water away quickly. Being of a wiry natu advisable to work a little limestone ch and sand in and about the plant in a This, besides providing the plants nourishment, helps to keep them d also provides the medium for the shoots to root into.

Ourisia coccinea

This delightful plant forms a neat ing tuft of soft green foliage from rises a stiff flower-stem 6 inches to 9 long with tubular scarlet-coloured gracefully suspended on slender st early spring. It is a gem for the sheltered places on the rock garden, t in good open loam and leaf-soil. It always be planted where its beauty enjoyed in spring. The plants sho fully exposed to direct sunshine, but s from the cold winds of early spring they are throwing up their flower- They require frequent watering weather unless in a very moist soil. ing the plants too dry in summer expl great measure why the plant is sai difficult to grow. It spreads slow fleshy rootstock travelling on the su the soil. In congenial quarters it f matted tuft. When the plant is happ velops numerous running shoots w taken off and potted quickly, mak plants. Established plants may be t and divided during autumn, and sh well established, and large enough t up, each shoot making a neat plan good cultivation. S. I

Ourisia macrophylla

This bears some resemblance to coccinea in its dark green, hairy leav instead of forming a creeping mass, dense tufted habit and blooms in Aug September. Earlier in the season in p it sometimes blossoms, but where the are healthy and the soil good it soon e into tufts of the loveliest soft pink. ground it is apt to go off in dry weat when given some moist shady cra flowers splendidly. The plant thri good loam and sandy peat mixed with rock, and should be planted on the le tween blocks of stone on which th delight to cling and are kept cool and The surrounding soil must be made ramming or treading. Firm soil primary importance to its successfu vation. H. STE

Veronica spicata rosea

This is one of the hardiest and mos cultivated of plants, thriving almo where, provided there is abundance for its rambling roots. It grows abou

nd its neat and spreading habit it particularly pleasing for the rock or some elevated position where a showy habit is required. On good forms an excellent border plant and , if the soil is deep, a good spreading In such soils it is suited for the of borders, where it will not be over-ree-growing plants. E. D. V.

Natural planting

ONSCIENTIOUS garden planner give much care and thought to nging plants for good effect, but it es happens that plants do it by them-nd in a much better way than could en intentionally designed. Some one steps lead up to a loft over a At the foot of the lowest step on the a thick bush of Rosemary. Iris to the left, and a spreading example retty double form of Rosa micro-These were all planted, but the steps en to themselves, apparently spon-, a well-disposed clothing of Erinus two bushes of Rosemary, Rock nd Alyssum. They have placed them-the happy way shown in the illus-The good state of the Erinus is no wonder, for it grows freely in any ks, but it is difficult to see how the ys can find not only enough root any sort of nutriment, for there is no r than the dust and grit that have accumulated since the steps were here may be some explanation for the presence of these plants, because there is a small seedroom, whose window shows above, partitioned off from the rest of the loft, and seeds may have lodged in the operator's apron and been shaken off in coming down the steps. G. J.

2. Erinus, Rosemary, and other flowering plants in the steps to the loft

1. The stone steps to the loft

Petrocallis pyrenaica

This forms a dwarf cushion-like tuft sparsely covered with lilac-coloured flowers which emit a pleasant fragrance. The plant is too dwarf to take care of itself among plants much bigger than Mosses, therefore a select position must be provided. The general appearance of the plant is that of a tiny Draba. It thrives on level, warm spots on the rock garden, where it can root freely into sandy soil of a good depth, and must always be in a sunny position. It is advisable to mix a quantity of broken rock with the soil to provide moisture and some firm medium to which the slender roots delight to cling. The plant is increased by division in August. A sharp look-out must be kept for slugs, which show a decided liking for this plant.

Campanula Hallii

This is a delightful little plant with tiny rounded leaves densely set in a cushioned mass. The pure white flowers appear abundantly in summer and are arranged in loose clusters, each flower drooping from stems seldom more than 3 inches high. It quickly forms strong tufts in open soil and spreads rapidly if planted where it will not suffer from the want of water. It is an excellent plant for the angles of steps, and as a wall plant it has much to commend it, for it will grow in the driest places, provided there is abundance of open soil for its underground network of succulent roots to ramble into. Where flagstones are used to make paths this is one of the plants that will run freely among the stones with delightful effect, and produce sheets of its snowy blossoms for several weeks. H. Stevens.

Leaf-mould

(M. L.).—The littery material found under Fir trees does more harm than good in the garden. Leaf-mould is only good when made from the leaves of Oak, Lime, Elm, and similar trees. The clearings of old ditches in which leaves have accumulated for years form excellent material to use in the garden.

REMINDERS FOR THE WEEK

Southern and Midland

Leeks

These useful vegetables can be assisted now by giving them liberal supplies of liquid-manure. This is best given when the soil is moist, afterwards hoeing the soil well amongst the plants. Where earthing is necessary this should be done when the foliage is dry.

Carrots

All but those sown in July should now be lifted carefully and stored away in a cool place in layers of sand. The tops should be cut off and any roots that are split or worm-eaten should be put on one side for immediate use. Any spare roots in the later-sown batch may still be bottled.

Spring Cabbage

It is wise to get the final planting of Spring Cabbage finished during the next week or two, as if left much later the soil will become cold and the plants will have little chance to become established before winter. The bed should be made firm, and a dusting of soot raked in will prevent them being eaten by slugs. Discard any plants that are blind or show signs of club root. Do not plant on ground that has been recently cropped with Brassicas.

Border Carnations

Get the layers of these planted as soon as possible in the beds in which they are to flower, as much depends on the success next summer, as late plants never do so well or flower and make grass as those planted in the early autumn. The season has been excellent for layers, which should now be nicely rooted. Firm planting is essential, and if any manure is given to the bed this should be placed well beneath the roots.

Violets

Any spare plants that are over after filling the frames, and are growing in the shady summer quarters, may be lifted and planted 1 foot apart on a border facing south. Leaf-mould, decayed manure, and wood-ash may be worked in the soil to form a genial rooting medium. All runners should be removed and the roots disturbed as little as possible.

Roses

Many varieties of Roses, especially the Hybrid Perpetuals, have made strong growth this season, and without the long shoots are required for pegging down, which is an excellent practice for large beds, there is no advantage in allowing them to attain their full length until next pruning time, so they may be cut back now to one-half their length, which will prevent them being swayed by the winds and thus damaging the roots. All ramblers not already put in order should have this attended to at once.

Herbaceous borders

Where it is intended to form new herbaceous borders the work should be commenced at once by trenching and incorporating a good supply of manure to the bottom spit. It is not advisable to add this to the top spit, as the young and fragile roots sicken if they come in contact with it. Immediately after planting, leaf-mould, burnt rubbish, and road sweepings may be added to the surface if the soil is of a poor nature.

Chrysanthemums

It is wise to get all the indoor varieties housed as soon as possible, as frosts are liable to appear at any time and injure the buds. The Tomatoes or other plants that have done justice should be cleared out and the glass and stages cleaned before bringing the plants in. Pots should be washed, decaying leaves picked off, and drainage examined. The doors and ventilators are best left wide open for a few nights after housing the plants.

Bulbs in Pots

Where flowers are required for Christmas the bulbs of Hyacinth, Narcissus, and early-flowering Tulips should have been potted a fortnight ago, and to keep up a succession of bloom a further batch should be potted up now. Where large quantities are required for cut bloom the bulbs may be set in boxes 4 inches to 6 inches deep and plunged as advised for pots.

Grease banding fruit trees

Now is a good time to place grease-bands around the trunks of the trees. The presence of these bands helps to prevent the females of the winter moth from ascending into the branches during the winter months and thus lay their eggs. There are several preparations on the market, and it is a simple operation. See leading article this week.

Root pruning

It is always well to keep ahead with the work during autumn, and where there is root-pruning to be done this can be done at once. We usually commence with the Peaches, Cherries, or other early stone fruit on the walls. A good trench should be dug at a fair distance from the stem of the tree and deep enough to sever all roots that descend into the subsoil. These should be cut slantways from underneath. Preserve all fibrous roots and work in amongst these a mixture of good loam, bone-meal, and old mortar-rubble. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Vallota purpurea and Nerines

These showy bulbous plants are always useful in late autumn, and the Scarborough Lilies which have been in frames until now will be showing the flower-spikes. The plants, therefore, can be brought into the greenhouse in which they will remain effective for some time. The Nerines, too, will be pushing up their flowers, and the plants which hitherto have been kept absolutely dry ought to be plentifully watered. It is best at first to immerse the pots in a tank until the soil is thoroughly soaked, otherwise the water will merely pass through the pots without moistening the ball. Both Vallotas and Nerines, of course, succeed best when they are in a pot-bound condition.

Arum Lilies

If the plants of Arum Lilies which have been planted out during the summer have not already been lifted and potted the work ought to be taken in hand at an early date. I have found that a good fibrous loam without any addition whatever is a good medium in which to grow these Lilies. They ought not at any time to suffer from lack of moisture, and when movement is plainly visible the plants can safely be allowed bi-weekly doses of soot-water, which will give tone to the plants and vigour to the foliage.

Chrysanthemums

As previously indicated, Chrysanthemums may be housed during the last days of September. Pots ought to be thoroughly scrubbed, and the drainage-holes inspected for lurking slugs which not infreq take up their quarters in such Withered foliage, too, should be remo the time of housing, and the ties and may be regulated at the same time. housing is completed the heat may through the pipes for a day or two in that the inevitable surplus moisture n dried up. Afterwards cool treatment is able, with free ventilation during da night until frost intervenes. Even th artificial warmth ought to be kept lowest pitch, consistent, of course, safety.

Carnations

While it is safe, and indeed desira some districts, to plant out the rooted of Carnations in their permanent quart autumn, there are other districts in wh is hardly safe to do so at this time. In cases the layers can be severed fro parent plant and put into 3-inch pots. if placed in a cold frame and, if pc plunged, will make extra strong plar putting out in spring.

Alpine plants

There are many of the commoner plants which may be increased by cutti this time. The cuttings should be pla a bed of sandy soil in a cold frame near the glass as possible. Althoug haps, it might be better to wait until s yet there is no reason why some of the c Alpines may not be increased now by di The divisions can be put into pots con surate with the size of each piece, th being plunged to the rim in a bed of in a cold frame, from which the sashes be removed except during wet or weather.

Bulbs

Continue the potting of bulbs for flowers as rapidly as they are del Everyone ought to grow at least a batch of the Jonquils and of Na Poetaz. Bulbs for outside planting should be got in as rapidly as possible. are apt to deteriorate if they are allo lie about in the bags after they are deli

Roses in pots

Now is the time at which Roses must be attended to. These can be re or top-dressed as circumstances warra if they are required to bloom at an ear the needful pruning should be done obtain long-stemmed blooms hard pru necessary. Many good Rose growers in young plants for pots, but old plants back severely, will usually break strongly at the base. At one time ve grew Roses in pots rather extensively lo it good practice to start them on a mildly fermenting leaves. Root actio quick; the growths were strong and h and the blooms of a fine colour.

Kitchen garden

Clear away at once all ripe Pea burning it on the break if possible. Co to lift Potatoes as they ripen, and if cellar or shed is not available store th rather small pits—or clamps as th called in some districts—covered with and a layer of soil, leaving a straw ve in the centre of each clamp. Hoe am green crops as frequently as the weath the time at one's disposal) will permit frame or pit can be spared plant it no an early French Bean. It will be bet course, if the pit can be heated.

W. McGUF

Mabie Gardens, Kirkcudbrightshire

Border Carnations

present season has not been one of best for border Carnations owing to check given by the long and in- spring that was experienced in many f the country. This particularly to plants set out during March and s they had no chance to grow away nd thus gave a poor return in flowers e or weak grass for layering. This nat to have success with border Car- it is essential to have them in their g quarters during autumn, and the he better, as they then become estab- nd all but those of weak constitution ve all winter storms with impunity. eatest enemy to Carnations during is damp and continued wet. The uffer more from these than they do vere frost. The Carnation-bed or hould be in the sunniest part of the that it is possible to find, and if the f a sandy nature one has very little about. All that such soil requires is gging and adding a little decayed low enough below the roots that ll not come into contact with it at the planting. Where one has to deal ıvy clay soils the work causes a little ouble, but if well carried out the vill do quite well. On land of this t is wise to raise the beds 6 inches e surrounding level, and this is best forming beds by staking out the feet in width. Place the line from stake and cut out a channel on either the bed 6 inches deep. These , which will form convenient paths cing amongst the plants during win- spring without trampling on the bed, e 18 inches wide and the soil that is should be placed on the proposed oad sweepings, burnt ballast, and and should be well mixed with the his will help to drain it and make it able for the roots of the plants to d of. All beds should be made as possible, and it must be remembered ırnations are a certain failure if n loose soil, so this must be made as possible by treading and levelling be- nting. Bone-meal and lime-rubble excellent for Carnations, and on il the latter is essential and should d lightly in at the time of planting, e bone-meal is best dusted over the hoed in when growth has become spring.

all is ready and the plants are to re should be no delay in getting them as these are seldom a success when after November has come in. In here obstacles are in the way the hould be potted up and grown on in rame, keeping them exposed to the as much as possible. Presuming are made 5 feet in width they will ee rows of plants comfortably. A ıld be run down the centre of the bed inches measured on either side for r two rows. This will leave ample r layering and working the soil be- e rows.

S AND PLANTING.—Where layers were n at home they should have formed ts by the end of September or early and these should be preserved by arefully with balls of soil attached ıted without delay. In this case, if of the lower leaves are removed and ıts watered in they will receive no nd roots will soon take hold of the Where plants are procured from a unless they are in small pots there n little, if any, soil attached to the roots. These plants require more careful treatment. It is advisable to soak the roots in water. Make a fairly large hole with the trowel, place the plant in the centre, and give a handful of coarse sand to each. This will cling to the moist roots much more than soil. In either case the soil must be made firm around the collar of the plant. All that is required during winter is to keep a look-out for slugs in mild weather. Dusting the beds with old soot frequently is the best remedy for these.

SOME GOOD VARIETIES FOR THE BEGINNER.—There are so many beautiful varieties raised and brought forward each year by the various experts that it is impossible to keep in touch with all. A dozen good varieties that are hardy and which I can recommend are:—Elaine (pure white), Bookham Rose (rose-pink, one of the best border varieties), Gordon Douglas (bright crimson), Loyalty (apricot colour and with perfect calyx), Lavernock (soft salmon-pink), Grey Douglas (deep heliotrope with a slaty sheen), Border Yellow (the best yellow I know, possibly not so robust in habit as Glamour, but a more refined flower), Lord Kitchener (a fine large white ground flaked with bright red), Paladin (deep yellow pencilled and edged purple), Skirmisher (yellow ground with a combination of mauve and rose-pink), Columbine (white ground with red markings), and Viceroy (another excellent yellow ground fancy heavily edged and flaked light crimson).

W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

The Iceland Poppy is an invaluable flower for cutting

Seeds may be sown now in boxes

Iceland Poppies

THESE flowers are extremely useful for cutting, and no time should be lost in sowing the seed. Although Papaver nudicaule is generally sown in the spring, the seed germinates better and produces stronger plants if sown as soon as the seed is ripe. It is best sown in boxes or a prepared bed in a frame; in the latter case the soil should not be more than 3 inches or 4 inches deep. Where boxes are used a compost of two parts fibrous loam, one part old road grit, and one part leaf-soil are mixed together. Should the soil be dry give a good soaking of water about an hour or so before sowing the seed. Sow thinly over the surface and cover lightly with fine soil. The boxes are then stood in a cold frame and covered with paper (old newspapers will do) until the seed germinates. Should the weather be warm an occasional damping of the covering paper will be beneficial and will help to check evaporation which is bound to occur. After being hardened off, the plants will need very little attention, with the exception of keeping weeds down and protecting from excessive wet. Early in the spring the plants are planted out in some well-dug land. The ground is marked out into beds about 6 feet wide with alleys a foot wide in between, making it convenient for weeding cuttings or lifting.

Celsia Arcturus

Seldom do we see this beautiful perennial with its long spikes of clear yellow flowers and purple anthers. This Celsia is a most attractive subject for the cool greenhouse or conservatory when grouped. It is easily raised from seeds or cuttings, but as it sets its seeds freely I much prefer to raise a fresh batch of plants each year, as the old plants become somewhat leggy if grown on a second year. Seeds should be sown in January or February in pans of good light soil. They should be distributed thinly, covering very slightly with finely-sifted soil, placing the pans in a warm greenhouse or frame, covering them with a sheet of brown paper until germination takes place. When the seedlings are large enough to handle prick off into pans or boxes, using a compost of loam and leaf-soil, with a liberal sprinkling of sand to keep the compost open. When these have made their second pair of leaves they should be lifted carefully and potted on into 3-inch pots, using a little coarser compost than that advised above. Having well filled their pots with roots pot on into 6-inch pots. These will be found quite large enough for them to flower in. When well established feed liberally with liquid-manure, varying this with an occasional dose of soot-water. Plants raised in this manner should give a good show of flower during August and September. Celsia Arcturus is almost hardy, and makes an excellent subject for a warm herbaceous border, but it is for the conservatory that I most admire it.

E. BAKER.

Saving flower seeds

(F. B.).—The simple thing to do in relation to common plants is to note when the seed-pods show ripeness, and then gather and expose to the sun on sheets of paper or something similar until fit to clean out. Brown-paper bags, with the name of the flower seeds saved written upon each one, are very useful for all seeds. It is essential that all should be thoroughly ripened and dried before being put away in paper packets for the winter.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FLOWER GARDEN

Lilium for name and treatment

(F. L. H.).—We are unable to name the Lilium from the poor specimen of growth sent. You have evidently done wrong by keeping the seedlings in the greenhouse, which has unduly hastened weak and spindly growth. The course to follow now is to let the foliage die down naturally, afterwards giving a rest by withholding water until March or April. Then make up a bed of light sandy soil in a warm sheltered position. Separate the small bulbs and plant them 4 inches deep, and in all probability they will bloom the year following. During autumn, when growth has finished, cut down the foliage and give a top-dressing of old potting soil or leaf-mould. Various kinds of Liliums are easily raised from sowing seed in autumn or spring under glass, and as soon as the second leaf is made they should be pricked off and grown on in a cold frame and planted out as previously advised the following spring.

Treatment of Vallota purpurea

Will you kindly tell me how to treat Vallota purpurea? I have a plant which I have had for a number of years growing in a 9-inch pot. There are three flower-spikes blooming at present, growing evidently from three good roots, with large leaves. But in addition there is a mass of smaller leaves, evidently from smaller roots. When should it be repotted, and would there be any risk in an amateur dividing the roots? I should prefer to have it in two pots rather than in a larger one than a 9-inch. M. M. N. D.

[As soon as your plant has finished blooming you may safely take it out of its pot and divide it up without any risk. Select the three large-flowering bulbs and plant these in a pot 7 inches or 8 inches in diameter, taking care not to damage the roots in doing so, and bury the base of the bulbs to one-third of their depth. The smaller bulbs may be placed in any sized pot convenient for your use, four bulbs to a 5-inch pot or five to a 6-inch. The soil should be made open and friable and the pots well drained.]

Tree Carnations

Would you kindly tell me if Tree Carnations are left standing in the open garden all the winter? If so, what precautions are taken to prevent them getting frost-bitten? I may say these are planted in a fairly sheltered position. M. E. R.

Northants.

[These do not winter well in the open air, in fact during March and April such plants are far from interesting and many deaths occur. You might place a few Spruce branches among any you leave out, but the constant rains are more destructive to them than frost.]

Sowing Gladiolus seed

(Interested).—The spring is the proper time to sow Gladiolus seed. The best way for amateurs to deal with it is to sow it in a box or pan 6 inches deep, and raise the plants in a close pit or frame, and about the middle of July to turn the pan out-of-doors in some warm place, and to keep the soil regularly moist about the roots. The seedlings should remain undisturbed all the summer. As a matter of fact, the bulbs will make stronger growth the next season if they remain in the soil until the following spring, as they will keep plump and fresh in the soil, but if taken out of it they are liable to shrivel. The pan containing the young bulbs may remain in the open until the middle of November, when it should be taken to some cool place out of the reach of frost and the soil kept quite dry all the winter. The seed may also be sown in the open ground if a warm position is selected for the seed-bed and the soil made fine. It will require the same attention with regard to watering, and be kept free from weeds. It is less trouble to raise them in the open, but they require carefully looking after in dry weather. Seedlings sown in the open grow very late in the autumn, so that there should be no hurry in taking them out of the ground. All the time the frost does not reach the roots they will take no harm.

Antholyza not flowering

("Woodville"). — Antholyza coccinea blooms during autumn and resembles a giant scarlet Montbretia. Being that your plants have made good growth there is a possibility of them blooming yet. To grow them well they require a good, rich, loamy soil, and should be planted in full sunshine. If no blooms appear during autumn it would be advisable to lift the roots in March. Move to a more favourable position and make up a bed of loam, leaf-mould, and decayed manure.

Pruning Polygonum Baldschuanicum

("Woodville").—Polygonum Baldschuanicum requires little or no pruning when once established, simply cutting away any shoots that may be damaged by frost during winter and thin the growth if it becomes overcrowded. In course of time the shoots, which grow very rampant, will droop down and form an attractive sight. The same applies to the newer variety Auberti, another vigorous climber.

GREENHOUSE

Mealy-bug on Fuchsias

(R. R., Sunderland).—The insects you have sent are mealy-bug. These are always troublesome pests on certain greenhouse plants. Mealy-bug often lives out of doors on plants which are first started under glass and then transferred to outside quarters for the summer, but it cannot live outside during the winter. You will find that this pest is extremely difficult to control on such plants as the Fuchsia, especially at this time of the year. Mature female mealy-bug congregates on the young, tender-growing parts, and eggs are laid within the cottony mass. The eggs hatch and the bug spreads to all the tender parts and lives by sucking out the plant juices. A mature female bug is said to lay 500 eggs. We should advise you to t a good insecticide, mix it up according maker's directions, and then dip your ing baskets in. You should remember the insecticide will not kill the egg sta that several dippings will be nece When the plants are resting you should every effort to get them free from meal before they are started again next se Fumigating your greenhouse with ca cyanide during the winter months woul you.

Propagating Gloxinias

(G. P. O.).—For ordinary purposes can be raised yearly from seed. Whe usually fine varieties exist, however, it i to increase them by cuttings made leaves. If the kind is scarce a singl will make three or four by notching the rib on the under side, and laying it flat pot or pan filled with sandy peat, ha inch of the top all sand, and putting surface of the leaf, over each incision on the under side, a pebble about the s a pigeon's egg to keep the cut parts in tact with the sand. They must be slightly, but not too moist. In this they will form small bulbs in the course summer, but where the leaves of the kil kinds to be obtained are plentiful, bulbs will be obtained by putting each l as a cutting, simply inserting the stalk the extent of 1½ inches in the soil.

Striking Heliotropes and Verbenas

(V. H. R.).—Both Heliotropes and benas may be propagated now by mea cuttings, and some may be put in up t end of the month with a fair chance o cess. Later than that, however, a good artificial heat would be required to them in, and unless there is heat at com all winter it is not well to strike cuttin late in the autumn. If a few good s pots of either plant can be got to through the winter plenty of cuttings taken from them in the spring if plac warmth. The cuttings put in now sho made from stout growth that is not fl ing, and the soil used should be ord light potting soil, having on the su 1 inch in depth, an admixture of on sharp, clean sand. When rooted, the tings will keep well if the pots are plac a shelf in the greenhouse.

Plants in a cold greenhouse

(C. A.).—Camellias would succeed would Azaleas, also the choice hardy R dendrons, Deutzias, Hydrangeas, Fuch some of the hardier Passion-flo Jasmines, Clematis, Choisya ternata, many other plants.

TREES AND SHRUBS

Cutting Lavender back

(J. A. S.).—Any hard cutting bac Lavender should be done immediately flowering or the second week in April. especially applies to large and establ lines or bushes. If your plants are bushy need no clipping at all and should fl freely next year, but if the plants are yo and have borne but a few flowers, then a light clipping to remove the flower-s and get the plants to the shape you des all that is necessary.

Buddleia variabilis seedlings

A very fine Buddleia variabilis has se itself in many parts of my garden. Son the seedling plants are already quite l and look very healthy. Can I move now to suitable places for them, or shou wait till they shed their leaves; and seedling Buddleias prove a success and and flower as well as plants raised from

Is it usual for Buddleias to seed all
e place? People who see mine seem
ied. T. M. D. H.

not unusual for seedlings of this
o spring up about the parent plant;
this frequently happens even with the
orms. These grow very strong and
s freely as the type, the flower-spikes
ing longer and more attractive. You
fely transplant them any time from
1st, but the past season's shoots
however, be cut back to half their
nd water applied if the weather con-
ot and dry.]

Lindleyana

.).—This is the name of your plant,
s remarkable for its hardiness, and
a native of Northern India, it stands
harmed in our climate; indeed, it
to thrive best in cool situations. The
ots produced this year will flower
son, so carefully preserve them.

ea colchica

.).—Yes, this is one of the most
shrubs for early forcing that we
It is propagated by means of cut-
d likes a warm, light, well-drained
l it might probably succeed well if
n stocks of S. pinnata, the Bladder-
ur shrubberies. Now is a good time
nts for forcing into bloom in winter.

g Brugmansias

sted).—It is usual to cut Brugman-
to the hard wood, or nearly so, in
prevent their occupying too much
During the winter when growth has
ve them less water—only sufficient to
soil from getting too dry—and keep
dinary greenhouse. About the be-
of March shake the plants out and
m, using as a compost one half good
m, the other half leaf-mould and
yed manure, with some coarse river
the pots get filled with roots during
mer an occasional dose of liquid
is beneficial. We, of course, are
g that you are referring to the
Brugmansias. We hope to deal
ly with this family in an early issue.

ROSES

ot on Roses

d be very grateful if you would tell
use of many of my Rose bushes sud-
ng off as in enclosed leaf samples.
s were all planted in carefully pre-
s last spring, and up to a short time
splendidly. Then I noticed curious
leaves of many, and soon some
came absolutely denuded of all
s this state of things only due to the
natic changes we have had this sea-
it a disease at root of bush? Can
hing to save the bushes affected? I
it seems to affect yellow and pale
white Roses more than red ones,
it is spreading fast. Any help will
grateful. T. M. D. H.

imatic changes mentioned in your
e had little to do with your Roses
eir foliage. The specimens you
to us are attacked by black spot,
caused by the fungus Actinonema
Black spot appears to be especially
this season, and no doubt the
onditions have been favourable for
opment of the disease. When the
badly attacked premature defolia-
s occurs. After this premature de-
has occurred new foliage is often
at the ends of the branches. The
of new foliage towards the end of
n always weakens the plants for
the following season. All portions of the plant above ground level are attacked. Fallen leaves should be collected and burned and the attacked bushes should be hard pruned in the spring by cutting all the young wood back to two buds. When the young foliage appears next year it should be sprayed with a solution of liver of sulphur. A good recipe is appended :—1 oz. of liver of sulphur, 3 ozs. of soft soap, 3 gallons of water. The foliage should be sprayed at ten-day intervals until the disease is got under control.]

Unhealthy Roses

(Firefly).—The Roses are affected with the Orange fungus, for which there is no certain remedy other than picking off and burning the bad leaves. Probably the Roses, being near the house, are dry at the roots. This should be seen to, and they are evidently badly supplied with soil.

FRUIT

Damson tree dying and treating a dry border

(Patience).—If the tree is not in an exposed position the evergreen Vine (Vitis striata) might be used for clothing its branches. The Horse Briar (Smilax rotundifolia) and Lardizabala biternata are other useful evergreen climbers; also the great Persian Ivy (Hedera colchica) is very handsome. We know of no evergreen Rose which would live in such a position, but suggest the rich orange-yellow flowered Emily Gray, or American Pillar (pink), both strong growers. *Re* the border, the grass and manure should be thoroughly mixed together; it may then be used to enrich the border. The latter should be trenched to a depth of 2 feet, and after breaking up the lower subsoil place a good layer of the manure. This should be repeated at every foot layer of soil, stirring up the latter so as to thoroughly incorporate the two together. If this is carefully done throughout the depth of your border a much better result will follow next year. Any leaf-soil or odd manure you may have should be added and mixed to the grass and duck-house scrapings, to add additional richness to the soil.

Grapes shanking

(F. A. R., Brighton).—Do not attempt to cut your Vine rods until the foliage has dropped or you will probably cause them to bleed and finally die. Your idea is quite good to remove every other rod, thus allowing more space for the laterals to expand. Shanking usually denotes that the roots are in a bad state of health, so it would be advisable to examine the drainage and see that it is free. If the border is impoverished you should obtain some good loam, crushed bones, charcoal, and lime rubble. Mix well together, and after removing as much of the old soil as possible without injuring the surface roots, replace with the new compost and work it well amongst the roots. You can do this at once. The roots will again become active during the autumn.

Grapes for inspection

(F. R. Rusthall).—Judging from the sample of berries enclosed we are of opinion that it is impossible for you to produce good Grapes from the Vines you have taken to. Not only are they small, but are shanking badly, which proves that the border is in a very bad state and the roots have penetrated a cold and uncongenial subsoil. We advise you to clear them out and make up a new border during November, and plant new Vines from pots in February. The bottom of the border should be made of concrete, leaving an aperture for the surplus water to drain away. Over the concrete place 9 inches of broken bricks, on these a layer of turves placed grass downwards. Fill up with 2 feet 6 inches of roughly-chopped good turfy loam obtained from an upland pasture field. This should be freely mixed with bones and coarse charcoal. After planting the young Vines they should be cut back to within 6 inches of the ground. As regards heat required, much depends on the variety grown and when the fruit is required.

Pears not ripening and diseased Cherries

(E. A. M.).—The cause of your Pears dropping before they become ripe is due to the larva of the Codlin moth and to the fruit rot disease, which is depicted on the specimens sent. To prevent the former, place grease-bands around the trunks of the trees at once to prevent the female moth ascending (see leading article this week). To deal with the latter, spray the trees with a lime sulphur wash during February. The leaves of the Cherry sent are affected with leaf scald fungus. It begins as small red spots on the upper surface of the leaves, which afterwards become larger and turn brown. Spray with Bordeaux mixture as soon as the leaves expand in spring, and repeat the operation once or twice afterwards. All leaves that fall from the Pears and Cherry should be collected and burnt. If you root prune the Cherry tree during the next few weeks and add lime to the soil around the roots it will check the growth and encourage fruit buds to form during next summer.

VEGETABLES

Celery for inspection

(Ride).—The Celery is attacked by Celery-leaf spot. This disease is very prevalent this year, especially on light soils such as that with which you have to deal. Remove all affected plants and burn them, and spray the remainder with lime-sulphur to kill the spores of the disease. See reply September 18th, page xi.

Tomatoes turning yellow

(A. J. L.).—The reason why your Tomatoes have failed to ripen properly is owing to lack of potash in the soil. Leaf-mould should not be used in the compost. Good loam is the chief factor for growing Tomatoes satisfactory, and this should be chopped up and mixed with wood-ash, which contains the exact amount of potash the plants require. One 6-inch pot to each bushel of soil is sufficient, and if the loam is not of the best quality add a pint of bone-meal to each bushel. It should be remembered that the soil should not be used a second time for Tomatoes, as this usually leads to trouble.

MISCELLANEOUS

Burning weeds and clay

(B. P. Standen).—The best means of burning your large heap of weeds when dry is to collect a good stack of wood and light a fire. When the fire has obtained a good body of heat shake out all the longest material and place this on the fire first, afterwards building up in a cone shape the remainder, which contains the soil. Examine the fire frequently to see that it does not burn through. In a few days' time the whole heap will become charred and will be in a fit state for digging in the soil. Treat the clay in exactly the same manner, although this is not absolutely necessary for Rose beds. If it is allowed to become dry it may be easily broken up and used in a crude state.

SHORT REPLIES

Orchard.—We are not surprised that you cannot obtain seeds of Dianthus Fettes Mount. It is a hybrid or "mule-pink," and sterile as a rule. In the rare case of a few seeds being produced these could not be ex-

pected to reproduce the hybrid. Cuttings are the usual mode of increasing this plant. The "Encyclopædia of Gardening," by T. Saunders, is easily obtainable in a recent new edition through any bookseller, and a valuable work of reference as far as it goes.

W. M.—The trouble on the leaves is, so far as we can judge, only the natural decay of the same.

Severn Valley.—The best thing you can do is to remove the dry soil and fill up with a heavy loam to the depth of about 2 feet. Even then you will have to water freely and apply a heavy mulch of rotten cow manure so as to retain the moisture.

NAMES OF PLANTS

E. Batten.—1, Berberis vulgaris var. atropurpurea; 2, Berberis Thunbergi; 3, Aristolochia Sipho; 4, Ribes, but cannot say which kind without a flower.

M. S.—1, Azara microphylla; 2, Myrtus tarentinus.

Name missing.—1, Escallonia Philippiana; 2, Lonicera; impossible to identify species as specimen was dried up. Can we have another? It should be easily recognised.

W.—Saponaria officinalis (Common Soapwort). See note on page 594.

Aquatic.—The Water Soldier is Stratiotes aloides and the Water Pimpernel is Veronica Beccabunga.

Skisdon.—Clerodendron fœtidum. Native of China.

A. Pike.—1, Azara microphylla; 2, Pieris japonica; 3, Leycesteria formosa; 4, Orpine Sedum Telephium.

M. N.—1, Artemisia tanacetifolia; 2, Senecio tanguticus.

NAMES OF FRUITS

Alex. Simpson.—Apple Catshead.

A. F. Turner.—Large fruit, Apple Wellington; small fruit, out of character and not recognised.

Conon.—Plum July Green Gage.

Mr. Poland.—Pears: 1, Beurré d'Aremberg; 2, Belle Julie.

GARDENING APPOINTMENT

Mr. W. Payne, formerly gardener to Sir Wm. Cory, Bart., Claremont, Esher, Surrey, now gardener at "Piccards Rough," St. Catherines, Guildford.

Report on condition of vegetable crops on the 23rd September, 1926

Beet.—A good average crop.

Broccoli.—Plants are making good growth.

Brussels Sprouts.—Crop promises to be a good average, good pickings being made off early plants.

Cabbage (spring-sown).—Christmas Drumhead section; average yield.

Cabbage (autumn-sown). — Germination was good, but lack of rain has delayed planting out in many districts.

Carrots.—Crop is variable, but generally promises to be a little below average.

Cauliflower.—An average crop; autumn varieties are turning in well.

Celery.—Plants making good growth, but much disease is reported.

Kale.—Is making very satisfactory growth.

Leeks.—Plants are generally healthy and vigorous.

Onions.—Bulbs being lifted and ripened under good conditions; crop average.

Parsnips.—Plants growing well and look promising.

Savoys.—Early plantings are hearting well; main crop is promising.

Sea Kale.—Has made satisfactory growth, good crowns being formed.

Spinach.—Germination has been fair.

Tomatoes (outdoor).—An above average crop ripening well in most districts.

Turnips.—Crop making good growth; late sowings are bulbing well.

FRUIT GARDEN

Fruit tree planting

IN selecting a site for an orchard or fruit garden, care must be taken to get one with a south aspect, with a soil composed of sandy loam, and a gravel subsoil. It is so much the better if it be on a gentle slope, which will allow of its being drained without much trouble. It will also give the trees a little protection from the north and east winds, and whenever there is any sun the trees get the benefit of it. Where there is no choice of soil, and you are compelled to plant on cold clay soil, see that it is well drained; and, after taking out the soil in making the holes in which to plant the trees, make them larger than usual, and fill up with rich light loam and horse manure, leaving a belt of manure beyond where the roots extend, to give life and warmth to the soil; so that, when the young roots find it, they shall get that nourishment they require. No fruit trees do well on a raw, damp, clay soil; it should be fertilised by being exposed to the air and to the frost in winter, which soften and mellow it.

Perhaps the best way to prepare land for fruit trees is to plant it for one or two seasons with Potatoes, at the same time giving a plentiful supply of horse manure; this clears the land of all Couch Grass and rubbish. Fruit trees may be planted at any time from now till the frost appears.

In selecting fruit trees always get the best sorts, as their first cost is very little more than the cost of the commoner kinds, and they only take up the same room in the garden. Apple, Pear, Cherry, Plum, Damson, and Gooseberry trees should all have straight, clean stems, with branches at right angles from the trunk, and at regular intervals round the trunk, forming a head. If the larger trees be planted 15 feet apart, Gooseberry bushes, Raspberry canes, and Red Currant trees may be planted in rows between them. Pears do well against a south wall, Morello Cherries against a north wall, Red Currants against a west or south wall, Black Currants may be planted to advantage near a ditch or drain, and Damsons may be planted at intervals along a young Thorn hedge. In planting any tree (whether fruit or forest) it should be so done that it will stand erect without any support. First dig a hole a little larger than the root, sufficiently deep to give the tree a good hold of the soil, but not too deep, or the tree will send up shoots from the bottom of the stem, which will rob it of its strength. After digging the hole, throw a little horse manure into the bottom, and after levelling down, cover over with clean soil. On the top of this place the tree (first taking off with a sharp pruning knife any roots that have a tendency to go down into the ground and any bruised roots); then cover up the root with clean soil, and on the top of that throw a few forkfuls of horse manure; then throw on the top of that the remainder of the soil taken out of the hole. All roots should be placed flat, so that they will radiate from the stem on every side, that they may the more readily find nourishment and heat. It is much better if all fruit trees be planted before Christmas, as then the roots get hold of the soil before their strength is drawn upon. Little pruning need be done till the young trees become established, but it may be necessary to take off a spur here and there where they seem to be taking a wrong direction.

Late Gooseberries and Currants

I find medium-sized Gooseberries, with a firm and rather thick skin, to be the best for hanging late, as the large thin-skinned varieties that are preferred during the ordinary Gooseberry season are sure to burst during heavy rains. The sweet kinds when over-ripe also lose their flavour, and are decidedly surpassed by those which, when moderately ripe, have a sharp acid flavour. Red and White Currants are also both useful, for although, as a rule, the flavour of the white kind is preferred, the mixture of the two has a pretty effect, the red variety being very bright under artificial light. Although they may be preserved on orchard bushes by means of netting, they are best on walls with a north aspect, on which fewer birds are more prolific or certain, and in such positions they can be easily protected from rain. I usually plant them about 3 feet apart and train up the required number of shoots about 6 inches apart, spurring them in quite close in winter. During summer the shoots of Currants are pinched in to three or four leaves, for if left at full length the fruit at the base of the shoots gets overgrown and falls off, whereby the keeping quality of the fruit is injured. When once the trees are fully furnished with spurs they only require an annual pruning of the simplest kind; and let the season be what it may, I have never known those on walls to fail in producing an abundant crop. Of Gooseberries I find Warrington, Rumbullion, and Smooth Yellow and of Currants the Red and White are the best to answer best.

Bush Fruits: Propagation by cuttings

As soon as the leaves have fallen cuttings of Gooseberries, Currants, Loganberries, and similar fruits may be inserted in the reserve border. For this purpose select well-ripened wood of the present season's growth. Remove the bottom buds of Gooseberry and White and Red Currant. Insert the cuttings about two-thirds of their length in firm ground about 1 foot apart. The usual method is to make a narrow trench with one upright side, against which the cuttings are placed and made firm by pressing the soil about them with the foot. I have found it quite sufficient to press them firmly into good soil and then firm them as above. In heavy soil it may be advisable to place a little sand underneath the cutting as this helps to stimulate root-action. Young Loganberry plants, Wineberries, and so forth may often be obtained by carefully detaching rooted suckers from the base of well-established parent bushes. *A. S.*

CATALOGUES RECEIVED

E. P. Dixon and Sons, Ltd., Hull.—Bulb list for 1926.

Thomas Carlile, Twyford, near Reading.—Hardy plants.

Robert A. Maris, 225, Bristol Street Birmingham.—Bulbs and Roses.

Foster and Pearson, Beeston, Nts.—Horticultural buildings, boilers, pipes, etc.

Sutton and Sons, Reading.—Bulbs, 1926.

Morle and Co., 150 and 156, Finchley Rd., N.W.—Catalogue of bulbs.

R. H. Bath, Ltd., Wisbech.—Descriptive catalogue of choice bulbs, Roses, Pansies, etc.

Jas. Carter and Co., Raynes Park, Lond., S.W.—The practical greenkeeper. Spring and autumn farm seeds.

Brimley Botanic Nursery.—List of rare and climbers.

Joseph Fison and Co., Ltd., Ipswich.—The cultivation of turf.

R. M. Crockett and Co., 190, Avenue, N. Cranford, N.J.

Wakeley Bros. and Co., Honduras House, Bankside.—Hop manure, list of bulbs, etc.

GARDENING ILLUSTRATED

43—Vol. XLVIII. OCTOBER 9, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

ood, the ... 613
r-like ... 613
ar crop, ... 609
LOUR... 607
clubbing ... 618
grow- ... 617
Polyr- ... 609
LACTI- ... 609
Codlin moth ... 619
Cranesbill, the Silver 608
Escholtzia Vesuvius 614
Eustoma Russellianum, cultivation of 620
Fig trees, removing fruit from ... 619
Greenhouse, blue flowers in the ... 617
Heleniums and Helianthus ... 614
Helianthus, insects at root of ... 619
Individualist bookshop, the ... 620
KEW, AN OCTOBER DAY AT ... 611
Lychnis chalcedonica ... 620
Mesembryanthemum imbricatum ... 614
Narcissus fly, the ... 618
Narcissus minimus ... 618
National Sweet Pea Society ... 608
North of England Horticultural Society ... 620
Nursery stock, annual sale of ... 607
Peach failing ... 610
Pentstemon, the propagation of the ... 611
Physalis, the ... 608
PLANT HUNTING IN SIERRA NEVADA ... 614
Plants, lifting, from the open air ... 619
Potato Ben Cruachan 609
Potatoes, seed, a change of ... 609
Publishing amalgamation ... 608
Reading and District Gardeners' Association ... 620
Red Currants failing 619
Rose leaves falling ... 619
Roses, a difficulty with 619
Schizanthus, the culture of the ... 617
Sit down and travel ... 608
STORY OF MY GARDEN, THE—I. ... 612
Sweet herbs ceremony 608
Sweet Pea essay competition ... 608
Sweet Peas ... 615
Tigridias, the ... 613
Tree, felling a ... 619
VINERY, THE SMALL 610
Vines mildewed ... 619
Vines, red spider on ... 610
Wallflowers, planting 614

Autumn Colour

In early October many trees and shrubs are gay with coloured foliage, whilst others are almost equally showy by reason of their brightly coloured fruit

ST the smaller-growing trees ious Thorns are very conspicuous, by reason of foliage alone, and e combination of fruit and foliage. s forms of Cratægus Crus-galli the most effective, and it would to select anything more pleasing arieties prunifolia and splendens, ight red fruit is half hidden aves which show many shades of , bronze, d yellow lly in evi- Douglasi particu- riety rivu- splendent bronze, , though uit is not evidence. red fruits ctata are h great hilst the ts of the nthocarpa ood con- hen the fruits of da are at they are , but less than coccinea nollis. ns of the Hawthorn attention. na fusca . fuscata large red st C. m. ellow berries. The scarlet berries antha are conspicuous everywhere. f various Roses lend colour, for, mmon Dog Rose and Sweet Brier -fruited R. rugosa all are orna- e same thing may be said of the s, for many of them create a fine reason of their red fruit. Such frigida, rotundifolia, buxifolia, nnosa, Franchetti applanata, and can be depended on to give a t of themselves. Pyrus offers a showy fruiting trees—P. Ringo, P. Aria and its varieties, P. nd its numerous forms are a few s. Among coloured-leaved plants the Rhus family contains a number of showy species. One of the most highly coloured is the R. Toxicodendron, or Poison Ivy, which, unfortunately, cannot be recommended for general cultivation on account of the poisonous properties of its juices. The ternate leaves at this period are orange and red. R. trichocarpa is a brilliant red, R. cotinoides orange-scarlet, and R. typhina orange and red. Nyssa aquatica has been conspicuous for several weeks by reason of its scarlet foliage, whilst the Juneberry (Amelanchier canadensis) may be seen from a long distance by reason of its bright red leaves. The various Azaleas create a fine display, for in most cases the leaves are of various shades of red, yellow, or bronze. Carya tomentosa has fine golden foliage, whilst the leaves of the Maiden-hair-tree (Ginkgo biloba) die off of a similar colour. Amongst the Acers are numerous kinds with brightly-coloured foliage. The several forms of A. palmatum, for instance, are gorgeous in red and yellow, A. Ginnala is bright red, and A. dasycarpum, A. circinatum, and A. saccarhinum are others which may be selected. Parrotia persica is handsomely coloured, as also is the deciduous Cypress. Many of the Barberries bear conspicuous fruits, while Berberis Thunbergi is also notable by reason of its orange and scarlet foliage. Vitis Coignetiæ is one of the most conspicuous of the large-leaved Vines when it colours well; but, unfortunately, it rarely does itself justice. V. quinquefolia and V. inconstans are so well known as scarlet-leaved plants in autumn that they require no special recommendations, but a word may be said in favour of the newer Vines of the armata section, for their leaves colour finely, while under satisfactory conditions the leaves of V. Henryi turn scarlet. Magnolia fruits here and there form a showy feature, for the reddish pods burst to allow the escape of the orange-red seeds within, which, when liberated, hang from the fruit for some little time by a small thread. Euonymus europæus and E. latifolius are both conspicuous fruiting plants, while the same may be said of Celastrus articulatus. Where Liquidambar styraciflua is grown a fine effect is produced by its brilliantly-coloured foliage, whilst a more lovely American plant is noticed in Corylus americana, the leaves of which are bright red and bronze.

Although the plants mentioned by no means exhaust the number of trees and shrubs with showy fruit and foliage, they are sufficient to show what a wealth of material is available for garden decoration.

Autumn in Mr. A. C. Kenrick's garden at Elstead, near Godalming
The flights of steps lead from the flower garden to the Heath garden and Pine woods

NOTES OF THE WEEK

Annual sale of nursery stock

THE annual sale of nursery stock takes place in the delightful nurseries of Messrs. R. Wallace and Co., Tunbridge

Wells, on October 12th and 13th, as announced in our advertisement pages this week. These sales, which have been revived in recent years, have proved the source of attraction to experienced amateur and professional gardeners in all parts of the country. The stocks offered comprise Rhododendron species and varieties, Japanese Maples, flowering shrubs, Conifers, Roses, Alpines, Irises, Lilies, and other bulbs.

Publishing Amalgamation

Readers of GARDENING ILLUSTRATED will be interested to hear of a big amalgamation announced last week. Ernest Benn, Ltd., has acquired the whole of the capital of T. Fisher Unwin, Ltd., and has thus brought about the biggest publishing merger of recent times. It is stated that Mr. T. Fisher Unwin and Mr. A. D. Marks, Governing Director and Managing Director respectively of T. Fisher Unwin, Ltd., will join the Board of Ernest Benn, Ltd. Thus Ernest Benn, Ltd., adds to its unrivalled list of technical books and to a general publishing list probably unique for its interest and diversity.

National Sweet Pea Society

The annual general meeting of the National Sweet Pea Society will be held in the Essex Hall, Essex Street, Strand, London, W.C. 2, on Tuesday, October 19th, 1926, commencing at 3 o'clock in the afternoon. Essex Hall is at the Fleet Street end of the Strand and nearly opposite the Law Courts. The Temple (District Railway) is the nearest railway station.

Sweet Pea essay competition

The General Committee of the National Sweet Pea Society has arranged a competition amongst the members and offers prizes for the three best essays on "My Experiences with Sweet Peas." The three prize essays will be published in the "Sweet Pea Annual" for 1927. Essays must reach the Secretary at 19, Bedford Chambers, Covent Garden, London, W.C. 2, not later than Tuesday, October 19th. Only members of the National Sweet Pea Society may compete and full particulars may be obtained from the Secretary.

Sweet herbs ceremony

All the ancient observances were kept in the Guildhall at the recent ceremony of the Lord Mayor's election. The Common Crier of the City called on those present not of the Livery to depart on "pain of imprisonment." A sweet yet pungent odour pervaded the Common Hall when, as a reminder of the days of the Plague, the floor was strewn with sweet herbs, and the members of the Court of Aldermen and each of the high officers of the City, in accordance with the custom of centuries ago, carried a posy of old English flowers.

The Silver Cranesbill

Among the Cranesbills, or hardy Geraniums, are many choice plants, one of the choicest of all being G. argenteum. It is delightful either in or out of flower. It has exquisite pinkish flowers, and the whole effect is delightful when we see a good plant on the rockwork. There is also a lovely white-flowered variety, G. a. album, and a deeper-coloured one named G. a. purpureum. It is admirably adapted for the rock garden, and a good-sized plant is productive of great pleasure there. G. argenteum and its varieties should have a light, well-drained soil of loam, leaf-soil, and sand, and ought to be planted in a sunny situation not too exposed. It may be raised from seeds or may be propagated by division. Few of our alpine plants are more worthy of commendation than this charming Cranesbill.

S. ARNOTT.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Sit down and travel

IT is to be hoped that the notes on rare and interesting plants once in cultivation in our gardens and brought to notice again by Mr. Hay's invaluable contribution to GARDENING ILLUSTRATED recently may be the forerunner of many more articles from his pen, which I am sure will be looked forward to by a large number of your readers.

It may lead others who are fortunate to have in their libraries valuable books on flowers to dip into them and give readers the benefit of their incursions into works that are rare and too costly for the majority of those interested.

It should also be an incentive to readers abroad to aid in the search for lost species, that is to gardens, and result in seeds or plants being collected, and thus restore to our gardens many lost treasures.

Old catalogues also afford a field for investigation, especially such as were issued for Reginald Farrer's Craven Nursery. One that I possess, issued probably about 1911, is not only a beautifully-printed catalogue, but also a guide. A few of the outstanding plants are printed in larger black capital letters. Among these are plants that do not seem to be in our gardens at present and do not appear to be included in any of the present-day catalogues.

Among the plants specially mentioned are Campanula Morettiana, a very rare treasure and hard to procure, as it inhabits the highest and most "care-take-ful" aretes and ridges in the Fassa Dolomites. It is a chink-haunting species, minute in habit, with large bells of dark blue that stand erect. Convolvulus sabatius is peculiar to the Olive yards round the Capo di Noli. It is near mauritanicus, but tufted and compact in habit. Thlaspi limosellæfolium, a larger, looser, brighter species from the Maritime Alps, is rare, but takes most kindly to cultivation either in soil or moraine. Is perfectly lovely and very sweet-scented. A treasure of the first rank. Viola nummulariæfolia, the wonder of the high shingles in the Maritime Alps, is purely a moraine plant. A Violet, not a Pansy, running about among the stones and sending up countless little round flowers of a clear lilac-blue freaked with dark purple. An extremely rare treasure beyond praise or price.

T. ASHTON LOFTHOUSE.

—— In his interesting article, "Sit down and travel" Mr. Hay tells us of plants introduced to this country which we and our fathers have neglected and lost. One by one he makes these ghosts appear before us, convincing us of our faults, and, like a good teacher, holding out hope for the future. Still better; he points out ways and means by which we may regain what we have lost. Mr. Hay will, I think, find many who agree with him, and our thanks are due for the trouble he has taken to bring such apparently desirable plants to our notice.

His strong appeal to residents abroad should bear fruit. For my part I would make an appeal to those who may rec seeds. Many of us may not be able in the collection; let us see that we part in caring for any that fall into ou And if successful help by distribut plant and publishing the method wl made its cultivation possible. Not more disheartening to a collector than his seeds, procured at much trouble a personal discomfort, badly cared f the other hand, it is, perhaps, well to collectors of the desirability of sele good variety of the species they colle Mr. H. F. Comber, the Andean c states that Lathyrus magellanicus va siderably, many forms being scarcel growing. The figure referred to by is that of a most beautiful plant.

When a good variety is collected it worth while to follow Mr. Kingdon example and give it a popular nam tainly it distinguishes it from the type of the species, with which it is likely to be confused. Seeds thus may revert to type, but my experien me to consider the extra trouble wort

Shall we succeed in growing these fastidious plants when reintroduced? young gardeners we still mourn fo keen men lost in the Great War, but a tion is rising which, backed by good may excel all older cultivators. It fortunate if this is the case, for it possible that many of these plants ha lost or superseded owing to diffic cultivation. One "ghost" mentio Mr. Hay is still in the flesh, viz., plicata, at Edinburgh Botanic Gard even that arch-wizard of a propaga Laurie Stewart, finds it difficult to Again, in the past rare plants were grown in batches, and good seed of cult to obtain because of the absence fertilisation. To-day this is better stood. It is well known that a sing may be self-sterile. Plants when tively propagated often become mor able to cultivation. Seedlings of officinalis are almost annual in chara form propagated in nurseries is p We have to thank Miss Willmott for of the *one* plant of Ceratostigma W raised from Wilson's seed. From it the hundreds that adorn our garden If seed alone had been the only m propagation the plant would probal been lost. Neglected plants have found a strong champion, and if thre article in question they again find a our gardens by all means give the trial. To "Prove all things and hold that which is good" is, after all, n rule for a gardener.

J. C

Nymans Gardens,
Handcross, Haywards Heath.

The Physalis

The season when the bladder-like of Physalises (the Winter Cherr gathered usually calls forth inquir those who have not grown them as plants may be cultivated. It is a matter of surprise to me that, thou winter decorators are sought after al time of the year, so few comparativ them. Physalises, though hardy, served when they can be given a wa tion, such as a sunny border. Propa effected by seeds, which can be sow doors in April or May, from cuttings shoots, and also by division of root autumn or spring. Species are Fr (orange-red calyces), Alkekengi (ora and Bunyardi, the last with pr pods. The stems should be cut whe ing of the calyces has finished.

DERB

Campanula lactiflora

careful gardener is always on the out for ways of making plants con- to his needs. Among various de- of the most useful is the simple of cutting back a tall plant in order its flowers to the height desired. tration shows a main group of la lactiflora, a plant that may be in height up to 6 feet. Self-sown are apt to appear near an estab- mp. One such seedling had grown rdy plant, but as it was close to the e of the border, and as it evidently n the group of tall ones just behind, down in June to about a foot above nd is now a flowering mass about igh. This cutting back does not ffect the time of blooming, though s that it would tend to retard it; ne at the right time the cut-down s pace exactly with the taller uncut his useful shortening of height can ed with several other plants. When pporting Michaelmas Daisies in the June some of those nearest the treated in the same way. Galegas, apt to be too tall and vigorous in s of the border, are benefited by a imming, and even annual Sun- hough we only grow the moderate- nrose-coloured ones, can be con- to bushy, blooming plants under gh. Moreover, they make better nts, for instead of having one large a 6-foot stem, they produce a num- aller ones in a shapely form. The Japanese striped Maize can be a fairly low plant by cutting out middle growth. When this is done shoots, which are always the best multiply, and make a beautifully lant of quite unusual aspect.

G. J.

Potato Ben Cruachan

e this Potato has been awarded a l and also the blue ribbon of the rld. How and under what circum- received these signal honours I agine. I grew a certain number of year, and last week they were Every Potato was found badly out a small quantity that escaped I d for dinner, only to find that they n extremely soapy nature and the oor in the extreme. In close to this Potato was growing the old York. This was found, as usual, ectly sound and good, and I now at another yard of the official ribbon cut off and pinned to the breast of ne and worthy veteran.

A. J. Davis.

Change of Seed Potatoes

recent years several ailments have which the Potato is subject, these h more prevalent in some districts s, hence the advisability of obtain- as much as possible from non- reas. For some 12 years or 15 tly in the nineties, I always saved eed and had excellent crops, the lt being about 3 tons, confined to at most four, varieties. These a first early, a white-skinned kid- d from Cosmopolitan; as a second, Castle, and as a main crop, The d later, Up-to-Date. I never had atoes, and never wish to have, none rieties of late years, with high- ames and very dear, beating them cropping or quality. If asked to best all-round Potato I have known last 40 years I should vote for Castle. This and the early variety above named have passed away, but Up-to-Date remains, and it is interesting to note that this year, in an allotment field of 12 acres, this variety quite held its own with, and, indeed, was far superior to, many of the newer varieties. Some of the holders were a bit too fast in lifting it, the skin being hardly set, and extra force used in clearing off the damp, clinging soil has had a tendency to bruise the tubers and considerably prejudice the keeping qualities. The field in question requires a necessary amount of thought and care in cultivation to produce the best results with Potatoes, the soil being heavy, overlying clay, and those holders are most successful who get their ground up early in autumn and are able to dig in deeply a thorough good dressing of short manure or leaf-soil. Manure, however, is scarce and dear, and leaf-soil, owing to the absence of trees in the district, nearly as scarce.

I am rather doubtful as to the keeping qualities of many varieties, for, as above noted, some were lifted a bit too early, and with others a slight touch of disease was evidently present, but was overlooked in the picking owing to the particles of soil clinging to the tubers.

C. S. P.

Campanula lactiflora

Calceolaria polyrrhiza

I was rather astonished to notice, on page 584, Mr. Arnott's appreciation of this subject, as, with me, in the rock garden here, it proved to be nothing but a troublesome weed, over-running many choice plants, and only being exterminated after much labour. It increases at an astonishing rate, running under stones and coming up through other plants, and that greatly to their detriment. I would be sorry to advise anyone to introduce it into a choice rockery, but perhaps it does not romp so outrageously in all soils.

C. Blair.

Preston House, Linlithgow.

The Apple and Pear crop

I was much interested in your report of these crops in the issue of October 2nd. Here, although not what might be termed a good fruit district, the return this year is much better than it has been since 1923. Certainly very few varieties have given a really fine crop, but in every case the quality of the Apples is finer, perhaps, than ever before as regards size of the fruits. Dessert Apples are never really good, James Grieve on a wall being invariably the best. This variety carried a good average crop this year. A young tree, also on a wall, of King of the Pippins produced a few large fruits, as did a Worcester Pearmain. Another unnamed variety that never before produced decent-sized fruits is really very fine this year. In appearance it resembles King of the Pippins, but is of different flavour. Cox's Orange Pippin carries a few fairly large specimens, but these are not yet ripe (October 1st). Grenadier gave us, on a wall, some large shapely fruits, while in the open Lord Suffield, Ecklinville, and another good unnamed variety resembling the old Gloria Mundi had a fair crop of very large fruits. Warner's King, on a wall, was very good, and quite fair in the open. Pears are never good here, but this year a smallish tree on a wall facing east had a really decent crop, the fruits in some cases being a fair size. The variety is Jargonelle. A good-sized tree of

Marie Louise only carried five fruits. Louise Bonne of Jersey has given us a sprinkling of fair-sized fruits, but these are not yet ripe. All other varieties are absolutely barren this year. C. BLAIR.

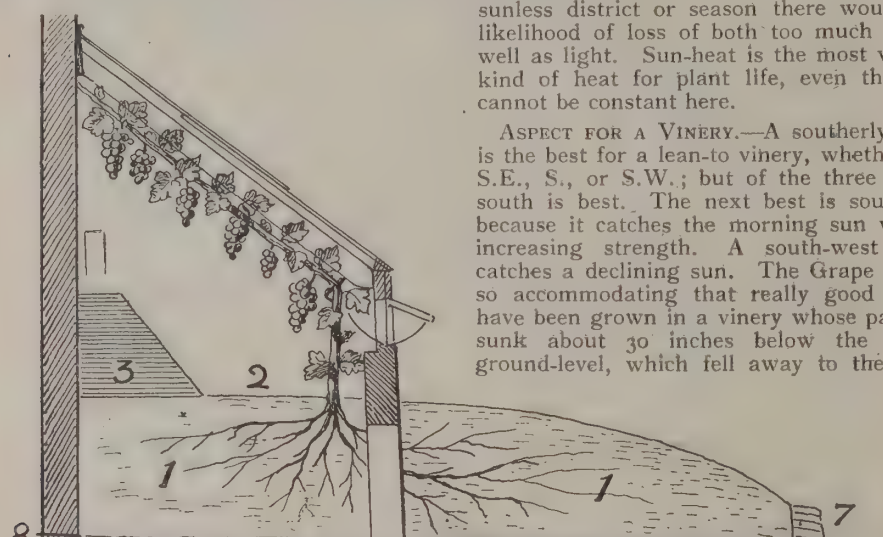
Preston House, Linlithgow.

The Small Vinery

Success usually comes to him who is attentive to details, and what are too frequently termed small things. Aspect is an important factor in the matter of heat and light, which the vine requires for the growth and ripening of its fruit.

IN the selection of an aspect for a vinery too often we see it built against two walls of the house and forming a right-angle, into which the vinery is built. That is a mistake, as the walls absorb so much of the light, to the loss of the leaves of the Vine. In this case we see that the cosiness of the corner is at the cost of the light, which is minimised by the angle formed by the wall at the back and on the left or right. If the vinery be built against a wall facing south there should not be an equally high or higher wall on either the right or the left flank, but one not so high as the vinery there may be.

It is well to consider all these things in detail before commencing to build. By so doing much disappointment and failure may be avoided.



A vinery, 19 feet wide inside measurement, having both inside and outside borders

The Vine is a lover of heat, light, air, water, food. It also loves cleanliness and space. The Vine is naturally one of the most luxuriant and most fruitful plants in the vegetable kingdom, and is much more widely distributed over the globe than it is generally thought to be. The Grape Vine (Vitis vinifera) is a gross feeder and a gross grower, but some varieties are much less gross than others, and size of the bunches and berries varies correspondingly.

It is quite unnecessary to build a large vinery in which to grow large bunches of Grapes. They can be grown as well, or better, in small vineries, but large enough to allow the Vine or Vines to attain a certain maximum degree of vigour and growth. A low roof and a rather long and narrow structure built for Melon growing once contained a Vine which was obtained early one autumn; planted in a small border, which was subsequently extended early the following spring, and at the end of the following summer was bearing 24 bunches of well-finished Grapes averaging from 3 lbs. to 4 lbs. each bunch, this fact proving that mere size of Vinery is not the most important item in Grape culture, and the small grower of Grapes may equal or surpass in size and quality of bunches and berries the produce of the grower on an extensive scale.

Attention has already been drawn to the few principal items of importance to the Vine. It is so easy to under-rate the importance of light. We cannot over-rate it; yet we must not confuse the value of intense light with the power to burn, and thereby cause injury to the leaves, thus rendering the parts burned incapable of performing any work. Hence we must have good glass, clear, and free from the defects which act as lenses to the leaves. In an unusually clear atmosphere, or even a normal atmosphere, excellent Grapes may be grown under rolled glass; but in a wet and sunless district or season there would be a likelihood of loss of both too much heat as well as light. Sun-heat is the most valuable kind of heat for plant life, even though it cannot be constant here.

ASPECT FOR A VINERY.—A southerly aspect is the best for a lean-to vinery, whether it be S.E., S., or S.W.; but of the three aspects south is best. The next best is south-east, because it catches the morning sun with its increasing strength. A south-west aspect catches a declining sun. The Grape Vine is so accommodating that really good Grapes have been grown in a vinery whose path was sunk about 30 inches below the normal ground-level, which fell away to the north, and whose aspect was due north. In addition to the great decrease of solar light entering that vinery (which was 120 feet in length), the roof was glazed with a very thick glass, admitting much less light than rolled glass. The border was practically level with the ground, and not raised above the normal level. Any risk of waterlogging of the roots did not exist, because the fall of the ground to the neighbouring brook was so steep.

These details have been given to illustrate the fact that the Vine will bear many adverse conditions and still be fruitful and healthy.

Our figure shows a vinery 19 feet wide inside measurement, and any length convenient, with roof at the angle of 40 degs. 1.1. shows the border inside and outside, the front wall being built on arches to allow the roots free access to the outside border. 2. The inside border, showing an open trellis path 3. 4.4. shows drainage placed in position before the soil is mixed and the border built upon it. 5. shows the drain immediately in front of, and not under the border, to carry away surplus water. 6.6. Front and back walls of vinery built on footings of stone, slab, or brickwork; the walls to be of brickwork 9 inches and upwards in thickness; in the absence of sustaining walls in the rear the vinery walls should not be less t inches thick. 7. A retaining wall turf. 8. Two layers of turf placed drainage to prevent the choking of th age with finer portions of soil.

Red spider on Vines

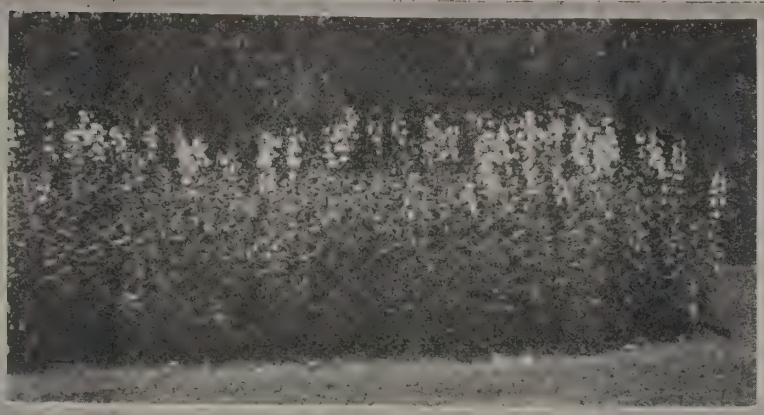
(REPLY TO J. E. FOSTER.)

One of the worst pests a gardene battle with in Grape culture is red s Vines, and as the time is fast appr when this diminutive yet insidious in be very busy, a little advice on one of means of destroying the pest may no of place. Perhaps the Black Hamb all others, is the variety which is t generally infested with red spider, if Muscat of Alexandria. Seldom in ever, do the berries colour satisfac the foliage is attacked with red sp fore colouring commences; therefor hoves all cultivators to take means its ravages before it is too late. perienced cultivator can tell at a g the spider be present or not upon th by the colour of the leaves. If the allowed to go on unchecked, the who leaves will be destroyed by the sun, shining full upon the impaired leave them up. I do not advise such rem covering the hot-water pipes with both in a dry and a wet state, the l painting them with the sulphur, mix the consistency of paint with water pipes are then made hot and the house It is then supposed that the fumes from the sulphur are strong enough the spider; but in many cases the fo injured by an overdose of sulphur, gi time when the leaves are not su matured to withstand the strength fumes. One other objection I have use of sulphur upon the hot-water that in the following season's growt pipes have not been properly cleaned f sulphur when the Vines are in blo fumes arising from the pipes, in cons of their being made hotter than maintain a higher temperature to as tilisation, injure the tender skin of th so much that rust takes place, and i quence the berries refuse to swell. cases the cure is worse than the disea in inexperienced hands much injury by the use of sulphur in the way de Sponging the leaves so affected with mixtures, such as soapy water, Tobac and such like is preferable to sulphu pipes, but it is a tedious process, fraug danger to the berries and bunches.

I have at some length pointed out t remedies employed and the disadv attending the application of such m I will now describe the method whic found to be the most satisfactory in checking the spread of, but of totally ing, the spider. Vines once affect spider are for several years subject to attacks in the same place. Directly appearance of spider is noticed on the dust the affected parts with sulphur state. When dry sulphur comes into with the spider it is almost certain to pest. With care the sulphur can be to the leaves without damaging or ing the bunches.

Peach failing

(Constant Reader).—The Peach you not Sea Eagle. It looks more like fruit of Royal George. The cause poor quality of the fruit is that the bo been allowed to get dry at some time cropping would also go a long way poor flavour. You ought to exam border as to its condition, and if dry thorough soaking of water.



Three interesting plants now flowering at Kew

imorphotheca Ecklonis — Pentstemon gentianoides — Amarcrinum Howardi

An October Day at Kew

OBER is not usually regarded as a d time to see Kew Gardens, especi- after a dry summer. There are, r, many fine colour effects at Kew at sent time. The Belladonna Lilies, n edging of Zephyranthes candida, he Orchid-house wall, and the Red Hot in front of the T range are ex- good; indeed, we have never seen etter. Then, again, the autumn tints its described in the leading article this nd groups of Michaelmas Daisies lend g splashes of colour in the Arboretum. ew Belladonna Lily, which is synony- with or closely resembles Amaryllis , is in good form, flowering well warm walls and planted shallow. lanting is a common cause for the vering of Belladonna Lilies, and the plies to Nerine Bowdeni, which does itdoors under a warm south wall, he bulbs get a thorough roasting in mer sun.

arge beds of Kniphofias, or Red Hot are particularly good this autumn, is their first season after replanting; tly young plants, with all the vigour h, give better results than larger and ants.

chief object of these notes is to refer three plants above illustrated, all of re now in flower. The first, Dimor- a Ecklonis, will be found in the s of Cambridge's garden, a quiet re- much patronised by nursemaids and , and situated near to the Wood n. This Dimorphotheca has been in ion many years. At one time it was nder glass, and it is a very admirable for the purpose, but, strange to say, s little known and is seldom seen.

plant illustrated is about 4 feet high ely studded with large Daisy-like tinged with steely-blue on the outside ray florets. This plant, like all the aland Daisies or Stars of the Veldt, dry, sunny position, and stands well. Dimorphotheca Ecklonis con- o bloom up to the frosts; it is of great r bedding, and makes a charming pot

temon gentianoides, the subject of the illustration, is a native of Mexico. It making an admirable display in a ed near the tropical ferneries. The mauve flowers are freely borne. ant has great possibilities for garden on as the colour is much needed in lower borders at this season.

crinum Howardi, the subject of the third illustration, is the hybrid that distinguished itself at the recent Holland Park Hall by gaining the only First-class Certificate. At Kew it is growing against the warm wall of the tropical pits. This is a lovely pink-flowered bigeneric hybrid, the result of crossing Amaryllis Belladonna with Crinum Powelli, the former being the seed parent. It was raised by Mr. F. Howard, of Los Angeles, California. Two plants are flowering at Kew. The shape of the flowers betrays the Amaryllis parent, while the growth and profusion of long, deep green, strap-shaped leaves arising from the bulbs take after Crinum Powelli, the pollen parent.

H. C.

The Bugle Flower of South Africa

This lovely Watsonia was shown by Messrs. Perry at the Royal Horticultural Society's meeting on October 5th

The propagation of the Pentstemon

Among autumn flowers the large-flowered, or florists' Pentstemon, takes a very high place, the modern varieties being of large size, both as regards spikes and individual blooms, while the colours, within recent years, have been wonderfully improved. Of stately habit of growth and not difficult to manage in any good garden soil, it is astonishing that this fine plant is not more widely cultivated.

While cuttings may be secured at any time from the middle of August till the beginning of October, the first half of September is, probably, the best season for this work. Side shoots of moderate strength and that show no disposition to form flower-spikes in the points are the most suitable for cuttings. These should be moderately firm and some 5 inches in length. Trim in the usual way and insert firmly in a bed of fresh sandy compost made up under a cold frame. This bed should be well drained and made pretty firm before proceeding to plant the cuttings. Allow from 3 inches to 4 inches between the cuttings each way and press the soil well round them, a "hung" cutting never doing much good.

On getting the frame filled with the cuttings give a thorough watering through a coarse rose. Close the frame and carefully shade from all sunshine for several weeks. As the cuttings become used to their new quarters, which is intimated by their stopping drooping, a very small chink of air should be given by tilting the sashes at the back. As they become used to this the chink can be gradually widened, and should be left so, both day and night, until frost threatens, when the lights should be closed. All autumn and winter, when climatic conditions permit, the sashes should be tilted a little at the back, and only shut for frost. It must be borne in mind that the Pentstemon, even in Scotland, is nearly hardy, and to coddle it is to spoil it. Unless the autumn is very dry it is hardly likely that more water will be required until February or March.

While varieties are now very numerous many of them are so alike that it is difficult to tell them apart. The following I consider among the finest to date:—Lord Aldenham, Maurice Gibbs, Mrs. Langford, Lord Hunsdon, Red Riding Hood, H. J. Elwes, George Home, Mrs. Edwin Beckett, Mrs. Fulford, Lady Hunsdon, Daydream, and Castle Forbes.

C. Blair.

Preston House, Linlithgow.

THE STORY OF MY GARDEN—I.

THE story of my garden, I suppose, actually began some 40 years ago, when I was learning the value of colour, form, and contrast as an art student acquiring some skill to paint. My first effort in gardening was in the modest little villa which I was proud to lease on my own. The garden was of the usual parallelogram form, some 22 feet wide, and looked over a brick wall on to a dreary range of Board School buildings.

To improve this outlook, and to hide the fence, I made a semi-circular bed projecting from it one-third across the garden. This I filled with Hollyhocks and Sweet Williams in front. It was a brilliantly successful feature during the flowering time, and it fulfilled its function then admirably. Later I have helped to create five other gardens, two of which were entirely of my designing. During this period my brother, who was a keen amateur Chrysanthemum grower, was instrumental in enabling me to pay many visits to Capt. Torrens' rock garden at Hayes, where I first realised the charming colour schemes to be wrought out in this medium; to the famous garden at Elstree, where, through the kindness of Mr. Beckett, I learned something of many glorious flowering plants and shrubs, and the possibilities of their effect in a garden. I also visited Baron Schroeder's garden at the Dell, Egham, where this fairyland of Rhododendrons gave them a high place in my affections.

The result of this experience, coupled with an ever-increasing interest in flowers for the sake of their variety, colour, habit, and form, is shown in my present garden at Rusthall. It is most beautifully situated naturally. It slopes down into a little valley with the Spa Hotel Golf Links on the east and south-east, while Rusthall Common is on the south-west and west. When I took the house the main lines of the garden were already laid, but to my taste there were too many trees and not enough flowers for colour. There was an unusual rounded grass terrace on one side of the top lawn. I had had experience of clipping grass terraces—a rounded one appalled me. I determined to change it to a rock garden. We dug two wedges into the terrace and heaped up the soil in between. At the southern end the ground was held up by a natural rock cliff some 8 feet high and an artificial flight of stone steps. Most of the soil was heaped at the south-western extremity. We also dug a shallow, winding trench on the west side of the now rapidly disappearing terrace, and heaped the soil opposite the apex of each wedge. We started to build from the north, where a small piece of rockwork had been made and a paved walk with a flight of steps led to the lawn. In each of the three main bays of the rock garden the highest end was always facing the north. We sloped the ground so that the counterscarp lengthened southward to catch as much sun as possible. The rocks were built up to suit this main idea. In the hollows of the original two wedges we laid flat steps of rock and so gently descended to the lawn. These step paths led up to the winding trench, where again we laid flat stones to form a rocky path. Opposite to each junction of the rock steps to this path we built up a feature of rock some 3 feet to 4 feet high, and we sloped the soil gradually away westward until it merged into the narrow herbaceous border already existing. This border was bounded on the west by a Yew hedge, on the other side of which was a 4-foot path. It seemed a pity not to have a grand width of flowers, as much as one possibly could in reason, and so I had the Yew hedge shifted to the other side of the 4-foot path, where it now flourishes as a topiary feature. I included the space it occupied in the herbaceous border, and the Yew hedge now forms a most effective background to clumps of Delphiniums, from which it is separated by the 4-foot path. Over the hedge on the other side of the kitchen garden, some 20 feet away, is a second batch of Delphiniums at the foot of a mound, so that we get a vista of Delphiniums contrasted with golden Brooms growing on the top of sized mound. Beyond, right away, w see the rocks on Rusthall Common bring these rocks into the picture we remove several Plum trees diseased silver-leaf, and Lilac and Veronica which hitherto had completely hidden th turesque feature.

The top lawn was levelled up consid to the east and south, the sloping si the south end having a depth of 6 fe path ran round these two sides of this as well as near to the house. The owner had zig-zagged his paths from o of the garden to the other, across the the valley, but had paid little attent direct access to the bottom of it. So in a flight of rough stone steps at the west corner of the top lawn and also n path straight from the bottom of the st the lower tennis lawn, which we a reached by three more stone steps. Ag had to make a flight of six steps fro level of the tennis lawn, to reach our path, which was shaded by Oaks, Fir May trees growing along the valley a the slopes of the Spa Links on the othe This path originally ran immediately the bank of the tennis lawn, but as it 3 feet of possible garden ground still completely under the trees, I moved th to within 1 foot of the shrubs, hidin boundary fence. I had the whole g thoroughly trenched, and as it was leafy loam, I planted it with Rhododen Azaleas, Trollius, all sorts of Lilies along the edge of the path Micha Daisies enliven it in the autumn. I st the tennis lawn bank of its grass, had over, planted it with Sutton's long-s Aquilegias with Iris along the top. Th of delicate colour we now get makes it the most delightful parts of the g whereas nothing did well before und trees. Around the top lawn had been p Penzance Briars trained as espaliers. did not like the drip from the Oak neither did they stand the winds comp They were old and untidy looking. I fore reluctantly dug them up and inserte shaped Rose-beds to fit each of the so corners and planted Mme. Ed. Herriot and Mme. Abel Chatenay in the other. did all right for a time, but the sand and possibly rapid drainage, did not to suit them, and I am now trying Be in their place. In a long, narrow bed the east side of this lawn I grow Cro Hyacinths, Daffodils, Spanish Iris, an Lobelia cardinalis and Marigolds, Libertia as a background. On the slope this side also are planted Daf which in spring make a great show those on top. The drip that I refer comes from a forest Oak tree which gro the slope to the east. It is 12 feet in c ference 3 feet from the ground, so tha some age. It makes an agreeable shad the slope being planted with Rhodode ponticum and Holly at the back it fo good shelter, so here I have a seat, a slope has been made up to form a semi-circular terrace on which we ca tea. The bank is planted with Hea various sorts, while Primulas occupy a to the left and help to brighten this in the spring. North of this Oak the two more Oaks not so large, but still trees. The banks on which these Oaks are flanked with Rhododendrons, Be Golden Privet, Aucubas, and Snow while on the flat between them and the we have made a bulb garden. Bluebells naturally, and with Winter Aconite, drops, Daffodils, Narcissi, Chionod

The Story of My Garden: The lower rock garden in the making

It is situated in a natural valley in Rusthall

s, Tulips, and Leucojum. This makes gay and interesting corner in the early The ground from the bulb garden ently down to a clump of Scots Pine the bottom. A path winds easily ut as it wore very badly by the drip e old Oak branches I had it tarred, now have a path that we can e in all weathers without risk of slip- On either side of the path was grass, the left the boundary hedge of Privet. ter we have cut down to 5 feet in so that from the small terrace under Oak we can get a good view of the ons of the links. It is like looking 's own well-kept park. On the left, a knoll of smooth turf, is a wood of nd Oak, one end of which hangs over r edge of a lake. From the lake the rises up with a fringe of Oaks and es on the top. In front of us and to t we have the rolling slopes of the ith Oak trees dotted about here and ruly one of the most charming and iews from the garden.

was enough grass and green to be r the hedge, and so I converted the ss patches in my own ground, one dodendron terraces, and the other I with flowering shrubs—Indigofera na, Weigelas, Forsythia, Philadel- iburnum, Buddleia, Hibiscus, Rhus Deutzia, Hydrangea paniculata— golden Catalpa, Cerasus pendula nd variegated Maple to rise above This flowering shrub border runs e winding path for about 30 yards, ve planted underneath the shrubs and kinds of common Primulas, Polyan- th an occasional P. japonica and B. a. For summer flowering we have veet Williams planted among the . The Rhododendron terraces are ut 18 inches high, faced with small hich are planted with various rock They are five in number, and slightly in shape. The Rhododendrons are towards the back of the terraces, pe back from the front towards the ndrons so that these get all the rain ibly can, otherwise they would have t of the rain, which would have wn the hill.

ll. H. T. W.

(To be continued.)

The Story of My Garden: Lupins and Clematis near the house

e Story of My Garden: The upper terrace makes a pleasing rock garden

The Ranunculus-like Wood Anemone

It is pleasant to associate with the varieties of the Wood Anemone, or Windflower, some of the plants of Anemone ranunculoides, a yellow-flowered species, native of this country. The typical A. ranunculoides is a dwarf plant with small bright yellow flowers. A. ranunculoides fl.-pl. has quite double little golden flowers. I do not venture to assert that it is superior to the single form, but it is a nice variety, and far from being a common plant. Then there is a large-flowered form called A. r. grandiflora. It is not only larger, but is also earlier, and is supposed to be the Italian form of A. ranunculoides. A very pretty variety which I have not seen for a while is A. r. sulfurea, with pretty sulphur-coloured flowers. Ess.

The Tigridias

The rock garden not infrequently lacks interest in September and October, but it is finely sustained by a group of Tigridias. Being natives of Mexico they have thoroughly enjoyed this warm and sunny summer. During the third week in September the beautiful golden-yellow variety named conchiflora, and the white alba, with its characteristic carmine-spotted cup, have been in blossom. There is, I believe, a pure white form in which no spots appear, but this I have never grown. The two above-named varieties flowered about a fortnight after rosea, with its deep rose-tinted petals and yellow cup heavily blotched with crimson, at the same time as the gorgeous scarlet-flowered grandiflora. Even in warm, shel-

tered, and well-drained positions they are, I think, best lifted and the bulbs thoroughly dried off as soon as the foliage is yellow. They may then be hung up in a place free from frost or stored in dry sand, and planted again about the third week in April in light sandy loam. Growing near them the delightful violet Crocus speciosus is flowering and each species of plant gains brilliancy from association with the other. In front of these brightly-coloured flowers festoons of Ice plant, Mesembryanthemum crystallinum, look cool and refreshing. The seeds were sown in the open, where the plants now are growing. H. H. WARNER.

Brighton.

Escholtzia Vesuvius

Employed to form part of a colour scheme consisting entirely of annuals, the above has been effective this season. The colour of the flowers may be described as a reddish-orange, and when viewed from a distance reminds one of Orange King or Defiance Antirrhinums. If it will stand the winter equally as well as E. crocea it would prove a fine subject for planting here and there in the crevices of a rough stone wall in company with Cerastium, Aubrietias, Alyssum, Arabis, Thrift, Dianthus, dwarf Lavender, Nepeta Mussini, Armeria montana, and other things. W. W.

Planting Wallflowers

These should be transferred to their permanent positions as soon as circumstances permit, so that they may become partly established before winter sets in. If pricked out in nursery rows in May and June, and the precaution taken to shorten the tap roots, they can now be lifted with an abundance of roots and with a good quantity of soil adhering to them. If the weather continues warm and dry one or two root waterings may be necessary, particularly on light and sandy soils. The early-blooming kinds of the Phœnix type should be got out first, and if they can be accorded a fairly sheltered position they should flower more or less throughout the winter provided the plants were raised from seed sown early in May last. Borders which have been devoted to the growing of annuals only, and which are now past their best, provide very suitable sites for the early Wallflowers after the plants have been cleared away. The later-flowering varieties, such as the giant-flowered yellows, reds, browns, and Cloth of Gold, may be planted in a few weeks' time.

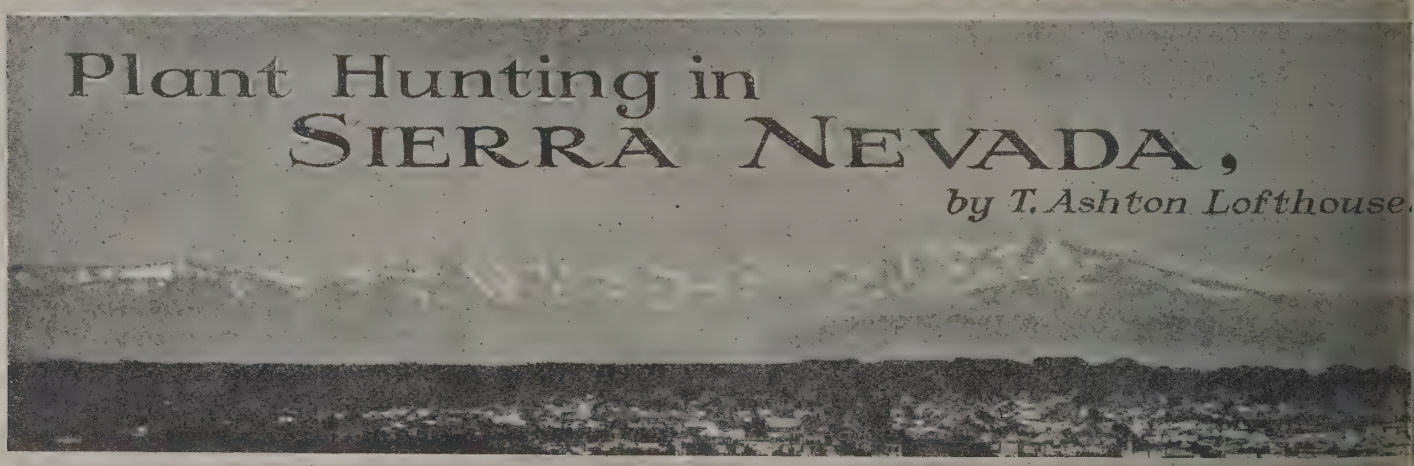
Heleniums and Helianthus

As these two plants thrive under similar treatment, and are more or less alike as regards their floral aspect, both giving a display from July well into October, the bronzy-red flowers of the former and golden-yellow of the latter yielding such a wealth of colour, it appears well-nigh impossible to praise them too highly either for the herbaceous border or the wild garden. The first-named comprise some eight or ten most excellent varieties, from 2 feet bordering on 6 feet in one or two cases, which make it all the more convenient in arranging or replanting a border. Probably neither is so well known to the general cultivator as H. pumilum magnificum, the first to flower. It is but 2 feet in height, while H. Hoopesi, of the same height and of an orange-yellow, begins to bloom in the month of May. Riverton Beauty and Riverton Gem are two that must not be omitted, neither ought the late-flowering H. autumnale superbum and H. a. rubrum.

While the above plant increases fairly fast it does not quickly oust its neighbours, as do the majority of the Sunflowers. These are mostly rampant growers, their spreading, thong-like roots monopolising the whole border if not kept in check. A great ob some will say, but we cannot obliterat from our borders entirely. Their flowers, so freely produced, would be missed during the late summer. The varieties are doubtless the best for work, such as H. multiflorus, Bouque rigidus (syn. Harpalium rigidum) dentalis, and doronicoides, relegating wild garden the taller ones as Mellish, H. G. Moon, Wolley-Dod Willmott, and one or two others of stature. As previously remarked, the ing habit of several varieties necessita sion and replanting every third year this in autumn or early spring, finer resulting, as well as keeping the clum allotted space.

Mesembryanthemum imbric

This is an interesting trailing, su plant suitable for the rock garden things make a more pleasing feature the dreary season than a broad mass plant hanging over a huge rock. Th produces curious branching shoots wh clothed with tiny fleshy leaves, giv plant a unique appearance. In co quarters it spreads into a distorted covering the face of large rocks w richest verdure. On some dry sunny o or the southern face of the rock gard ideal, for it will withstand heat and with impunity and thrive in the most places. It will thrive with a modicum and even this need be only of the character. For this reason it is ad adapted for planting in some hot, dry where a rambling plant is desired, for a position it will form an attractive teresting specimen. The plant is p hardy if grown under sun-baked con Good culture tends to make the plan too grossly, and it is then liable to back during sharp weather. H. ST



(Concluded from page 599)

AT 4,500 feet I reached the first house on the track side, and a little higher were two detached houses of recent erection, apparently country houses with gardens, an innovation for these parts which opens out possibilities of future development.

The track now traversed gradually up and round the mountain sides. Among plants seen before returning were the grey woolly-leaved and green-leaved Lavenders, Teucrium aureum, Teucrium Polium, a white-flowered Micromeria like Thyme, the pretty purple Orchid-like spikes of an Orobanche, the dainty bright yellow-flowered Linum tenue (scabrum), not unlike a yellow-flowered Aphyllanthes, Saponaria Vaccaria, with its Silene-like rose-coloured flowers, and some Genista hispanica.

On the 22nd the same route was followed up to "Les Acacias," a new residence at about 4,600 feet altitude. Starting at a little after 6 a.m. this point was reached about 9 a.m., the journey being made much more quickly than on the previous occasion. The path, gradually winding upwards towards the Col on the south side of the Dornacho, was more interesting, and some very good plants peculiar to the Sierra Nevada were seen by me for the first time on my last day in this delightful region.

Linum suffruticosum, one of the salsoloides type, was frequent and very pretty, with its dark-eyed, satiny-white flowers fre duced and fully opened out in the This and Dianthus brachyanthus, hard green short-pointed leaves an large red flowers, were both seen pr in similar situations at the east en Sierra Nevada. The bright single flowers of Linum tenue were freque masses of Lavenders, Teucriums, a aromatic plants, including the vivi Santolina viridis, with its bright yel ton flowers, and the curry-scente chrysum serotinum.

At about 5,000 feet a considerable covered with Salvia argentea, with silvery-grey leaves and blue flowe

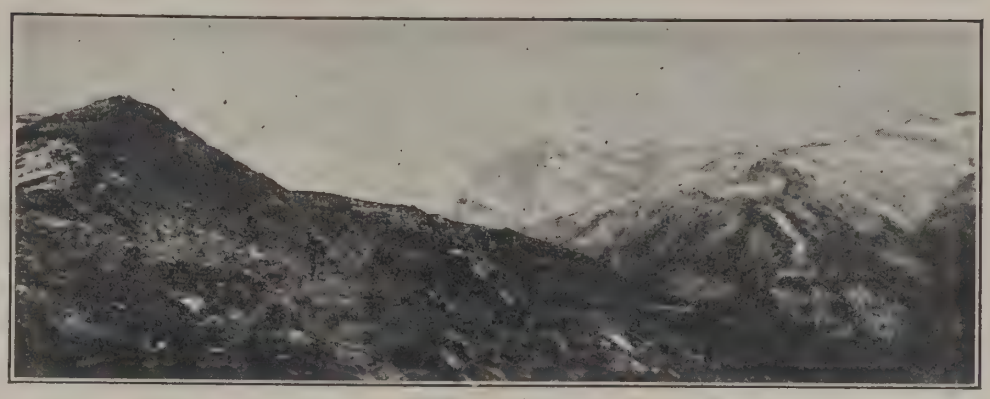
was growing on shaly ground that have held Erinacea and Cytisus at this It occurred to me at the time that they ave been cleared off owing to its near- to the considerable population of da. It was noticeable that little scrub ft that could be used for fuel in these s parts, there being only isolated bushes hispanica, Juniperus Sabina, and no ea pungens in the limited area explored Natives were met with mules loaded ith Genista, etc., no doubt brought uch further afield.

track, winding round the buttress of the Dornacho, eventually traversed gh ground above the Monachil stream, lay deep down in the valley to the At this height, about 5,500 feet, there considerable outcrop of limestone with oulders lying about. In the crevices se rocks, in a very limited area, was vely dwarf Campanula mollis, with rounded, greyish-green, hairy leaves quisite bright blue, wide-open bells. plants were wedged tight in the s, from which I found it impossible to e the roots. In the same rocks was r treasure, the dwarf grey, villose- aromatic Teucrium granatense with flowers. Draba hispanica, a D. s-like plant with pale yellow flowers; dum glandiferum, a pretty S. dasy- n like Sedum, were in the same area.

as now about mid-day, extremely hot, ot conducive to diligent research. was also about due, but was postponed vater was reached. A lovely spring entually found about 2½ hours from the pply. A halt was made and lunch in a delightful position high on the above the Monachil. There was modern house a little below and the the Monastery of S. Geronimo were

the stream from the spring was a anagalloides, a rare species; also smopolitan Veronica Beccabunga, retty when dwarf, reminding me of a ittle plant taken by a roadside stream ,000 feet up in the North of England nsferred into the garden, only to de- to a large, loose, overgrown plant.

wing the path a little higher up to- the Col, several plants of Pæonia were seen, some just going out of and some with seed, unfortunately not tly ripe to germinate. A week or two these slopes at about 6,000 feet alti- ist have been lovely, with these hand- ngle-flowered Pæonies. My intention attain the shoulder of the Dornacho, as hot and tiring at this time of day, my time was getting on, I decided to my steps. On the return another was made to dislodge Campanula but without success. Pushing on, at nd of the track, away from the il Valley, a wrong path was followed brought me into some very rough ; but it proved to be a fortunate mis- lding some of the most interesting of the visit. On the steep, stony were bushes of the not unpleasing Gnidium, with smallish heads of owers, a species that occurs in other ranean stations. In green and some- mp places at the bottom was a lovely Aphyllanthes monspeliensis, with its l blue, longish-stemmed, Linum-like owers and rush-leaved foliage, the ifficult to trace out among the her- which it is matted. I had seen the arlier and it always came out with the tem only and no leaves. In this where they were quite a feature, I set to trace out the roots and found ghtly entwined in the roots of grasses, happened to visit Kew for a short time on my return to England, and noticed a lovely clump high up on the rock garden planted under the shade of some shrubby plants. Medicago sativa here had much darker purple flowers than seen previously on plants at the other end of the Sierra Nevada. Thalictrum minus, the local Calamintha granatensis, the choice wholly, red flowers of Trifolium angustifolium and the lovely Polygala Boissierii were also seen.



The Sierra Nevada as seen from above Granada

On working my way out of the basin towards a track to be seen below, I came to a lovely lot of the rare and choice Erodium asplenioides, with its compact rosettes of green, deep red-centred leaves and pretty rose-coloured flowers. I also saw Anthyllis tegedensis, one of the gems of this genus, with mats of grey, silvery leaves and heads of fluffy yellow flowers, a desideratum for the rock garden, but possibly too much of a sun lover for our climate.

Coming down into the track, the blue-grey limestone zone was reached. In this were plants of the rare and very local Echium albicans, with rosettes of lovely silvery-white leaves and bright blue fluffy flower-spikes. The tap roots were deep down in the blue limestone grit. This find provided a fitting termination to a most interesting outing.

Sweet Peas

The flowering season is now past and the thoughts of the cultivator must be on plans for another year. After having noted the newer forms in the various exhibits one naturally finds some variety that may improve one's own stock collection as it were; something to add. I try not to get over a score of colours at any time, including one or two sorts quite new, favoured just for interest in trials. There is a difficulty, therefore, in concluding which not to grow; what once favoured variety shall be discarded to make room for the additions.

Perhaps the better way is just to name those intended to form the collection for next season, chosen for size of bloom and colour. These are Charming, Constance Hinton, Gold Crest, Elegance, Hebe, Leslie Rundle, Mammoth, Mascott's Ingman, Mrs. A. Hitchcock, Mrs. T. Jones, Picture, Powerscourt, Royal Pink, Royal Purple, The Sultan, Valentine, Youth, and 2LO. The respective shades of colour can be obtained from the list of any specialist. The newer 2LO is crimson-scarlet, Leslie Rundle cream, Royal Pink a remarkable shade. The others are more or less well-known names.

Failures during the year have been pretty frequent. From my point of view, deferring the sowing of the seeds till spring is a cause, and those who have not been successful will do well to note this. Autumn sowing gives the grower a splendid start. This provides time for the plants to make abundant roots. Spring sowing will not do this. Plants so started have a tendency to spindle into bloom without a good foundation. It is not good practice either to attempt to get ample roots through the use of stimulants; this will end in failure. One treats the Sweet Pea as being hardy, and it resents being coddled in warmth. It may be that there is safety in sowing the seeds in the open in autumn if the grower took the necessary steps to protect against slugs. The method, however, is not advisable in the case of the better sorts, because the seeds are somewhat costly, or rather they should be treated individually. We do not like to lose one. Prepare, then, to start towards the end of September in a way that protection may be afforded in winter, and so that the cultivator has the little plants at all times under the eye, so to say. There is not any special gain in using a small flower pot for each seed; yet to recommend this method there is the fact that when taken out in spring the plants can be handled without fear of damage to the roots. I certainly should use pots if not cramped for room under glass.

If boxes, these may not be more than 3 inches in depth, and in either case fill with fresh soil composed of loam, leaf-mould, and gritty sand. Get this of good medium moisture, then it will not require water after the seeds are in—a favourable thing for the germination of these. Press the surface of the soil level and then use a small stick to make a hole just big enough to bury each seed—in the case of the pot one, that of the boxes put in a couple of inches apart. Stand pots or boxes in a cool place under glass and shade from the sun. Take the precaution to set a trap for mice or the whole of the seeds may go in a night. As soon as the tiny plants show above ground give ample air, and as time goes on a gentle shower of rain will do them much good.

Through winter there is little to be done except to guard against slugs and too much wet. As the plants gain strength it becomes desirable to place a small stick against each to keep it upright, for the practice of taking out the points is not followed in my case. I think, indeed, to do this is harmful. The plants want every little bit of leaf to help them through the dull period. Presumably topping is done to make strong sucker-like growths push from the base. These will come in time quite naturally, and comparatively stronger.

Prepare the ground early that is intended for planting next spring. Where possible select a fresh spot each season. If that used where Celery has been grown, or Onions, a capital position is ready made, as it were. Such has been well and deeply dug, as well as manured, and Sweet Peas revel in a good root run, as they resent fresh manure. Lime as a dressing is beneficial and burnt refuse helpful; but I should not favour adding to the earth the remarkable fertilisers so freely talked about. There is time for such when the plants are growing strongly. S. W.

REMINDERS FOR THE WEEK

Southern and Midland

Asparagus

During the next week or so the foliage should be cut down and burned. The beds should be hand-weeded and pricked lightly over with a fork. A good dressing of partly-decayed farmyard manure should be placed on the bed and covered with 2 inches of soil from the alleys. This will prevent birds from scratching the manure down during the winter.

Rhubarb

Where Rhubarb is required for forcing early a few of the best crowns should be lifted now and allowed to remain exposed to the air for a few weeks before taking into the forcing house, shed, or cellar. All decaying foliage should be removed, weeds pulled, and the bed forked over, incorporating the old manure. Cover the crowns over with stable manure.

Spring Cabbage

Plants that were set out during September have now recovered from the shift and are growing away freely. The bed should be hoed over at least once a week, and if any plants have failed these should be made good. Frequent dustings of old soot will keep away slugs if these are troublesome.

Housing plants

Do not delay the removal of all tender plants from the open to the greenhouse or frame or much damage may be done by the autumn frosts. Plants that have been plunged in the beds should have the pots washed and the drainage examined, as this may be choked by worms.

Chrysanthemums

It is advisable to keep these plants as cool as possible, as if undue heat is given many of them will be spoilt. Buds swell quickly when the plants are placed under glass, and the plants may be fed at every other watering until the blooms show colour, when no more should be given. Give ample air on all fine days and see that the soil in the pots does not become dry.

Freesias

These are coming on nicely now and care should be taken to see that they are not injured by frost. A high shelf in a cool greenhouse may be utilised for these plants during the next few weeks. Do not coddle Freesias by placing in heated house or they will be ruined. When the buds show they may be assisted with a little warmth. Keep the growth tied in nicely or it soon falls about.

Lobelia cardinalis

This is not hardy enough to be left in the open during winter, so should be lifted, and either potted up or packed together in shallow boxes. I find it a good plan to divide the plants at the same time. All they require is the shelter of a cold frame.

Hollyhocks

Plants that were raised from seed sown during summer may now be planted out in their permanent quarters, and will bloom much earlier than spring-sown plants. Hollyhocks do not require over rich soil, and lime worked into the bed in the shape of old mortar-rubble is beneficial. The plants are not so liable to be attacked by the disease when this is present.

Thrift

Where this plant is used for edging it is apt to become untidy and bare in the centre. Now is a good time to lift the plants. Divide and replant in single rows. Each division should have a few roots attached, and a little fine grit or gravel used amongst the roots will help them to become established quickly. Pinks and other edging plants may be served in the same manner.

Black Currants

The crops of this have not been heavy in many districts this year owing to the cold winds experienced during the spring. It is good practice to thin the branches of the trees early, but the young shoots should not be cut back. Where increase of stock is required a few of the strongest shoots from healthy trees may be inserted as cuttings.

Raspberries

As soon as the foliage has fallen is the best time to plant Raspberries, and if these are to do well they require a deep rich soil of a retentive nature that has been enriched with a liberal supply of manure. Strong young canes that are well furnished with fibrous roots should be planted 18 inches apart.

Apples and Pears

These should be examined daily, and when they leave the stem freely they should be gathered and placed in the store room. Apples should be kept in single tiers with the eye uppermost. All fruit that falls from the trees will not keep so should be used immediately. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Bulbs

The planting of bulbs, especially the early-flowering bulbs, ought to be pressed on to a conclusion. The sooner these things are planted the better is their chance of blooming in a satisfactory way in the forthcoming spring. This refers to Snowdrops, Narcissi, and the Winter Aconite particularly. Anemones, too, should be planted now. A. coronaria and the double scarlet can be freely used. The latter is a lovely thing, but, like A. fulgens, it does better in some districts than in others.

Flower beds

Where much use has been made of annuals in the flower-beds—Clarkias, Larkspurs, Lupins, Nigellas, Poppies, and the like—the plants will now be shabby and less effective. They may, therefore, be cleared off without further delay, and after the beds have been lightly manured and dug such things as Cheiranthus Allioni, Polyanthi, Sweet Williams, and so forth can be substituted. When beds of Begonias are on the wane the plants, if necessary, can be lifted and put into boxes to complete the ripening, after which the tubers should be stored in sand or, what is better, in cocoa-fibre, in which they keep perfectly until again put to work in spring.

Late vinery

Those who, perforce, must find accommodation for Chrysanthemums or for other pot plants in the late vinery must be prepared for trouble. It is better by far to keep plants, of whatever description, out of fruit houses, especially out of the late vinery. If Grapes are expected to keep well they ought to be ripe by the end of September or early in October, and there is generally, under normal conditions, no difficulty in finishing Alicante, Lady Downe's, and Gros Colman at the time indicated. Gros Colman, though it begi colour earlier than Alicante, takes long finish, and if there be several rods of handsome variety in the late house it is s policy to run a brisk heat through the from now onward.

Fernery

This is a good time at which to take s and to "scrap" any old specimens, espe of Maidenhairs. These are so very raised from spores that there is no nee keep worn-out pieces. Young Adiantum only produce finer fronds than old ones more of them. Those who have suffi heat may move on young Ferns at almos time, and increase their stock by so spores or by division as is preferred.

Fruit picking

This has been, on the whole, a satisfa fruit season, especially in the case of P and of Apples. Picking the later timeously ought to be attended to, but all late fruits should be permitted to han long as possible. If gathering be don soon they will assuredly shrivel. This is ticularly the case with late Pears and A Naturally, such must be closely netted ag birds.

Pinks

Long-established edgings of Pinks always attractive, and if the blooms o plants be small they are freely prod Nevertheless it is advisable now and th break up such edgings, to manure the and to replant. If young plants are not able the older pieces can be torn apart every piece which has a portion of ripe will root if planting is done very firmly. is the time at which to put this work in

Rose cuttings

Many like to put in cuttings of favo Roses, and now is the best season at to do so. The climbing Roses are very increased in this way. Let the cuttin taken with a heel and be of wood whic flowered this season. Insert them very f in a bed of good, sandy soil.

Late Cucumbers

These must be looked over regular order that the necessary stopping and t in may be attended to. Given a brisk this may have to be done weekly, bu finger and thumb will do all the nece "pruning" now. Small top-dressings be given frequently and the roots mu kept moist. A humid atmosphere is desi and this can be secured by damping the and the paths of the house. No ventil need be given except on exceptionally s days.

Kitchen garden

The spades may again be brought out from this time onward be kept regula work on vacant quarters. There is no d of seedling weeds marring the appearan newly-dug ground after this date. Sti soil deeply; if it is inexpedient to trench upon double digging. Very many f realise the value of deep cultivation. O it may be feared, shirk the work, or hav time to dig thoroughly. Any surplus P may be gathered, dried, rubbed down, stored in wide-mouthed jars. Parsl always in request, and if anything wrong with the green crop during win spring the dried material has a certain Tie up Endives and late Cos Lettuc blanch, and put out young plants of B Cos to stand the winter. W. McGUF

Mabie Gardens, Kirkcudbrightshire.

NDOOR PLANTS

Growing Brugmansias

(Reply to "Interested.")

CORDING to botanists we are wrong calling these plants Brugmansias, beiuse they all belong to the genus a. Horticulture and botany, however, t always agree with regard to plant , and the term Brugmansia is applied dens to the shrubby perennial species, f Datura being limited to the annual , to which the Thorn Apple belongs. h quite a host of names has at different been applied to the Brugmansias, it appear that the true species are limited ee, that usually assigned specific rank the name of B. Knighti being really ty of B. suaveolens. The three species stion are B. arborea, B. sanguinea, and veolens.

GMANSIA ARBOREA, a native of Peru, is old plant in gardens. In a wild state South American home it forms a large or small tree from 15 feet to 20 feet in and under cultivation in this country ins about the same dimensions. In a conservatory with ample space for its ment it forms a very striking feature, urdy, wide-spreading branches being with handsome leaves, while the white trumpet-shaped flowers, each inches to 9 inches in length, are freely It is often confounded with the n B. suaveolens, but differs therefrom corolla lobes, terminating in quite an ted tail, whereas in B. suaveolens the its lengthen but little. In fragrance, arborea is not the equal of the other, in both it is more pronounced in the or early part of the night than at any me. In many of the tropical and sub- l regions of the globe B. arborea is vely naturalised, particularly where any attempt at cultivation, for it can dily increased and quickly attains ig size, while what is of considerable nce in a tropical country, the flowers their best in the evening, when they inspected without the discomfort of a sun. Well-marked varieties of B. are chlorantha (often regarded as a species), with yellow flowers, and cor- smaller altogether than the type, but with white blossoms.

MANSIA SANGUINEA.—This, which is, arborea, a native of Peru, attains to the same dimensions, but the leaves e lobed and the branches more slender the older kind. The funnel-shaped of B. sanguinea are from 7 inches to es in length, and in colour bright red, lessening in intensity in the tube merges into orange-yellow and blends e green at the base. This species is nting in the fragrance of the white- l kinds. Like the preceding, B. san- is a native of South America. It t strike from cuttings so readily as B. or B. suaveolens, hence it is some- ncreased by grafting on these others.

MANSIA SUAVEOLENS.—This, which is nfounded with B. arborea, is said to tive of Mexico. The main differences this and B. arborea are alluded to but, as a rule, B. suaveolens, though large, is scarcely so tree-like in habit, ne pure white flowers are deliciously t. The Kew Hand List gives the uble flowered B. Knighti as a variety uaveolens, but it is well worthy of rank, and perhaps the finest of all nsias for conservatory decoration. By is considered to be a form of B.

Culture.—With the exception of B. sanguinea the different Brugmansias may be readily struck from cuttings of the young growing shoots taken during the spring months. The young plants make rapid progress if liberally treated, a suitable compost being loam, leaf-mould, well-decayed manure, and a little sand. As a rule, they do better if planted out in a well-drained border in the greenhouse or conservatory than in pots or tubs, as the roots are wide-spreading and do not bear confinement well. If it is absolutely necessary to grow them in pots or tubs the plants must be liberally supplied with liquid-manure during the growing and flowering seasons. In preparing a hole for planting out a Brugmansia in the conservatory, it should be made at least a yard deep and the same in width, a good layer of drainage material being put into the bottom. The hole must then be filled up with some good soil of a lasting nature, and in this the plant will make rapid progress. When it has attained sufficient size it should be pruned back hard every autumn or early winter, otherwise it will form a straggling specimen. During the winter it must be kept much drier at the roots than when growing.

The culture of the Schizanthus

For the greenhouse, conservatory, or house during April and May no plant requires less skill in cultivation and gives such a fine show of bloom as the Schizanthus. To obtain the best results the seeds should be sown thinly in pans of light, sandy soil during the early part of September. The pans should be shaded and kept in cold frame or greenhouse until germination takes place, which, if fresh seed is secured, should be in about 10 days. Immediately the young plants appear the pans should be uncovered and brought up close to the glass, as at no time must the seedlings become drawn. The soil should be kept moist without overwatering or the small plants are liable to damp off. As soon as the second pair of leaves is formed the seedlings should be carefully pricked off into shallow boxes filled with the same compost as advised for sowing the seed. A cold frame is the best place to grow the seedlings in until the middle or end of October. By this time the plants will have formed nice little balls of roots and will be fit for potting on into large 60 pots, in which they may remain until the turn of the year. The best soil for potting at this stage is three parts good fibrous loam, two parts leaf-mould, and one part old manure. To make this porous, which is essential to the plants at this season, a 6-inch pot full of coarse silver sand should be added to each bushel of soil, and a few handfuls of old mortar rubble, finely-broken charcoal, and wood ashes. These should be well mixed together and passed through a coarse sieve. The pots should be thoroughly clean and well drained. The little plants should be carefully lifted with the point of an old knife or label and transferred one to each pot. The soil should be made moderately firm without undue pressing. A shelf near the roof glass of a greenhouse or pit that can be kept free from frost is all that they require, as at no time must they be subjected to more than 50 degs. of heat. Careful watering is necessary or the plants may be attacked by mildew during the dull days. Presuming the plants are 3 inches high when potted-up, they will require pinching back, but this should not be done for at least 10 days after potting. During February, if all goes well, these pots should be filled with roots and the plants making headway and fit for their final pots. The best size is those of 6 inches in diameter, with the same compost as previously used. New pots should not be used unless they have been well soaked for several days as they are liable to burn the fibrous roots of the plants. The potting may be firmer at this stage. Water carefully and return to the shelf. By this time the plants should have several side shoots formed from the break caused by pinching them back, and these must be staked to keep them in an upright position, twigs from an old garden besom being suitable for the purpose. The plants will now grow away freely, and if kept cool and free from insects will develop into fine plants, which in due course will flower freely. Feeding may now commence, giving weak doses of soot and liquid manure, alternating these with a pinch of Clay's fertiliser to each pot, discontinuing this when the plants are in full bloom. A little shade on the glass is necessary to keep them in good condition. To provide a good show, several plants may be put into large bowls and taken into the house, or they may be stood in groups in odd corners of the room.

W. E. Wright.

Tregarth Gardens,
Creigiau, near Cardiff.

Blue flowers in the greenhouse

Blue flowers are in a general way much admired, whether they are in the open ground or in the greenhouse. In this latter structure there are several of that hue, prominent among them being the forms of the African Lily (Agapanthus). They have been flowering for some time, and there are still many blossoms to expand. There is a good deal of individual variation in the case of this Agapanthus, probably the result of raising plants from seeds. The showiest is the bold, richly-coloured form sometimes met with as major, while a very distinct variety is Mooreanus, with its compact heads of rather pale-blue flowers. A notable feature of this is that it is quite deciduous in the winter. The double-flowered Agapanthus I do not care for, as the blossoms never expand properly. The Chimney Campanula (C. pyramidalis) and its white variety are indispensable for greenhouse decoration during the summer. The large-flowered Lobelia tenuior is remarkable for its profusion of rich cobalt-blue blossoms. With the support of three or four sticks it may be grown as a pot plant, while it is also seen to considerable advantage when grown in a suspended basket. It is very readily raised from seed sown in the spring. Another rich-blue flower that can also be increased in this way, though it needs a little more warmth than the Lobelia during the earlier stages, is Exacum macranthum, the flowers of which, borne in loose, terminal heads, are of an intense purplish-blue, against which the yellow stamens are very noticeable. Though, as above stated, it can be raised from seeds, cuttings root freely, and plants so obtained flower in a smaller state than those raised from seed. An old plant in gardens is the Throatwort (Trachelium cœruleum), which might well be more used for greenhouse decoration than it now is. The blue-flowered members of the genus Browallia will keep up a display of flowers nearly throughout the year. The best of them are: The annual Browallia elata (the Forget-me-not of the Andes), and two sub-shrubby species, namely, B. viscosa (whose small, rich-blue flowers have a conspicuous white eye) and B. speciosa major (whose flowers are much larger, but of a less decided blue tint). The richly-coloured Lasiandra macrantha, whose latest name is Tibouchina macrantha, is just opening its earliest blossoms, and under favourable conditions a succession will be kept up for some time. On the roof the attractive porcelain-blue flowers of Plumbago capensis are still freely borne, while a pretty little, but seldom seen, greenhouse climber has been flowering for a very long time. This is the Blue Bell Creeper of

Australia (Sollya heterophylla), whose small, bell-shaped flowers are of a rich blue colour. It also makes a pretty pot plant if allowed to twine naturally around a few sticks.

Narcissus minimus

Although this Daffodil cannot be regarded as a rare plant, it is seldom one finds it cultivated except in the form of a group in the rock garden or in pots in a cool greenhouse. Its early flowering is sufficient to warrant its inclusion on a much larger scale. The best place for it is outdoors in the rock garden, and if a broad patch were planted in a level bay a pleasing effect would result. Owing to its dwarf habit the flowers often get badly spoiled by rain, but to prevent this it may be planted in a carpet of mossy Saxifrage. It is a gem for a sheltered position, thriving in good open loam. It should always be planted where its beauty can be enjoyed in spring. The plant should be fully exposed to direct sunlight but sheltered from the cold winds of early spring. As a plant for the cold greenhouse it is delightful. The bulbs may be potted in early autumn and kept in a cold frame, bringing the plants into a cool greenhouse to flower. Grown thus its full beauty is revealed. S. C.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

PESTS

Clubbing in Brassicas

I have been very interested in your various articles *re* clubbing of Brassicas. Seven years ago I enlarged a piece of ground for a vegetable garden. No one employed here was aware of the field having been broken up in the previous 25 years. How, then, when growing Brassicas, do you account for club root attacking them? A part of the same ground has never had a Brassica on it till this year, and I see some attacked with it now. I could send samples from early stage, like a Pea in size, to as large as a tennis-ball. I always was a believer in fresh lime, but it does not cure any more than basic slag or vaporite. Any gardener troubled with the club has my sympathy, as he has a struggle to grow the various Brassicas. I have even seen the hardy Curly Kale attacked with it.
W. W.

[Club root of Cabbage is a difficult disease to control. It is caused by a fungus known as Plasmodiophora brassicæ. Its common name varies, being Club Root, Finger-and-Toe, or Ambury, according to the plant attacked and to the district in which the disease appears. The disease attacks all members of the natural order (Cruciferæ). The disease forms resting spores, which remain in the soil throughout the winter. Some of these spores appear to germinate the following spring. Other resting spores seem to delay germination for several years. How long the spores can remain dormant in the soil is not known. There are many instances on record where land has been under grass for long periods, which, when ploughed and a cruciferous crop planted, the crop has been badly diseased the first season. It is probable that the disease cannot remain dormant so long as is sometimes thought, but the disease carries on from year to year in the absence of a cruciferous crop. It is almost impossible to find pasture anywhere which does not carry a few cruciferous weeds, quite enough to allow the disease to carry on. Arable land and gardens have always plenty of these weeds to ensure that club root does not die out. We have had Shepherd's Purse sent in to us several times this season which has been carrying club root. All those who have land which produces clubbed Cabbages should remember that the disease does not occur as a dangerous pest on land which is naturally rich in lime. In other words, soils which are naturally limy are not liable to grow the fungus. This is because the disease can only become rampant in acid soil conditions. Gardeners who have suffered loss of crop from club root are told that the cure for the disease is to apply lime. Lime is applied, and the gardener is very disappointed because he does not see any reduction in the degree of attack the following season. This is explained by the fact that once a soil has become acid the application of lime only removes the acidity very slowly; it requires several years before the lime is able to entirely remove the acidity. *The acidity is the real cause of the disease being rampant.* Lime does not kill the disease, but it gradually removes a condition which, in the presence of a cruciferous crop, allows the disease to flourish.

If gardeners carefully read the above they will understand why it is that club root can remain for long periods in soils which have not carried a crop that is liable to attack, and also why an application of lime fails to arrest the attack for a season or two. It is a better plan to apply lime before an acid soil condition is reached. It is much easier to prevent club root than it is to cure it. Nearly all grass land is acid in character unless it has been well farmed. To dig or plough up acid grass land and then plant Brassicas is asking for trouble. Grass land which is to be turned up for garden purposes should always be well limed before a crop. If the lime can be applied a year before the land is broken up so much the better. The Potato is always the best crop to be taken in the first year, unless the land is known to be full of wireworm.

The only known practical method of dealing with club root infested land is to apply a dressing of quicklime at the rate of 1 lb. per square yard. Every effort should be made not to allow any plant of the natural order Cruciferæ to grow for at least three years; longer would be better. Before another cruciferous crop is grown lime should again be applied. Good lump lime slaked on the ground to a fine dry powder and spread at once is the only form of lime which has much effect on the reduction of club root.

When a gardener is trying to remove root from a plot he should be careful the artificial manures he uses. If he use artificial manure which removes lime the soil such lime is not available for removal of soil acidity, which acidity stated above, is the real cause of club becoming rampant.]

The Narcissus fly

I am sending you a sample of Narc bulb affected by maggot. Is the maggot or grub the same as the small The large ones have only been found si with no small near at hand. The bulbs planted three years ago, having been flow indoors the previous spring. This is the time I have seen the large grub, but often seen the small one in other bulbs.
W.

—— I should be glad if you could tel the name and means of destroying or venting further damage by the enc grubs. I have some very fine bulb Narcissus Magog and others comple spoilt. Any hints would be gratefully ceived. GEO. R.

[Narcissus bulbs are liable to the atta several kinds of maggots, but only two h are in the habit of attacking healthy bb The others live on bulbs that have damaged. The two maggots which a healthy bulbs are the larval stage of large Narcissus fly (Merodon equestris and of the small Narcissus fly (Eun strigatus, Fln.). The maggots of both species are present in the specimen bulb have sent in for examination.

The large Narcissus fly, when in the stage, is a fairly large fly about ½ in length. The body is stout and very h It much resembles a small humble bee. flies exhibit great variation in colour an pearance. So much so that they are mistaken for other insects, especially and drone flies. Narcissus flies ca separated from the bees by the fact that have only two wings, whereas bees al have four. They can be separated from drone flies by being more hairy and by hai a tooth-like appendage on the undersi the thigh. The life-history of this fly follows:—The flies appear in early sum and eggs are laid near the bases of the le In due course maggots appear from eggs. The maggot enters the bulb eith the neck or the base of the bulb. Us only one maggot enters each bulb. maggots feed on the scale leaves and ho out the bulb. An attacked bulb does no lapse completely, nor does it decay qui The grubs are fully fed towards the aut and some of them pupate before the w The rest remain as larva throughout the ter and pupate in the spring. The adult appear over a fairly long period, which bably accounts for the fact that conside difference in size is to be found in the gots. The large maggots in your specie are those of the large Narcissus fly.

The small Narcissus fly in all its stag a much smaller insect than the one ment above. The adult fly is about a quarter inch long. It is a blackish fly and s green metallic reflections on the thorax also white markings on the thorax and The maggots are small compared with of the large Narcissus fly, and many gots—30 to 40 in each bulb—are prese stead of one or two. The small Narciss appears in May and June, and eggs a posited at the bases of the leaves. The hatch and the maggots get into the ne the bulb and feed between the scales. of the maggots feed rapidly and pupa the autumn, the flies emerging shortly

The rest of the maggots feed more and remain in the maggot stage nout the winter, pupating in spring. s emerge during May and June and -history is again commenced. The naggots you send are those of the Narcissus fly.

control of Narcissus flies is not an atter. It would be wise to lift all ircissus bulbs each summer and care- amine the bulbs. The hard, heavy e generally sound; those that are soft nt are generally attacked. To make t none of your apparently sound bulbs cked you should treat all your lifted ith hot water. It has been found Narcissus bulbs are immersed in hot or an hour the temperature is fatal to gots of both of the flies which are g your bulbs. The temperature of r should be 110° F., and no damage esult to the bulbs if they have been off properly. A special apparatus can btained for carrying out the sterilisa- bulbs.]

Moth

or has crept into a reply on page 605, October 2nd. Codlin Moths emerge nd June, and as both sexes are fully grease-bands are useless for this moth. control for Codlin Moth is to place ls around the stems of the trees. e caterpillars are fully fed they seek lace of shelter on the trees to in. Many of the caterpillars will n the hay-bands. The hay-bands e placed in position at the end of d removed and burned when the nds are put on in October.

t root of Helianthus

ainter).—The insects attacking your us appear to be a species of fly, and y there are ants present we should these are the cause of the trouble. ld endeavour to find the ants' nest oy by pouring boiling water into it.

FRUIT

rants failing

Hammond).—We have carefully ex- he specimens you have sent in and no trace of parasitic fungi. The ght which you mentioned in a pre- r is a fungus, but only a saprophyte. of the so-called sooty moulds which n honeydew, which is excreted by e now have no doubt that your as first of all caused by aphis at- e aphis excreted honeydew which the foliage and the bunches of fruit. mould then started to grow on the and covered the whole of your with filth. A bad aphis attack is ways followed by premature leaf- best control for aphis attack on all ardy fruits is to spray the trees at f January with a good tar-oil wash. shes should be applied according to r's directions. We thought at first Currants had been attacked by k," a fungoid disease that is lot of trouble this season, but we no trace of it on the specimens you the trouble reappears next season some specimens at once.

ildewed

wnes).—You should, when the e all fallen, paint all the inside clean the glass, and limewash the en dissolve ½ oz. of sulphide of in a quart of water, mix it with ulphur to a thin paste, and brush re into the bark and every crevice spurs on the Vine rods. The most fruitful cause of this trouble is maintaining a cold, damp atmosphere during a spell of dull weather, also opening the front ventilators when the wind is blowing from a north or easterly direction. A too dry condition of the border would also cause it. You ought to examine the border, and, if found dry, loosen the surface and give a thorough soaking of water after the Grapes have been cut. We should say it would pay you to put in a flow and return hot-water pipe into the house and see to the repairing of the glass.

Removing fruit from Fig-trees

(F. F.).—Fig trees that are grown in the open-air, or even in perfectly cool houses, and do not, therefore, ripen their second crop of fruit, are often weakened by the fruits being allowed to remain on the trees until autumn. Indeed, some people have an idea that these late-formed fruit will ripen early next year if allowed to remain on. This, as all practical gardeners know, is not the case as a rule, isolated fruits only maturing now and then, the majority falling to the ground as soon as the sap commences to rise in the spring. This is so even in the south of England, and after extra hot summers. Unless the trees are extra strong and need checking, all the Figs formed too late in the season for ripening should be removed as soon as they are large enough to handle. This enables the trees to increase their strength and form strong embryo fruits on the extremities of the current year's growths for swelling away next spring, as they can then appropriate the sap which otherwise would be used up by the second crop fruit if allowed to remain on. This necessary removal of late-formed fruit is much neglected by gardeners who force Figs both in pots and in permanent borders. Sometimes a second crop is taken from pot Figs, which will not materially harm the trees provided over-cropping is avoided, and the trees are liberally treated, but to allow a third lot to remain on for any length of time means waste of vitality to trees that can of all others ill afford it. Our own opinion is that one crop, if a good one, is quite sufficient in one season from Figs in pots.

ROSES

A difficulty with Roses

I should be much obliged if you could tell me what is the matter with my Roses, some leaves of which I enclose. I have only had my Rose garden for a few years, but each year my Roses have been getting steadily worse. If it is Rose rust, as I suppose, could it be caused by the following:—(1) Overfeeding with farmyard manure in winter? (2) An insufficient amount of water in summer? (3) Poor soil? Can I get rid of the disease by gathering the leaves and spraying as you suggest in your paper, or would it be more satisfactory to renew the soil or by burning the infected bushes? N. M. T.

[The specimens of Rose leaves you have sent in for examination have several things present which would account for your Rose trees not doing well. In the first place, the black spots on the upper surface of some of the leaves are due to the fungus Actinonema rosæ, commonly called Black Spot. Control measures for this disease are given in a reply to "T. M. D. H." on page 605 of our issue for October 2nd. Secondly, there is a lot of rusty-coloured spots on the undersides of some of the leaves. These are caused by another fungoid disease called Rose rust (Phragmidium subcorticum, Wint.). This disease attacks the wood and foliage of the Rose. It appears quite early in the spring on the leaves, and at first gives rise to orange-coloured spores, which is the summer stage of the disease. Later in the season darker resting spores are produced which serve to carry the disease over until the following season. The spores are also produced from the perennial mycelium which lies beneath the bark when the wood is attacked. We should advise you to collect and burn as many of the fallen leaves as you can, thus destroying one source of infection for another season. All the wood of your Roses should be carefully examined at pruning time and all diseased wood cut out and burned. Just before the foliage begins to expand you should spray all your trees with a solution of soluble lime-sulphur at winter strength. You should spray at intervals afterwards with a weak solution of soluble lime-sulphur, or else use the liver of sulphur spray recommended for black spot. If you cut out diseased parts and spray well you should have no difficulty in controlling either of the above diseases. Thirdly, the Rose foliage has been eaten by the caterpillar of one of the Rose sawflies. These can be controlled by spraying the Roses with a good nicotine spray fluid. If you examine your Rose foliage you will find a lot of holes eaten out. This is the sawfly damage. We think if you can get the two diseases and the sawfly under control your Roses will improve. Have you any wild Roses near you? Rose rust and sawfly are common on wild Roses, and they may be the cause of some of your trouble.]

Rose leaves falling

The leaves of some of my Rose trees are falling off very rapidly; in fact, some of the trees are absolutely bare except for the blooms, which appear quite healthy. I enclose a sample leaf, and should be glad to know the disease and if there is any remedy. G. Williams.

[Your Roses are attacked by Rose black spot. Please see reply to "T. M. D. H." on page 605 of our issue for October 2nd, and also the reply on page 575 of our issue for September 18th.]

TREES AND SHRUBS

Felling a tree

I have an Ash tree, some 30 feet high, which has been dead some years. This I wish to cut down. I have been told, if properly done, a tree can be dropped exactly in the place desired. I have been told further that the proper way to fell a tree is to cut a wedge-shaped piece out of the side on which it is to fall and then saw it nearly through on the opposite side. Unfortunately this particular tree has a decidedly natural inclination to fall in a direction I do not want it to, because it would damage a young plantation as it fell. I should very much appreciate expert advice. A. E. G.

[The suggested method of felling the dead tree is the correct one. If, however, the natural inclination of the tree is to fall in the opposite direction to what is wished for a rope should be attached to the stem high up and made fast to a stake in the direction in which it is to come down. Otherwise, reduce the tree by half its height by roping and sawing, when the remaining 15 feet can readily be dealt with. This would be the cheapest, and probably the easiest, way of getting over the difficulty.]

FLOWER GARDEN

Lifting plants from the open air

(Roy Clayton).—(1) After the Coltness Gem Dahlias are frosted the tubers ought to be lifted, leaving at least 10 inches of stem, and be stored in a place from which frost can be excluded and which is not too warm. The dry shed referred to would be admirable for this purpose, placing a little dry straw or Bracken round the tubers. If there is no convenience for propagating by means of cut-

tings in spring the tubers could be planted out when dormant about the middle of May, putting them at a depth of 6 inches. (2) Lift and pot up the Salvias before they are frosted. Place them in an airy position where they may receive as much light as possible, water sparingly during winter and plant out after danger from frosts passes in spring. It would be more satisfactory, however, to procure young plants or to raise such from seeds for next year's work. (3) Lift the stools of your border Chrysanthemums, placing them quite thickly in boxes and covering the roots with fine, rather sandy soil. The boxes may also be placed in the shed, watered sparingly, and the stools torn apart for replanting in April. (4) Lift and dry off the corms of your Gladioli, retaining, meantime, the foliage by which they can be tied in bundles and hung up in the shed. In spring clean them down and plant at a depth of 4 inches, placing, if possible, a handful of sharp sand at the base of each. Planting can be done early in April, and from then till the middle of May for successional blooming.

GREENHOUSE

Cultivation of Eustoma Russellianum

(R. D., Belvoir).—Eustoma Russellianum is the correct name of Lisianthus Russellianus. This plant—and not without reason—has always been regarded as being difficult of cultivation. Seed should be sown about the middle of May in a cool house, the object being to get the plants to make a rosette of leaves to pass over the winter. If sown too early there is a danger of the plant trying to flower during late autumn or winter, and thus spoiling for the following season. The plants should be grown in a compost consisting of about equal parts good turfy loam, brown fibrous peat, and silver sand. When repotting, care should be taken to disturb the roots as little as possible. If properly grown the young plants should be well established in sixty sized pots for the winter. Careful watering is very essential at all times, also cool treatment, an ordinary greenhouse temperature being all they require; indeed, during the summer they grow perfectly in a cold frame. Early in the New Year they should be ready for a shift into their flowering pots, 6 inches being suitable for this purpose. They are subject to attacks of thrips, but this is generally caused by too high temperatures and dry atmospheric conditions.

CATALOGUES RECEIVED

D. Prior and Son, Ltd., Colchester.—The Queen of flowers and other trees and plants.

F. Gifford, Hornchurch, Essex.—Special offer of Delphiniums.

Hewitt and Co., Ltd., Solihull, Warwick.—List of Delphiniums and Roses.

Harlan P. Kelsey Salem, Massachusetts.—Rhododendrons, Azaleas, rare plants, etc.

James Carter and Co., Raynes Park, S.W.—Lawns and sports grounds.

Lowe and Gibson, Crawley Down, Sussex.—Border Carnations and Bearded Irises.

Ernest Ballard, Old Court, Colwall, near Malvern.—New Michaelmas Daisies.

The Barton Nurseries, Boston, Lincoln.—Barton's Boston Roses.

Daniels Bros., Ltd., Norwich.—Fruit trees, Roses, shrubs, etc.

Sheppards, Shawhurst Nursery, Hollywood, Birmingham.—Hardy and alpine plants.

Morse Bros., Deben Nurseries, Melton Woodbridge, Suffolk.—About Roses.

Elisha J. Hicks.—Catalogue of gold medal Roses.

Chas. Wright, The Nursery, Takeley, Essex.—Roses and fruit trees.

Charlesworth and Co., Ltd.—List of Orchids.

North of England Horticultural Society

The Autumn Show and proposed trials of garden plants

From all accounts the autumn exhibition was better than ever and more varied. The quality was of the highest, and the fact that no less than 13 gold medals were awarded is, in itself, an indication of the high standard reached. The only trouble was lack of sufficient space to enable exhibitors to display the rare and up-to-date products of their skill satisfactorily. Twenty-four feet of staging was the maximum allowed, so an extended display was impossible. The result was that every bloom and every plant had to be of the greatest value, and only the "cream" of the best set up for an award.

ARRANGEMENTS FOR 1927.

The Council has decided to arrange for shows to be held on Thursday and Friday, April 21st and 22nd (Easter Week), Spring Show; Wednesday, Thursday, and Friday, September 13th, 14th, and 15th, Autumn Show. These dates are conditional and subject to satisfactory terms being arranged.

TRIAL GROUNDS.

The annual meeting of Fellows will be held on Thursday, April 21st, the first day of the Spring Show, when it is hoped to present the official report of the Committee of three experts appointed recently on the extension to the original site for trial grounds. This latter site has been inspected and pronounced suitable by an expert committee, and copies of the report may be obtained from the Hon. Secretary, the Rev. J. Bernard Hall, Farnham Vicarage, Knaresboro'.

The Council hope that by April 21st, 1927, a definite and agreed scheme will have been worked out and a commencement made for carrying out trials of flowering plants.

It would be a very great help if Fellows will express their definite wishes with regard to plants which, in their opinion, ought to be given preference in the trials.

The Secretary passes on the following suggestions and awaits replies:—

(1) Roses (Section A).—Trial of Roses which have already received R.H.S. recognition.

(2) Roses (Section B).—Garden Roses for scent.—The idea is that each separate entry will comprise 38 Roses, six each of six different colours (white, pink, red, yellow, copper, salmon and orange, and any other variety), and two climbers for a background; all Roses to be tested for garden purposes and also for scent.

(3) Dwarf Dahlias.

(4) The early dwarfer outdoor Chrysanthemums.

(5) Violas.

Reading and District Gardeners' Association

The first fortnightly meeting of the autumn session was held in the Abbey Hall, Reading, on Monday evening, the 27th ult., and was a great success in every way; the attendance was large, the exhibits grand, and the lecture most interesting and enjoyable. Mr. F. J. Green presided. A special feature was the magnificent display of autumn flowers, both in the competitive and non-competitive sections. Roses were strongly represented, upwards of 250 blooms being staged, whilst Chrysanthemums, Dahlias, Pentstemons, and Michaelmas Daisies were well to the fore. In the class for three vases of flowers, outdoor grown, there were no less than nine entries, the competition being very keen. The first prize was awarded to Mr. A. H. Fulker, The Gardens, Elmhurst, Reading, the second to Mr. A. H. Dow, The Gardens, Calcot Park, and the third to Mr. M. Goddard, Gardens, Bear Wood. In a class fo vase of Roses there were seven entrie Mr. J. Wynn, The Gardens, Hamr Checkendon, was first, Mr. A. W. (w The Gardens, Calcot Grange, secon Mr. H. Wynn, The Gardens, Luern's Goring Heath, third. In the non-comp section a First-class Certificate was by Mr. E. A. Beaumont, The Lodge, for an excellent display of Chrysanthe the varieties September Glory, M Hamilton, and Almirante being parti fine. Mr. A. W. Fulker received an of Merit for a fine collection of Dahlia

The lecturer for the evening was Mr Cobb, Lecturer in Horticulture to the ing University, and his subject "R By means of a splendid series of slides—kindly lent by the National Society—he showed the correct and in ways of planting and pruning, follow explaining many of the different specie which the present-day flowers have and then touching upon many of t varieties in the various sections. An esting discussion followed.

SHORT REPLY

A. F. J.—(1) If you examine your goniums you will find that a green cat is the culprit. The only thing you ca to hand-pick the plants. (2) The only is to lift the bulbs when they have ripe and thoroughly wash them with Gh Compound, carefully following the is tions sent with the box.

NAMES OF PLANTS

Irishwoman.—1, Crinum capens; Cobæa scandens.

H. Downes.—Leycesteria formosa.

J. E. F.—1, Acer Buergerianum s trifidum, A. trinerve; 2, Eupatorium binum.

NAMES OF FRUITS

A. J. B.—Pears: 1, Should like to sc ripe; 2, Beurré Clairgeau; 3, Crassane; 4, Apple not recognised.

Cattespoole.—Apple Adam's Pearmn

A. H. Garforth.—Apples: 1, Yo Greening; 2, Cellini.

LATE NOTES

The Individualist Bookshop

The Individualist campaign will o October 26th with a luncheon at w Hugh Bell will be the speaker a Ernest Benn will be in the chair. T be the first public activity of the n dividualist Bookshop. Applicatio tickets to the luncheon are already in such numbers as to ensure not onl tinguished, but a big, gathering, and t promises to be of exceptional interes Bookshop itself is now open, and bus full swing at 40, Marsham Street, W minster—a part of the Empire's activities—and those interested will able to find at one convenient spot plete collection of the literature of Indi ism.

Lychnis chalcedonica

One of the most brilliantly-colour baceous plants, when in bloom, is the It is also one of the easiest to gro comes freely from seed. Healthy reaching about 4 feet in height and m the hardy plant border are, when in gorgeous. Some care is necessary ever, in grouping this old plant, othe may destroy the effect of other plan I find it very desirable for massing foreground of evergreen and other where the site is open and sunny.

GARDENING ILLUSTRATED

.484—Vol. XLVIII. OCTOBER 16, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

d Pear trees, rd, pruning 632
and Pears, ... 631
om pips ... 632
om the An- 626
es, because of 626
ia polyr- 623
ias from 633
wintering ... 633
themums, ... 623
Chrysanthemums, the newest 626
Dahlias, the newest ... 626
FLOWERS AND FRUITS, OCTOBER 626
Fruits, bush 631
Fruit, storing 631
Fuchsias for exhibition 633
Gladiolus bulbs 633
Gloxinias, treatment of 633
Grapes in bad condition 633
Grapes, monster bunch of 622
Hydrangeas 622
Imperial Fruit Show, Holland Park Hall, London 622
Lawns, weedy 634
Lilies 623
LILIUM REGALE IN A LINCOLNSHIRE GARDEN 623
Mignonette in pots ... 626
National Rose Society 622
Orchid Show Challenge Cups, autumn 622
Peach and Nectarine trees 633
Peach foliage, diseased 632
Plants, indoor, treatment of 633
Potato Ben Cruachan 623
Primula Stellata, foot-rot in 633
Polyanthus and Primrose failing 633
Quinces failing 633
Raspberries, autumn-fruiting 632
Romneya Coulteri ... 622
Rosa Wichuraiana ... 625
Rose bed, making a ... 633
Rose Bouquet d'Or ... 622
Rose climbing Lady Hillingdon 622
Rose cuttings 624
Roses, a reader's selection of 623
Roses, British grown, for British gardens 622
Roses in a Scottish garden, the most reliable autumn-flowering 624
ROSE SOILS, IMPROVING 621
ROSES OF OUTSTANDING MERIT 624
Roses, Rambler 633
Roses, Rambler, for arches 625
Roses, reliable autumn-flowering ... 632
Salvia cœrulea 622
Seed sowing 634
STORY OF MY GARDEN, THE—II. ... 628
Sun Rose, the Truffle (Helianthemum tuberaria) 622
Sweet Peas, early, how to grow 629
Sweet Peas: Too many names 623
Tomato house, improving soil in ... 633
Violas 625

Improving Rose Soils

time is now with us when we shall hinking of improving the soil in our R e-beds or forming new beds. It may we possess a heavy clay soil, and ll our plants to the point of surfeiting nd yet we have not obtained really oses. Why is this? I think, if I soil was lacking in lime, I should not wrong. This is often the case with ay soils. Again, clay soil needs good on, such as a frequent stirring of the and some of the clay needs pulver- the action of frost It is astonishing ay be accomplished espect if some of the spread out some- arly in the autumn, the winter frosts educe it to fine Then it may be to the Rose-beds, great advantage.

ge is very neces- clay soil, in order surface water may ay freely. On my which is one of the clays in the county s, I have found a improvement where dug narrow drains the walks and lly across the por- land where water o stand most. The ing a nice fall to a abled me to drain it d at very little ex- Where this would racticable I would at a main drain, eet deep and 1 foot opened towards some good outfall, n-pipes put in, or their place taken ble of some kind to a depth of 8 10 inches; then, when the beds or are retrenched, smaller drains to may be connected with the main

earth is an excellent material for the condition of clay soil. Obtain ll means, either by burning some or ring it from some individual who speciality of the work. Let this be added freely to the lower spit of n trenching takes place, together c slag, which Roses are not slow to This should be added at the rate of zs. to a square yard. With the top dered chalk should be incorporated at the rate of about 2 lbs. to 3 lbs. per square yard, or, if chalk be not available, then slaked lime should be applied in the form of a fine powder at the rate of about 8 ozs. to a square yard. Where dressings of dung have been annually given, gypsum or sulphate of lime would be best to apply at the rate of 4 ozs. per square yard. When planting, see that the Roses are furnished with a shovelful of nice compost, neither too wet nor too dry. In like manner I would advocate replanting Roses that have gone back during the last year or two. Most gardeners replant all their Roses every four or five years, and it pays to do so. One need not do the whole collection in one season, but let the beds be replanted in sections, dividing the Rose garden, say, into three, and replanting No. 1 section this year, No. 2 next year, and so on. In like manner, standards may be quite renewed if they have not stood too long, and even Ramblers, where they fail to grow vigorously, could have the subsoil improved without actually removing the plants. Where farmyard manure is available I would advocate its use in addition to the materials named above, but it should be well rotted.

Where Roses do not require replanting, then a dressing of basic slag in the autumn will be of great help to them, applied at the same rate as mentioned above and well hoed into the soil. An additional dressing of dung may be given in spring following the pruning, and forked in at the same time. A simple plan to test soil to see if lime is deficient is to take a small sample from a few different parts of the garden, mix well together, then place a small quantity in a glass, and pour on to it a wineglassful of spirits of salts. If lime is plentiful the spirit will cause a rapid fizzing and bubbling, but if feeble, then lime is wanted.

The Rose garden at Red Roses, Tonbridge, Kent, the home of Mr. S. W. Burgess

Suppose one has a sandy or gravelly soil to deal with —what then? If so, do not attempt to grow Roses in it unless you are prepared to add good loam at the rate of two-thirds to one part of the sandy soil, and, of course, a good dressing of manure, preferably cow manure. If the soil is a sandy loam add clay if available; if not, dig it out 3 feet deep, and remove the gravelly subsoil, replacing with the best soil obtainable. If basic slag is added as advised, and the surface soil mulched with good, well-rotted manure in May, no one need fear to grow Roses in such a medium. Anyone having such a soil should grow mainly the Hybrid Teas, the true Teas, and Monthlies, and, where possible, obtain them on their own roots. Hybrid Perpetuals must be avoided, for they are addicted to red rust in such a light soil. Peaty soils may be improved by draining and adding pulverised clay or stiffish loam, and, if possible, have the beds or borders excavated to a depth of 3 feet, and mix the peaty soil with the other materials, including, of course, manure and basic slag. I had to plant a long border in November last. The soil was of the blackish peaty character ofttimes found near forests. Taking advantage of a heap of turf edgings, road-scrapings, and decayed weeds, I had the staple soil wheeled out to a depth of 3 feet, and, after mixing about a fourth of it with the materials named, the mixture was wheeled into the border, adding some well-rotted dung as the filling-up proceeded. The Roses have done exceedingly well and have more than repaid the time and trouble that were taken.

E.

NOTES OF THE WEEK

National Rose Society

ARRANGEMENTS have now been made for next year's exhibitions as follows:—The spring show will be held at Westminster on Friday, April 22nd; the summer show in London on July 1st and 2nd; the provincial show at Cheltenham on July 6th and 7th. The special show of new seedlings, at which the *Daily Mail* Cup will again be competed for, will be held at Westminster on July 15th and the autumn show at Westminster on September 9th and 10th. It has been decided to hold a Rose Conference in London in July, 1928. An announcement as to the arrangements will be made later.

Rose Bouquet d'Or

I know no more beautiful Rose than this in late summer and autumn, to say nothing of its value during the rest of the summer. As I write (early October) it is lovely climbing over the tops of pergolas, its abundant and luxuriant young bronze leaves and shoots providing a delightful setting for the coppery-yellow blooms. These lovely flowers are as freely borne at the present time as they were in June, and the effect is equally as good. It is a strong grower and loves a cool, heavy soil. Where a vigorous subject is desirable, such as a very high wall, it is most suitable. This valuable Rose, a seedling from Gloire de Dijon, was raised by Ducher as far back as 1872 and is far superior to many of our more recently introduced climbing Roses, as it branches freely from the base, the lower portion never becoming bare where the plants are properly cared for. E. M.

Rose climbing Lady Hillingdon

This is a really beautiful Rose which possesses all the essential qualities so desirable in a climber. With me it flowers over the greater part of the summer, and even to-day (October 6th) carries quite a lot of its refined orange flowers set in a medley of coppery-coloured young shoots. E. M.

Monster bunch of Grapes

Covent Garden was on October 6th interested in an abnormally large bunch of Grapes, which had been brought over by aeroplane from Belgium by the grower the previous evening. The bunch, of the Alicante variety, turned the scale at 37½ lbs., and it measured over 2 feet long by some 15 inches across. It was stated to have been taken from a Vine about 30 years old, but the grower's name was not obtainable. Mr. W. Grove had the fruit, which was in good condition, on view at his Covent Garden premises, where we examined it. The fruit was purchased by Mr. Harry Mash, of Messrs. Mash and Austin, Ltd., Covent Garden, at £1 per lb.—£37 10s. in all. It was exhibited at the firm's premises before presentation to the Lord Mayor of London to be sold by auction on behalf of the "Fleet Street week" for St. Bartholomew's Hospital. Mr. A. F. Barron, in "Vines and Vine Culture," states what are believed to be record Grape bunches. These include:—Trebbiano, Mr. Curror, Eskbank, 26 lbs. 4 ozs.; White Nice, 25 lbs. 15 ozs.; Gros Guillaume, Mr. Charles Roberts, Charleville Forest, Ireland, 23 lbs. 5 oz.; Syrian, Speechly's famous bunch grown at Welbeck, 19 lbs.; and Black Hambro', Mr. Hunter, Lambton, 21 lbs. 12 ozs.

Autumn Orchid Show Challenge Cups

The annual R.H.S. Orchid Show will be held in the Society's Hall at Vincent Square, Westminster, S.W. 1, on October 19th and 20th. The Baron Schroeder Challenge Cup will be awarded for the best group of Orchids exhibited by an amateur; no restriction as to the number of assistants or area. A challenge cup valued 20 guineas, presented to the Society by the Trade Orchid Growers for competition, will be awarded for the best group exhibited by an amateur who employs not more than three assistants in Orchid houses (including the head-gardener) for a group of Orchids not exceeding 60 square feet. A silver trophy, valued 7½ guineas, for the best 12 Orchids, not more than two of one genus, exhibited by an amateur who employs not more than two growers in his Orchid houses. A trophy, valued 5 guineas, for the best six Orchids exhibited by an amateur who employs one Orchid grower. The Secretary of the R.H.S. will be pleased to receive entries for these competitions and to supply entry forms. Entries should not be received later than by the first post on Monday, October 18th.

Salvia cœrulea

On September 21st, at the Royal Horticultural Society's great autumn show, a Salvia exhibited by Miss Martineau under the name of Salvia Bluebeard received an Award of Merit, subject to its receiving a specific name. The plant has now been identified by Dr. O. Stapf as Salvia cœrulea Benth. It is understood that the plant survived last winter in the open both at Ascot and Maidenhead.

Imperial Fruit Show, Holland Park Hall, London

Amateur gardeners and others interested in horticulture should not fail to pay a visit to the Imperial Fruit Show at Holland Park Hall on October 29th to November 6th. The fruit entered for competition at this exhibition, grown by the leading experts in this country and in the Dominions and Colonies, represents the high-water mark in cultivation, and will prove of absorbing interest to all growers of fruit, whether amateur or commercial. The Royal Horticultural Society have arranged for a special display of fruit, flowers, and evergreens from their gardens at Wisley. The most prominent feature at the show will be the combined exhibit of the great fruit-growing Dominions—Canada, Australia, and South Africa, covering an area of over 3,000 square feet, under the auspices of the Empire Marketing Board. An i esting competition has been arranged baked Apple dumplings (using Empire only), the entries in which will be st daily at the show. Superb exhibits of are being arranged by some of the gre distributors in the United Kingdom. show is open from 10 a.m. to 9.30 p.m. Music every afternoon and evening. nearest stations on the Underground Shepherd's Bush and Uxbridge Numerous 'buses pass the doors of the

The Truffle Sun Rose (Helianthe tuberaria)

I find this distinct and beautiful species most useful for growing in crevices of low retaining walls, whe maintains a healthy clean growth from to year and commences to bloom abou first week in June. The cushions of leaves rarely exceed 3 inches in height from these rise numbers of glaucous each 9 inches in height, bearing several yellow flowers with dark centres, not u a small single Rose, and 2 inches across reason of its not having woody stems a dwarf clusters of hairy leaves this char plant is distinct from all other Sun It is said to grow abundantly where tu abound, and as it flowers continu throughout the summer it is a valuable for the rock garden. E.

Romneya Coulteri

Huge satiny-white crinkled flowers 6 across, with a large central cluster of g yellow stamens profusely borne on elegant, branching stems and furnishe blue-grey foliage, such is a description above beautiful Poppy from California. a glorious plant which loves a warm loam, and a remarkable specimen I s cently is responsible for this short no was in a garden at Handcross, Susse had been planted at the foot of a 5-foo above which it had soared for 3 feet at Not content with this, it had burrow neath the wall, and plants 4 feet in were in full bloom on the opposite side E.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Hydrangeas

IN this part (N. Devon) the Hydrangea is known as "The Changeable." It is planted everywhere, and has every shade and variation of pink and blue among its flowers, and bushes bearing all these colours are not at all unusual, whilst others have self-coloured pink or blue blossoms only. In this garden there are several plants of both the common variety, H. hortensis, and a black-stemmed one which was given me from a Kentish garden as being true blue.

Of this last variety there are two plants growing almost side by side which have hitherto produced only pink flowers, and not noticeable in any way.

This year, however, one of them has produced heads of large and brilliant blue flowers, whilst the other has persisted with its usual somewhat insignificant pink ones.

The strange conduct of these two plants has somewhat shattered the impression I had formed as to the flowers coming blue.

I had always been inclined to think that, given congenial soil, it is age alone that gives the plant naturally its blue blossoms, and then only when a suitable season follows, for there is no certainty that a blue-flowered bush will be blue next year a pink will be pink.

I would add that all cuttings with variably have pink flowers at first.

R. N

British grown Roses for British g

The slogan "Buy British goods" n be borne in mind by those who presen be planting Rose trees, and acted Every autumn one notices in large Roses advertised to be sold by auction bulk of them hail from the Continen budded on a different stock from ou grown on lighter soil, do not, as far s limited experience prompts me in stand our soil, and, as a rule, do long, if ever some of them become lished. There is another reason wh contemplating purchasing Rose trees do so from their own countrymen. this, the plants are more vigorou should there be any losses one is in a p to communicate with the firm supplyi invariably I have found some consider shown. With Continental Roses, gr one knows exactly where, nor when t were got up to be sent to these shore

cedure is impossible. I have been a r of Roses for over 30 years, and I yet to find that the British nurserymen e beaten. Let me persuade those who bout to add to their stock to pause they leave the home-grower and . The British Rose Growers' Associa- o which most firms of repute are allied , issue seals which are the hallmark ving that the goods are British and, ore, can be relied upon. The seals are nâ fides guaranteeing the origin of the and with these one has confidence that, proper treatment, one will not be let

WOODBASTWICK.

A reader's selection of Roses

n now making a couple of Rose-beds enough to hold 36 each, and have just d the following varieties to fill them :— and pink bed.—General McArthur, de Hollande, Mme. Butterfly, Betty ard, Mme. Melanie Soupert, Mrs. Shawyer, Mrs. Henry Bowles, and Henry Morse.

ge and yellow bed.—Christine, Mrs. ss Quin, Emma Wright, Mabel Morse, . Page Roberts, and Sovereign.

s, Somerset. L. BIGG-WITHER.

regale in a Lincolnshire garden

CLOSE you a photograph of a clump ilium regale in this garden which may of interest. The tallest were 6 feet and some of the stems had 14 . They seem to grow well in this mestone soil, mixed with some leaf- in partial shade. They do not seem e to their best for two years after g. I think it is best to put in small nd then leave them alone, but one ot expect much the first year. They y easily raised from seed.

GUY FENWICK.

Luffenham Hall, Stamford.

Lilies

many years we have tried to grow but they have always become diseased ve died out. We tried peat, leaf- manure, but all to no purpose, and e the two borders up to other These borders face due south, one a hedge on its east and the other on its west side. Last year we made attempt in another place on the north a shrubbery. We took out about 2 feet earth and filled in with old turf. The as been perfect growth, good flowers, disease. Last year one L. auratum 29 flowers on its stem, and this year s 7 feet 6 inches high. Of course, may be the important point, or our y not suit them. I think both leaf- nd manure are apt to foster disease. d be interesting to hear comments on Lily growers.

THACKERAY TURNER.

rook, Godalming.

eet Peas: Too many names

elcome the improvements that have de in Sweet Peas in recent years, but ning is overdone. It tends to con- nd distracts attention from the sorts ve been well proved and are really d distinct. Taking up a few seed es there would not be the least diffi- compiling a list of 30 or 40 named , all of which are claimed to be dis- t which, when grown, are found to much alike. Anyone who has the d the time may test this by growing ion. A few good things may be dis- and also many that should never n named at all. We are greatly in- o those who have spent so much labour among Sweet Peas, but it is to the interest of all concerned that those sent out as new should be distinct, and only when this is the case can the interest and the popularity of the flower be extended and sustained.

Calceolaria polyrrhiza

I once had Calceolaria polyrrhiza in a cold, exposed garden in Yorkshire, where the soil was heavy and limeless. It grew abundantly. Here my soil is thin and limy and subject to drought. It seems impossible to keep the plant alive without making special preparations. It is not a matter of great regret when space is limited. L. J. ROGERS.

Oxford.

Potato Ben Cruachan

I was rather astonished to notice, on page 609, an article by A. J. Davis giving the above-mentioned Potato a very bad name. But I suppose it is the same with most other varieties. Find what varieties suit your garden and stick to them.

Lilium regale, 6 feet high and carrying 14 blooms on a stem, in Mr. Guy Fenwick's garden at North Luffenham Hall, Stamford

I grew Ben Cruachan this year in Hertfordshire for the first time, and it proved to be everything that could be desired. It was the last Potato in the garden to take the disease among four other varieties. When lifted it had by far the least number of diseased tubers. The flavour was excellent. I can honestly say it was the best flavoured Potato I had tasted that had been grown in that garden during my three years there. I have just moved into Bucks and intend giving it a trial here next season.

A. J. Davis sings the praise of Duke of York, a good old Potato I will admit, with an excellent flavour. I tried it in that same garden three years running, and it was an absolute failure each time, which just goes to prove that one must find what varieties suit the soil.

It would be interesting to hear of other readers' experiences with Ben Cruachan.

W. COLSELL.

The Gardens, Hitcham Grange, Taplow.

Early Chrysanthemums

A new style of plant is gradually taking the place of the old in respect to the outdoor sorts. This is a good one, too, inasmuch as there can be detected improvement in length of flower-stem, and this makes for elegance when cut for decoration. One ideal variety named Mrs. Jack Pearson has for several seasons been noted in the markets, but hitherto the general cultivator has not been given a chance to include it. Probably there will be no difficulty another year. The colour varies in shades of red and yellow, the bloom is full and shapely. It begins to flower in July, and at the time of writing (the end of August) its display is excellent.

There may be those who maintain that Chrysanthemums in the months named are too early; yet they are esteemed even then on account of their lasting qualities when cut. Phœnix is another variety very early to bloom, and in this instance, like the other, is free flowering. To thin, or disbud, as taking away bloom buds before developed is termed, to get a bigger flower, would end in failure. The variety is not well adapted for this mode. Cranford and Cranford Cream, the former deep yellow, are in blossom now and both lend themselves to the spray form of culture. They belong to a new type indicated above.

By retaining crown buds, as in the case of exhibition blooms later in the season, it may be possible to get some of the early sorts to flower even at the period named. This indeed is done in such instances as Sanctity, Countess, and even Almirante, but the generality of growers may prefer varieties that do not require any manipulation of growth and the like. Mayford White is regarded as one that will flower early in a natural manner, although this year, owing to the necessity of propagation, the plants were backward when put in open ground. Nevertheless, this will show its truer character as years go on. Hollicot Yellow, or as some name it, Goldfinder, is quite a fine type, more lusty in growth and flower than is the newer Cranford, but not so elegant in the cut state. Then there is the coloured form named Harvester.

I saw a plantation of seedlings from the last-named pair just recently, composed of some hundreds of plants, and not more than one among 50 has come with the very early bloom and lengthy stem mentioned. Still, this is not unsatisfactory from the point of view of a new type.

I have for some years considered the variety Polly and its forms ideal as early-flowering ones. These, however, may in the future be quite surpassed by those named above and by others that are sure to follow. Faults in Polly are those of somewhat difficult growth and too great a freedom in flowering, or rather a disposition to form blossoms instead of branches first.

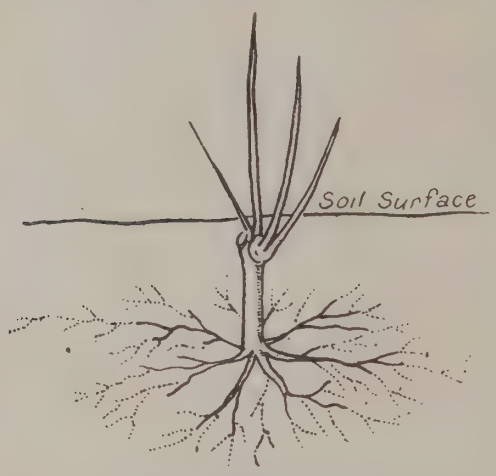
The bulk of early kinds has yet to flower. The season, with its ample moisture, has suited them, and one is looking for a great display in quite a short time. The class may well be considered the more popular of all Chrysanthemums, because they can be enjoyed without the aid of glass, and commercially they are valuable for the same reason. Fire-heat is not required to produce them. It is easy to extol the merits of Cottage Pink or Flora, to name a pair of ancient ones, which look common indeed by the side of such sorts as I have named. H. S.

Roses of Outstanding Merit

With hints on how to plant them

THE planting of Roses should be done as soon as the nurserymen make the first deliveries. All books and articles on Rose planting insist that the roots should be spread out flat and parallel with the soil surface. This is a grave mistake which is obvious to anyone who cares to examine the two accompanying rough sketches in which the dotted lines represent the new roots formed. In A the Rose plant is in danger of being ruined through inability to obtain sufficient moisture in the soil, whereas in B, owing to the new roots occupying a much greater area and depth, there is no such danger. The after-life of the maiden Rose is greatly influenced by the growth, vigour, and ripening of the new wood made during the first year of planting. If the first year's growth is poor or the plant stunted it will take three years' careful nursing and constant attention to bring it back into good healthy growth.

The main object of this article is to notice a few special varieties of Roses which no Rose garden should fail to contain on account of their outstanding merits. First among the singles comes Isobel, the finest single



A. Planting Roses

In this example the roots are spread out flat and parallel to the soil surface. The roots occupy a good area of soil, but not of sufficient depth

Rose there is. Planted in May, by October the growth is over 4 feet and the second year nearly 6 feet. These are measurements made of basal shoots, one of which bore no less than 25 blooms. Unless for exhibition no single or semi-double Rose should be disbudded, and in any case no summer or autumn shoot rising from the base. The colour of Isobel when well grown is incomparably fine, owing to an intensely bright rose being superimposed on a yellow ground with pure translucent yellow base and golden stamens. As the flower ages the yellow ground gives place to pure white, leaving the flower pure rose with white base. The flowers are large, occasionally 6 inches across, and at times the large petals crinkled and fluted. Isobel is a most profuse bloomer, only slightly liable to mildew when budded on the Briar, but more liable to both mildew and black spot when worked on any other stock, particularly when Dutch-grown. Vesuvius, another single Rose, though rather small, is particularly fine owing to its extraordinary depth of colour and brilliance and purity of tone. No name could have fitted this Rose better.

In 1906 I had the privilege of seeing Stromboli in action in the evening and at night, and while the similarity of the colour of a Rose and an active volcano is far-fetched, yet Vesuvius invariably brings back the recollection of that memorable night. Vesuvius is quite a dwarf compared to Isobel as to growth, but much more bushy, and as continuous, or even more so, a bloomer. Among the semi-doubles, undoubtedly there is no Rose to compare with Hawlmark Crimson, the finest semi-single or double there is, and it is unlikely that it will ever be supplanted. Growing no higher than Vesuvius, but more bushy and open, the flowers are huge, 6 inches across, large velvety crimson petals, with glorious black bloom of indescribable beauty and refinement. The flowers come strong and healthy and have a delicious fragrance. Until the advent of Hawlmark Crimson, K. of K. undoubtedly was the best semi-double Rose. In its colour class it is still the best. The height is 3 feet and the form an open bush. The intense crimson colour is superimposed on a yellow ground, giving that metallic brilliance to the flower so much admired. Particularly is this the case in high summer, when the sun, being high in the heavens, bleaches the colour of all Roses to some extent. In autumn K. of K. is a deeper crimson still, with metallic brilliance due to its yellow ground, but in addition it bears a black flushed velvety bloom, giving the flower very great charm and distinction. The nearest rival to K. of K. is Red Letter Day, but unfortunately this Rose has thinner, long petals which curl over and quarter, giving the blooms a dishevelled appearance and detracting from its refined colouring. Moreover, it is nothing like so free blooming as K. of K. The Adjutant, raised by the late Rev. J. H. Pemberton, who made Hybrid Musk Roses his particular speciality, is a carmine Hybrid Musk Rose of superb excellence. Slightly taller, and much more bushy and vigorous than K. of K., The Adjutant is a semi-double Rose of the highest quality, large size, great substance, and exquisite colouring, almost continuously in flower, and with the most delicious Musk scent; the best in this class. Few people have realised the value of this Rose.

The colour of Roses is influenced by nitrate, potash, and phosphate, as also by sulphate of iron and a soil rich in humus, which retains the moisture. Unless these are continuously supplied there cannot be that refinement and distinction in colouring, form, and pose in the flowers which every rosarian knows is the hallmark of skilled cultivation and management. C. A. JARDINE.

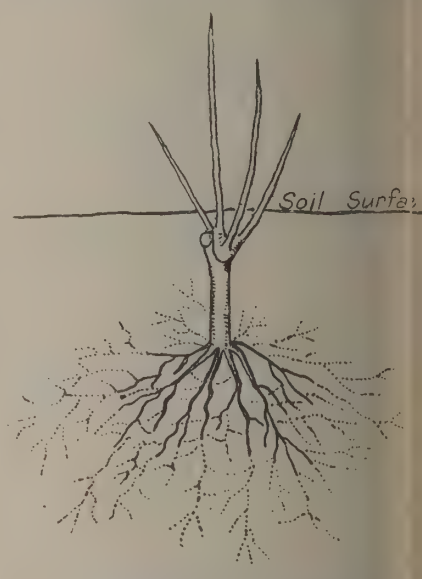
106, *Sutton Court Road,*
Chiswick, London.

Rose cuttings

This is an interesting method of increasing the stock of all such varieties of Roses as are amenable to this mode of propagation. I have long since found it useless to try and increase the stock of Roses which make weak or but indifferent growth in this way, and have found it best to confine attention to those of a more robust or vigorous habit of growth. A sheltered border facing south-west or west provides an admirable position for the cutting bed. Any good garden soil suffices, but in dealing with that which is inclined to be heavy or is actually so it is always best to place some sharp sand in the drills when the cuttings are being inserted. The cuttings should consist of pieces of ripened wood which have bloomed this season, and, in addition to their being as robust as possible, obtain them with heels whenever this can be done without damage to the plants, as such cuttings root the readily. The length of the cuttings ma from 8 inches to 10 inches, and be inse from 4 inches to 5 inches in depth, and very firm. I have seen them planted close together in the rows, but think 6 in to be quite near enough. The rows sh be 1 foot asunder. I have found it to very good thing after the cuttings have got in to lightly mulch the surface with leaf-mould or spent Mushroom-c Label each variety legibly, using good labels for the purpose.

The most reliable autumn-flow ing Roses in a Scottish gard

SOME weeks ago I gave a few not the behaviour of some of the Roses i summer, and perhaps it may not b appropriate that I now give my expe regarding the most reliable sorts in aut It is not every variety that can b pended on to be really fine all throug season, some of the best early-season being but poor in colour and form late



B. Roots planted at an angle of 45 de to the soil surface

The roots occupy as much soil area as in but to a much greater depth, and are m numerous.

while others are entirely the reverse. C Roses Colonel Oswald Fitzgerald is e fine in autumn as in summer, and is, i one of the most continuous of all Rose autumn, certainly, the blooms are sm but they carry their rich scarlet-crims the last. Lord Charlemont is another c deep red Roses that give a grand lot of b late in the season. Although not qui profuse, W. C. Gaunt gives an lent account of itself in the autumn do Covent Garden, General McA (very profuse), Lieutenant Chauré, Alex Emslie, and Mrs. Edward Powell. Uprichard, although neither profuse no tinuous late in the season, gives a fair u ber of very richly-coloured blooms that well. Los Angeles is very fine in colou not quite so floriferous in autumn as I wish. Wm. F. Dreer is simply glori late September, giving that wonderful y overlaid with carmine, that no other v can equal. In autumn, too, it carri blooms erect on stiff stems. It should b budded freely, as it produces such a nu of buds. Noblesse is another beauty i tember, its large pale yellow blooms o with pale pink being very chaste pleasing. Frances Gaunt is one variet

od at all times, but in autumn the is richer. A very fine Rose in all re-, Mrs. Henry Morse, if only it could be ree from mildew, would be one of the son sorts. Even as it is, it gives num-f beautifully-formed blooms. Most of ellows do well, but Mabel Morse, ine, Florence I. Izzard, and Golden m are best, Christine, perhaps, being ost constant and profuse, always retain-olour and form well. Of the paler Pharisaer is, probably, the best, but a, if not too reliable in colour, flowers and continuously. Mme. Butterfly is, ne, not quite so continuous a bloomer, dy Pirrie is always particularly brilliant ur and profuse in bloom in the autumn. atter is, indeed, one of the very finest Roses late in the season. Lady Round-have only had this season, but should inue as it has begun must be classed of the best all-season varieties. Mrs. d is another beauty in autumn, as is l variety Mrs. A. R. Waddle. Mme. rriot has been extra good this autumn, lly in colour. In dry weather one of ry best September Roses is Rev. F. Roberts, but it is inclined to "ball" in l and wet spell. Hugh Dickson, gh never very free late in the season, well and retains its colour. Provided airly dry and sunny Mme. Melanie t is superbly beautiful, but it dislikes s and damp. Gustav Grunerwald is at its best late in the season, and so David McKee. Mrs. C. V. Haworth well and retains its colour well right on e. Earl Haig gives some very good , as does Marjorie Bulkley, but the s rather easily disfigured by wind and Etoile d'Hollande gives exquisite in autumn, but the blooms are small t too numerous. Paul Lédé, in favour-weather, gives abundance of richly-d flowers, but in wet weather these n badly marked. Others that give ood flowers, but that can hardly be as free autumn bloomers include Wallace, Mrs. H. Bowles, Padre, Lady n, Mme. Segond Weber, Isobel, tta, Betty, Richmond, Caroline , Antoine Rivoire, and Una Wallace.

C. Blair.

on House, Linlithgow.

Rambler Roses for arches

(Reply to Rose.)

anting, as you suggest, a late variety early variety upon each arch, you e able to have a very beautiful effect fairly long period. As a rule, the and Tea or Hybrid Tea Roses are success upon arches, although Rêve ay be given as an exception, so that not obtain quite such a late flowering otherwise would if such Roses were Some of the lovely free-growing Teas brid Teas-of the non-climbing varie-ld be planted at the base of the r, and allowed to mingle with the rowths of the latter. We have seen Marie Van Houtte and Anna Ollivier quite a considerable height, giving vely blossoms until quite late in the s you require four arches to be pink ite we should recommend the follow-ady Godiva, late; Gruss an Zabern, is is a freer bloomer than Climbing et); Mme. Alfred Carrière, late; Tea r, early; Alberic Barbier, early; n Pillar, late (this has superior foli-Tausendschön, and well worth grow-lush Rambler, late; Joseph Lamy, Then, for the other four arches, or yellow and white:—Gardenia, Bennet's Seedling, late; Rêve d'Or, sie Robichon, early; Goldfinch, early; Alister Stella Gray, late; Leontine Gervais, early; White Dorothy Perkins, late. Aglaia is good, but does not flower freely until two or three years old. If your garden is well sheltered try Mme. Bérard instead of Alister Stella Gray, as it is a more rapid grower, or Duchesse d'Auerstœdt would be splendid for its foliage, although rather a shy bloomer. Be careful to have good, deep holes prepared for the climbers. They should be dug out fully 3 feet deep and 2 feet in width, and then filled up again, good manure and bone-meal being mixed with it as the soil is returned.

October Roses, from a photograph taken in the Editor's room

The tall flowers are of a single spray of that grand pink Rose Mrs. Henry Bowles, one of the best, if not the best, of all pink garden Roses. Among the varieties represented at the base are Isobel, K. of K., Vesuvius, and The Adjutant

Rosa Wichuraiana

The value of this class of Rose for decoration is a recognised fact, and its popularity and that of its hybrids are evidenced by being so extensively employed for the clothing of pergolas, rustic arches, arbours, and so forth. There is, however, another use to which they may be put, and one that is but seldom seen, and that is filling large beds with them, and, instead of training the growths to poles in the orthodox fashion, pegging them down to within 6 inches or 9 inches of the soil. Only those who have either seen or employed this method of growing this type of Rose can appreciate the wonderful effect that is produced, especially if care is taken to plant one variety only in each bed. Then the masses of flowers displayed by varieties such as Excelsa, Lady Godiva, Rene Andre, Goldfinch, Paul Transon, and others are seen to perfection. If the growths are pegged down as already mentioned, so that they are not too close to the ground, all formality of surface is avoided. Their cultural treatment is the same as when grown in the ordinary way. Cut out the old wood directly the plants pass out of flower, thin out, and leave sufficient of the new growths to cover the beds; peg them down and leave the tipping of the shoots till spring. Dress with half-decayed manure in alternate years. W.

Violas

Where the flowering shoots were cut back a few weeks ago there are now innumerable strong growths suitable for cuttings. These may be taken off 3 inches in length and dibbled into boxes or beds made up of fine sandy soil. This should be made firm before inserting the cuttings.

October Flowers and Fruits

Observations on a few plants of special interest noted at the Royal Horticultural Society's Meeting on October 5th

THE Lilies were exceedingly fine and merit all the good things that Mr. E. H. Woodall has to say in their praise on this page. There were many spikes of Lilium nepalense from bulbs grown in India. Incidentally their flowers were larger and more reflexed than the old type. The dark chocolate-maroon stood out in bold contrast on the yellow-green perianth.

Watsonia rosea was shown in the same group, also Lilium regale and L. sulphureum from Empire-grown bulbs.

Michaelmas Daisies were extensively shown and pink varieties predominated.

The varieties most in evidence were:—Little Pink Lady, Barr's Pink, Wells' Favourite (a pink Amellus), Ruby Tips, Lil Fardel, Dick Ballard, Ryecroft Pink, and Ballard's Crimson.

Mr. Ernest Ballard showed the new white variety Mrs. George Monro in quantity. It is a splendid variety of tall, erect habit. It should make a perfect border plant and in time no doubt it will be grown for market. With reference to Michaelmas Daisies for market, it is interesting to note that Barr's Pink is a great favourite in Covent Garden Market and is quite the best Aster in Covent Garden this season. The pink-flowered varieties are preferred for the cut-flower trade as they show up to advantage under artificial light. On the other hand, it must be admitted that the purple shades are dull under artificial light. For border effect, however, the blue and purple shades will always hold their own.

A very remarkable Gentian, under the name G. detonsa (ciliata), was shown by Lady Aberconway and the Hon. H. McLaren, Bodnant, N. Wales. It is certainly not G. ciliata, which we saw flowering a few weeks ago in the Dolomites. The plant shown carried very large violet-blue flowers about 2½ inches across and 3 inches long. The four-petalled flowers were more remarkable for their size than for their form or colour. The petals were tinged with green on the outside and margined with white hairs towards their base.

From the Botanic Gardens, Cambridge, came sprays of Cornus Mas laden with bright red fruits known as Cornelian Cherries. In Eastern Europe these fruits are much prized for the making of conserves, and we have pleasant recollections of the delicious jams made from Cornelian Cherries in Bulgaria. It is unusual for this tree to fruit in England. H. C.

Because of the Butterflies

How bright and beautiful the Michaelmas Daisies were at Vincent Square on the 5th inst.! The other day in Devonshire I saw a pretty sight that made me smile, for one sunny morning I went into the garden to enjoy the Asters in the sunshine, and I there found, to my amusement, that the butterflies all preferred the pink or rose coloured varieties. Not one was to be seen on the white varieties, and only a few Painted Ladies and one Brimstone was to be seen on the lilac shades, such as Climax and many others. But on the rose-coloured shades multitudes of Red Admirals and Tortoiseshells and a lesser number of Painted Ladies jostled each other in their haste to drink the nectar. Is it, I wonder, on account of the butterflies, both human and winged, that pink shades are so predominant? One used to consider a Michaelmas Daisy as inevitably lilac or bluish, now the rage is set clearly for the rose-pink shades so beloved by the butterflies. When there is such a gorgeous variety of rose and other colours in the modern Dahlia it is a pity to let the old-fashioned Michaelmas Daisies ape the colouring of the Dahlias, so, ladies, pray remember that, after all, everything cannot always be Couleur de Rose. E. H. W.

Bulbs from the Antipodes

HOW many people did, I wonder, admire the splendour and magnificence of the Lilies shown recently by Messrs. Perry at Vincent Square? The sight of those superb Lilium nepalense positively made one gasp, so much finer were they than any shown before, and when one realised that these are the results of bulbs imported from the Antipodes in cold storage last spring it made one aware of many wonders and possibilities in the future, for surely never were there such specimens grown in England. Shall we see (I hope we may) these Lilies grown as Japanese Lilies are grown—for market purposes or for greenhouse adornment in the winter months? Certainly such an industry should be encouraged and gardeners in the Antipodes thanked for their enterprise and skill. We are proud of such persons. E. H. WOODALL.

The newest Dahlias

THE last meeting of the season of the joint Floral Committee of the Royal Horticultural Society and the National Dahlia Society was held at the Royal Horticultural Society's Hall, Westminster, on Tuesday, October 5th, when a very interesting series of novelties was submitted for adjudication. Miniature-flowered Pæony varieties largely predominated on this occasion, and some were very attractive and beautiful. The following were selected for trial next year at Wisley:—

CORA.—One of the most striking miniature-flowered Pæony Dahlias of the current season, chiefly on account of its colour, which may be described as bright cerise-pink shaded gold in centre. The florets are fairly broad and build an attractive flower about 3¾ inches across. Good wiry stems. Shown by Mr. C. Turner, Slough.

JOSEPHINE ADAIR.—A very handsome large-flowered decorative having broad florets that build a flower of good form on erect stems. Colour, rich bright yellow. Shown by Messrs. J. Stredwick and Sons, St. Leonards-on-Sea.

REV. JOSEPH LEE.—Another large decorative variety having broad florets of good substance that build a flower of good, even form. Colour, crimson-purple. Stiff, erect flower-stalks. Also shown by Messrs. Stredwick.

COULSDON.—A very distinct type of the miniature-flowered Pæony section. Florets prettily fluted, building an attractive flower about 4 inches across. See illustration on page opposite. Colour, scarlet on terra-cotta ground. Shown by Messrs. J. Cheal and Sons, Ltd., Crawley.

BRIGHTON GEM. — Another miniature-flowered Pæony about 4 inches in diameter. Rather loosely built. Colour, bright crimson-cerise. Very attractive. Also shown by Messrs. Cheal.

The following six varieties were selected for trial at Wisley from a good number of beautiful novelties shown by Messrs. J. Burrell and Co., Howe House Nurseries, Cambridge. They all belong to the miniature-flowered Pæony section, for which type of the Dahlia this firm has done so much.

ALICE.— A lovely rosy-cerise-col flower with crimson centre or zone rou well-proportioned golden disc. The fl are about 3½ inches in diameter and are on erect wiry stems.

DOT.—A flower of great refine Colour, rose-tinted on fawn ground. florets are fairly broad and blunt-pointe build a flower about 3½ inches across wiry stem.

EFFIE.—A striking bicolor that was admired. The colour may be describ white with a scarlet margin to the florets, and the marking was consi Stiff, erect flower-stem. The flowers inches in diameter.

ELATIOR.—This is a most striking of the type and the colour is a beautiful son-scarlet. The florets are broad and pointed, and build a flower about 3½ i across borne on a wire-like erect stem.

EMMELINE. — Another refined Colour, heavily-shaded rose on a light ground. Florets fairly broad and po and slightly twisted. Flowers abou inches in diameter.

WANDA.—A rather loosely-built about 5 inches across, having fairly pointed florets. Colour, yellow, edged This last set of six novelties is flowering and the habit excellent.

The newest Chrysanthemu

Thirteen new Chrysanthemums wer mitted to the Floral Committee o National Chrysanthemum Society on day, 4th inst. These novelties were outdoor garden varieties disbudded a disbudded. Only three were recognis this expert Committee.

RED ENSIGN.—This is a large exhi Japanese variety measuring fully 8 inc diameter. The florets are of medium and of good length, and slightly cu incurve at the ends. Colour, brilliant nut with bright gold reverse. It w ported that the plants from which blooms were cut were grown outdoors. class Certificate to Messrs. H. Woolm Sons, Shirley, Birmingham.

MRS. JAS. WHITEHOUSE.—This is a what solidly-built flower, having fairly florets reflexing evenly, building a full some 4 inches across. Colour, light ch with gold reverse. Disbudded flower were shown. It was commended. Als Messrs. Woolman and Sons.

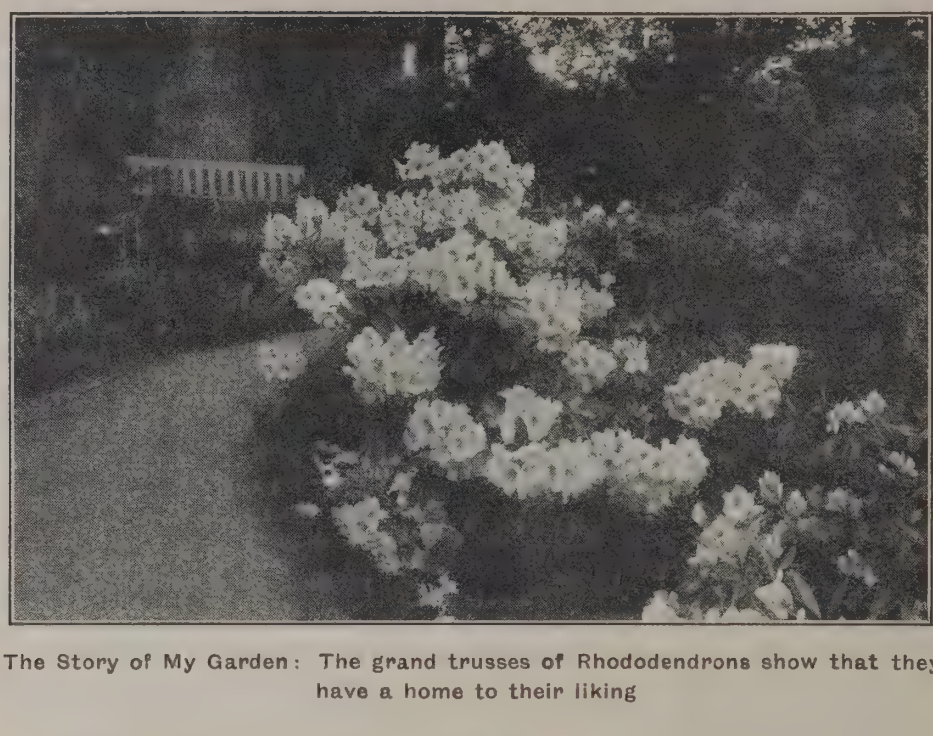
There were a few other promising no worthy of mention. These were Deri rich yellow flower of compact form may be described as a richer yellow fo that popular outdoor variety Goldfind was also represented in undisbudded f sprays. Primrose was also noteworthy flowers measure about 4 inches or rath across and the colour may be descri canary-yellow. The blooms in this cas disbudded specimens. Atalanta is bloom having fairly broad florets, ma flower fully 6 inches in diameter. C peach-pink. The Committee wished the variety again. D. F

Mignonette in pots

This is a good time at which to sow of Mignonette in pots for spring flow Five-inch pots are, perhaps, the mos able, but I have had nice little pieces in pots and which were very useful. loam is necessary, and to it must be lime or lime-rubble. Make the surfa firm, sow sparingly, and thin the see when sufficient progress is made, t per pot. A cold frame will, meanti the best place for the pots, and, if it u done, they are better plunged to the ri. W. M

PLANTS OF SPECIAL INTEREST AT VINCENT SQUARE

. Lilium nepalense
. The fruiting of Cornus Mas
2. Watsonia rosea
5. The new white Aster Mrs. George Monro
3. Dahlia Coulsdon
6. Gentiana detonsa



The Story of My Garden: The grand trusses of Rhododendrons show that they have a home to their liking

The Story of My Garden—II.

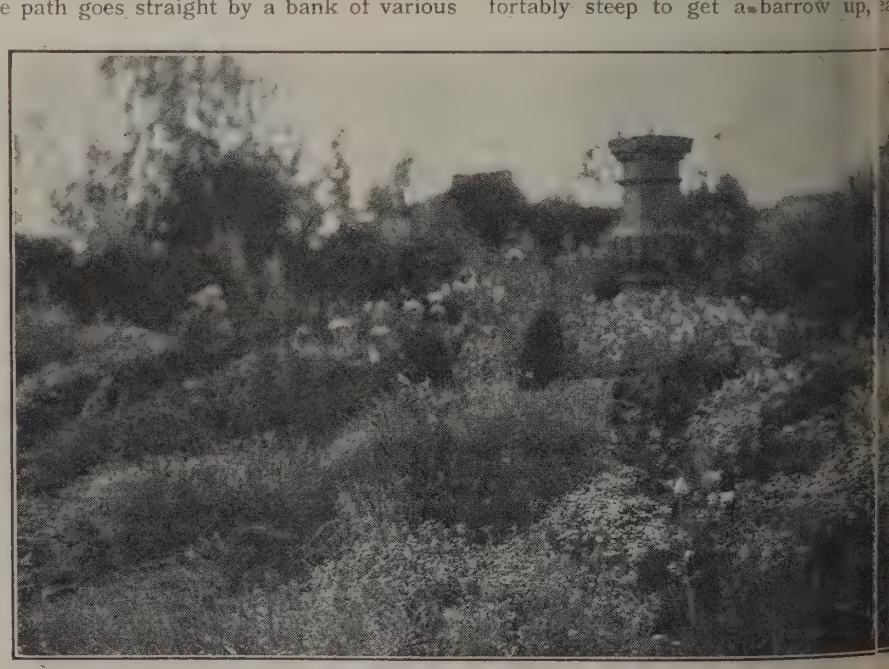
(Concluded from page 613)

AT the lowest end of the Rhododendron terraces are planted a few Azaleas and Lilium Martagon. This path here runs close to the Privet hedge and under the shadow of one of the largest Holly trees in the district. Three feet from the ground the trunk measures 5 feet in circumference. It was difficult to get anything to grow under the shadow of this tree, but at last I have managed to get a little colour with various sorts of Broom. About 12 feet from the Holly tree a narrow flagged path runs off to the right. It leads upwards, and at the top on the right there is a small flight of four steps which brings one on to the flat path cut into the slope of the hill, which goes east to west across the garden. At the lower end of this narrow flagged path were planted Nut trees on either side. Where these ended on the north side of the path is a fine Deodar, and further on a Mountain Ash tree. On the south side was a Pear tree, while further on up the path were two Laburnums and a pink May, with an Apple tree too close to the May. These trees no doubt were a suitable distance apart when first planted, but, as so often happens in a newly-made garden, they had, in process of time, overgrown their space, and so they formed a dark alley under the shade of which nothing would grow well. I have cut down three of the Nut trees, the Pear tree, and one of the Laburnums, so that now we can get Daffodils along the edges of the borders, while Hepaticas and Violets do well under the Nut trees. On the north side, towards the top, the ground is held up by a rock wall, on the top of which is a sloping bed some 8 feet wide. The slope was a little too stiff to retain the moisture, and so I put another series of rocks towards the north side of the bed about 18 inches high, which retains 3 feet of bed quite level. On this strip is planted a climbing Rose with an Almond tree at one end and double-flowering Peach at the other. On the remaining portion of the bed I have planted Magnolias, Viburnum plicatum, and Prunus triloba, which give us a fine display of bloom in the spring. At the west end of this bed, near the small flight of steps, the rock of the district has cropped out naturally, and with the addition of a few more pieces of rock there is a perpendicular rock wall about 8 feet high which has been used as one side of a Rose pergola. The rock wall is planted with Ferns, Arabis, Aubrietia, London Pride, and Primroses. In front of the pergola is a small bed planted with Pentstemons. This bed has sloping sides on the east and south, which have been dotted with lumps of rock, so that we get Rock Roses, Iris fœtidissima, Arabis, Aubrietia, Cushion Saxifrages, and Lungwort, with a few King Alfred Daffodils interspersed; thus we get colour in the spring. On the edge of this bed are planted Pyrus japonica, Siberian Crab, Pyrus purpurea floribunda, and various Viburnums.

The flat path continues under the pergola, past the bottom of another and longer flight of stone steps from the top of which we reach the south end of the top rock garden. The path goes straight by a bank of various Brooms, Lavender, and Foxgloves to h trance of our quarry. This was o dug into the solid rock to provide s ballast for building the four house form our park. It is entered by a about 8 yards long and 2 yards wide, the side of the hill. The highest poi corridor is about 9 feet high, and at a narrow bridge has been built over bridge is now overgrown with Hon and Roses. Inside the quarry propert rises to from 11 feet to 15 feet at the point, the space widens out. The roughly, 12 feet wide by 20 feet long, walls are precipitous except on the w where the rock has been cut away f 6 feet, but the soil on the top has fall that it forms what might be describ half-funnel. This slope I have built lumps of rock. On either side of a feature rough steps have been built the initiated can easily get to the two stone paths running round the top quarry on this side. The whole h planted with British Ferns, Primula j and Tropælum speciosum.

A few months ago I found in t clinging on the vertical face of the c Sporling Osmunda regalis, the sp which must have been carried up fro have by a small pool right at the bo the garden. I have potted it up and has four well-developed fronds.

On the top of the earth banks aro top of the quarry are planted several c Roses and various Brooms. The e of the quarry, although quite perpe has clothed itself with Ferns. The were self-sown, and have germinate Ferns themselves cling with a w pertinacity to the face of the dam Occasionally the wind breaks one a there are scores of juniors to take i It is a unique, cool, and refreshing find in one's garden, and always con delightful surprise to a visitor who know it. At the entrance to the qu flat path ends, but is continued by a paved way with occasional steps round until it reaches the west end bridge. The hill on which the ga made slopes very steeply from t ground above the quarry down to th lawn. It is so steep that an oblique from the quarry entrance on the we the hill eastwards, although most fortably steep to get a barrow up,



Alpine flowers and sundial

The Story of My Garden: Where lawn and rock garden meet

our eastern boundary before getting the western side on the slopes are uniper, Silver Birch, Yew, Haw- l Apple trees, under whose shade in Anemones and Bluebells delight us welcome.

und is so steep that I have had to ow serpentine path into the side of o reach the bottom comfortably. re a Beech and a Horse Chestnut he bottom, but these with some trees I have cut down, so I now mone fulgens in mass, Solomon's ifts, Dicentra eximia, and Hybrid in their place. I have kept an Holly tree, so that with the Apple Pear trees it still retains a touch of shade.

ole of this bank, from the sloping e tennis lawn, was grass with a ler at the top in which were planted Pear trees, with Rose standards d. I felt I should like to have ar on this bank, and so, in process stripped the turf and built up, bit rocky slope which I have planted sorts of Alpines, Allwoodii Pinks, zia, Rock Roses, and Mulleins, so it makes a very gay and agreeable olour, especially when the Brooms quarry are out and form a distant colour to the slope. It is also an sight when in the spring the this bank join with the colours of tias, white Arabis, double yellow hanging over the three terrace which I retain part of my kitchen a workable level. These again the colours just showing over the my other rock garden above the s, so that from the tennis lawn up vn of the slope on which the house now have gay colour during a of the year instead of green grass and dull earth. The mound above the quarry was really composed of the soil I had to dig off before I reached the sandstone rock into which I cut to make the quarry. It was a conical heap and was thickly planted with Brooms, which smothered the Lilacs also planted on it. When I first saw the mass of yellow these Brooms made when in bloom I named the mount Mont d'Or, but as I have plenty of Brooms elsewhere I have recently cut down three-quarters of them and also transplanted the Lilacs, spreading out the soil into a flattish bed some 20 feet wide in which I have planted Roses. I now call it Monte Rosa.

The rest of the ground is devoted to kitchen garden, and along the edges of the paths of this I grow Phloxes and Pompom Dahlias. In an irregular bed at the east end of the bridge I grow the salmon-coloured Papaver-orientale in the spring; a broad mass of single Hollyhocks for autumn colour. They look well against the foliage of the Silver Birches and other trees on the bank under which the Wood Anemones grow.

This is, roughly, the story of my garden. My aim in planting it has been to have bloom as early and as late as possible, and as far as I can arrange it, when one effect is done, to have another near it to follow on and so maintain both colours and interest all around. Heleniums, Sunflowers, Gladioli, Chrysanthemums, Cosmo, Achillea ptarmica, Nasturtiums, and Fuchsias will all help to keep the colour going until the frost cuts them down. I generally find some blooms to cut on Christmas Day, and after that it will not be very long before Winter Aconites and Snowdrops invite us to look forward to the succession of pleasure which each batch of plants gives as it opens out its treasure-house of bloom each in due time. H. T. W.

Rusthall.

How to grow early Sweet Peas

THE present season has been abnormal as far as the Sweet Pea is concerned. No doubt the unkind and cold spring has been the cause in many cases; in others the lateness in sowing the seed. The Sweet Pea, whether sown in autumn or spring, is of little value after the beginning of September. Everyone is aware that there are no blooms nor length of stems like those produced during the first and second months after the commencement of flowering even under the best cultivation. No plant is so apt to become sick and deteriorate sooner than the Sweet Pea. In some instances that dreaded malady streak, and also the stem and root rot, attack the plants and cause a collapse. So where really good flowers are required early, which means the latter part of May or the beginning of June, one should not hesitate to give autumn sowing a trial. In gardens that are sheltered, and have a nice light loamy or sandy soil, the seed may be sown in autumn in the trenches where they are to bloom, and where attention is given during winter, and pests are not too prevalent, excellent results can be obtained. I advocate sowing the seed in boxes or pots. The first week in October I find is the best time to sow the seeds, and the boxes I use are 4 inches deep and 24 inches by 18 inches. Holes should be made in the bottom to ensure the soil not becoming sodden. Clean, pure loamy soil is the best material to use, and this should be made porous by adding a sufficient quantity of coarse sand. Some growers believe in leaf-mould, but for my part I believe if not properly sterilised it leads to trouble later on. When the loam and sand have been thoroughly mixed a dusting over the heap of fresh-powdered lime may be given with advantage. This should now be passed through a sieve with a ¾-inch

mesh, using the rough portion to place on top of the crocks. Two inches of rough material in the bottom of the boxes are ample, and this should be pressed down before adding the finer soil to within 1½ inches of the top of the box, and when levelled off ½ inch of pure sand should be placed on top and the boxes given a good soaking of water. They should remain several hours to drain before

SOWING THE SEEDS. These should be obtained from a grower of repute who will vouch that the stock is free from streak. I am convinced that the spread of this disease during recent years is due to inferior stocks of seeds. I advise readers to consult page 494 of GARDENING ILLUSTRATED dated August 14th. There they will see a classification of Sweet Peas for 1926 given by the Floral Committee of the National Sweet Pea Society, which has spared no efforts in its work. All varieties named in the list can be recommended. All hard-skinned, black-seeded varieties should have a little of the outer skin chipped off. The seed should be embedded in the sand in lines 3 inches apart and not less than 2 inches between the seeds, labelling each variety as the work proceeds. When each box has got its compliment of seed they should be covered with ½ inch of the compost that has been passed through a sieve with a ½-inch mesh. After levelling the surface the boxes should be set in a cold-frame or on a greenhouse stage.

Many complain of faulty germination, and very often blame is put on the seedsman. In nine cases out of 10 it can be put down to too much watering, which causes th to rot. No water should be given ul mination has taken place, but to pre n soil from becoming dried up the boxes s be covered with glass and shaded wit s of paper, which should be removed m ately germination has taken place c plants show above the soil. Plenty of i light is necessary at all times, and th need only be placed on the frames i frost or heavy rains. No coddling attempted at any time. When th made three pairs of leaves nip out th Nothing further will be necessary oth seeing that the soil is kept moderate and the plants free from insects u turn of the year.

W. E. Wr

REMINDERS FOR THE WEEK

Southern and Midland

Kitchen garden

The chief work in this department at the present time is to clear the ground of all spent crops and proceed with the manuring, digging, and trenching as far as possible during the next few weeks. It is advisable to remove all decaying foliage from the plants of Broccoli, Savoys, and Brussels Sprouts. Keep the hoe going amongst all late-sown crops.

French Beans

In cases where these Beans are growing in pits or frames and where heat can be given it is wise to do this now, as the extra warmth will cause the crop to develop quickly. Ample ventilation should be given, and when the pods form, the plants may be assisted with weak liquid-manure. This crop will prove useful when the outdoor ones are over.

Main crop Carrots

Where not already done, the roots should be lifted without delay or many will split and be infested with insects. The foliage should be cut off and the sound roots stored in a cellar and covered with sand or fine ashes. Where room is not available they may be stored beneath a sheltered wall and covered to the depth of 6 inches to 8 inches.

Lawns

It will not be necessary to mow the grass so frequently after this date unless the weather keeps mild and open. Where re-turfing is contemplated it is well to put the work in hand as soon as possible as the turf will become united before winter sets in. Newly-sown lawns should be rolled when the ground is dry, and if this requires cutting it should be done at once, using a scythe. Where worms are troublesome, now is a good time to use worm-killer.

Cannas

These should now be lifted, as if they are left in the borders and subjected to severe frost they will lose their foliage, which will very much injure the crowns. They should be packed close together in boxes, just covering the roots with soil, after which they may be stood in a deep frame or pit to complete ripening off.

Lily of the Valley

October is a good season to make up a new bed, and a position with a west aspect suits it best, although it is a success if grown on a north border, where the flowering season is prolonged. The bed should be deeply dug and enriched with decayed manure and leaf-mould. Plant the crowns 6 inches apart in rows 1 foot asunder.

Winter bedding

This should be completed as soon as possible after this date, and all bulbs, Wallflowers, Forget-me-nots, Daisies, and other spring-flowering plants should be got in position. Wallflowers do much better when the soil is firm and not too rich. Lime-rubble is excellent if mixed with the soil for these plants. It should be scattered over the beds and lightly forked in.

Poinsettias

These are beautiful plants when well grown and turn in around Christmas, when bright colours are highly appreciated. Established plants whose pots are filled with roots may be improved by watering twice a week with soot-water and liquid-manure in a weak state. A temperature of 60 degs. should be maintained from now onwards to do these plants well. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Figs

Where Figs are grown in cool houses or in corridors any small fruits which have attained to the size of a Broad Bean may now be taken off, for they will never come to anything, and, if left, they are but a drain on the plant. Trees which have made over-luxuriant growth and from which the fruits have fallen prematurely, or upon which no fruits have formed, should be lifted and attended to now. A good bed of brick-rubble ought to be laid beneath, and the roots, kept well up, should be planted in good loam made very firm. Few fruit trees are so easily managed as the Fig when its requirements are understood.

Roman Hyacinths

Early-potted bulbs have now filled the pots with roots and top growth is on the move. The pots, therefore, ought to be removed from the plunging bed and placed in a cold frame. It is not likely that the plants will require a great deal of water at the moment, yet they must by no means be permitted to become dry or disaster will follow. Should it be needful to have a batch in good bloom early in November the pots can be removed from the frames and placed in heat any time after the middle of the month.

Plant houses

Watering will now, of course, be done in the morning in order that superfluous moisture may quickly dry up. In the houses which accommodate Chrysanthemums it is preferable, for a time, to omit the daily swilling out of the house in order that damp may not lead to mildew upon the foliage. Such houses must be very freely ventilated whenever it is safe to do so. A little ai a apex of the house overnight will do 1 for some time to come, and pipe-he: i undesirable save, perhaps, if persist t days, with rain, occur, as sometimes u at this season. See that Salvias, l toriums, Arum Lilies, and the likel suffer from lack of moisture, but do rt water Primulas or early Cineraria latter, and especially at this season, resent too much water and soon beco As a precautionary measure the hous now be vaporised, giving, rather, t doses on successive evenings than or dose. Eucharis Lilies and Gardenia have been well rested and ripened w a good deal of forcing. A useful an s plant at this season is Schizostylis c (the Kaffir Lily). It succeeds, of cou of doors, flowering naturally in Septe October, according to surroundings, always, I think, seen to more ac when grown as a pot plant. Thos flowers are cleaner and the foliage i affected by the minute brown spots w here at all events, mar it when the la grown in the open.

Fruit trees in pots

These ought now to be outside, an i of them require repotting the work g be attended to without delay. Of c there ultimately comes a limit in roo the size of pots, and then top-dressi suffice. This may consist of loa manure, the latter either organic a well rotted, or of a chemical natu loam used for fruit trees in pots oug of an adhesive, rather than of a lit sandy, description. Fruit trees in po not be neglected in respect of wa although, of course, less moisture wi be necessary. By-and-by the pots m protected against possible danger fro by being covered with Bracken or wit le

Kitchen garden

If Beet be left too long in the soil its to become "earthy" in taste, so ac ought to be taken of fine weather to roots lifted, dried, and stored. Contu earthing of Celery. Give an eye to e of young Cabbage plants, and make g deficiencies. A few of the bottom lea s be removed from the early Brussels s This practice, I think, helps to har stem of the plant before frosts set in of the old foliage may be remov Parsley in order to prevent dampin a neck of the plant and, in some mea promote fresh growth. Protect the autumn Cauliflowers from rain by le a few of the leaves over them. Th the autumn Broccoli are, this season, standing crop for bulk. W. McGr

Mabie Gardens, Kirkcudbrightshir

UIT GARDEN

Bush fruits

ome use Currants, both Red and also Gooseberries and Rasp-s, are indispensable fruits, and their n is carried out on a more extended erally throughout the country than r kind of fruit. In every well-garden they are usually to be seen in sufficient quantity to meet the They are also to be found in many nt garden, and in most cottage gar-n for them is usually found by the who, in many cases, after supply-own needs, dispose of the surplus fairly remunerative prices. In districts their cultivation is essayed or less success, and in this case, conditions are in any way at all heir cultivation might be consider-ded. That they will succeed in and e great metropolis, for instance, the d ocular demonstration when in-etc., allotment gardens during the

ting time is close at hand a few how it should be carried out and arieties to plant will not, perhaps, place, and may help to encourage ious to plant, but do not know, or are sure, how to proceed in the matter. difficulties which presents itself at t day is that of procuring manure, some shape or form is very neces-atisfactory results are looked for. in country districts are more situated in this respect than those he vicinity of large towns. Where ticle is not to be had, recourse must the use of artificials. Of these the able for the purpose in hand are and kainit for heavy soils, and and kainit or sulphate of potash soils. If strict economy has to be he sites where the bushes are to be ould be marked with stakes, and plied to these stations only. This plies to farmyard, stable, or arti-nures alike, and the intervening be manured at some other time. in which planting is to take place 5 feet apart for Red and White 6 feet apart for Black Currants, re than one row is required allow distance between the rows. Holes to 1 square yard and two spits in not any too large, seeing that the l occupy the same position for some ome. With the upper and lower ach spit, mix intimately 4 ozs. basic 2 ozs. kainit if the soil is heavy, bone-meal and 2 ozs. kainit or of potash for light soils. This at ½ lb. basic slag and ¼ lb. kainit one-meal and ¼ lb. of either kainit of potash as the quantities needed case. Of animal manure, which well decayed, apply a liberal quan-n spit in every instance. For Rasp-rench from 2 feet to 3 feet in width, in depth, breaking up the bottom with a fork, will answer for em if but a single row is required. se this plan will obviate the neces-aking up and manuring the whole expenditure on manure has to be as low as possible. If the culti-cordon-trained Gooseberries and in the open is contemplated the me 2½ feet in width may also be or them in the same way. The cordons to be grown against walls thern aspects, to furnish late sup-d not be quite so wide. Late are indispensable wherever late or ruiting Raspberries are grown. Whatever kind of manure it is decided to employ for these trenches apply it on the same principle as that already mentioned above. In spring, say, about the middle of February, apply ½ oz. nitrate of soda to each bush and per square yard in regard to trenches. On light soils apply in the same way ½ oz. sulphate of ammonia. In April or May apply another ½ oz. dressing of both under the same conditions. With respect to suitable

Varieties of Red Currants there are Red Dutch, Raby Castle, La Versailles, La Constante, Cherry, and Warner's Grape. The best white is Versailles. Of black kinds Boskoop Giant, Baldwin's, and Carter's Champion are three of the most reliable. Of Gooseberries for dessert there are among the red kinds Scotch Nutmeg, Keen's Seedling, Ironmonger, Champagne, Lancashire Lad, and Warrington. Of yellow sorts Champagne, Broom Girl, Langley Beauty, Golden Gem, Leveller, and Leader are good, while Whitesmith, Bright Venus, Langley Gage, Careless, Champagne, and King of Trumps are six excellent white sorts. Of the green kinds Pitmaston, Greengage, Gascoigne, and Early Green Hairy can be recommended.

For gathering early and for general purposes there are Whinham's Industry, Crown Bob, and May Duke among the red kinds; Leveller and Leader, two yellows; Keepsake, Early Kent, Stockwell, and Telegraph, four greens; and Careless, King of Trumps, and Whitesmith, three white kinds. Norwich Wonder, Superlative, and Baumforth's Seedling are three reliable red and Queen of England and Yellow Antwerp two good summer-fruiting Raspberries. Of the autumn-fruiting varieties November Abundance, Queen Alexandra, October Red, and October Yellow are all worth growing. W.

Storing fruit

Immense loss takes place from want of thought in making the fruit-room, and Pears and Apples, our most important fruits, suffer the most. The common way of keeping fruit in dry rooms leads to early decay. The walls of the fruit-room should be thick; the windows should open to the north; the doors should be double, the outer door thick, the inner door not so thick. A ground floor over a cellar is the best, or an upper floor, provided it be not under the roof. The temperature should be uniform. The shelves should be wood, and, if possible, of open work, so that the fruit can be aired on all sides. Fruit-rooms are often built in any convenient spot regardless as to whether the position is a suitable one, and their general character is frequently quite the opposite of what is required for keeping Apples and Pears over the longest possible period. In the first place, fruit-rooms should never have a south aspect, nor yet be lofty. The reason for this is apparent, as the sun, especially during October and November, runs up the temperature to far too great a degree, the fruit ripens speedily, and is soon past and gone. Lofty structures become too dry, and thus also hasten premature ripening and speedy decay. The best fruit-room I know is constructed behind a high bank of earth and facing due north. It is entered by descending several steps, and is covered by a heavy, thatched roof, ample ventilation being provided. A cool, even temperature is what is wanted to preserve fruit, and to enable late sorts of Apples to retain their weight. So long as actual freezing does not occur the fruit will take no harm in winter. I prefer to lay sheets of coarse brown paper over the shelves when storing soft-fleshed, tender-skinned sorts, but firm, thick-skinned, long-keeping Apples do very well simply laid not too thickly on the bare shelves. Where there is plenty of space, the more thinly Apples are stored the better, as the greater the pressure the greater the liability to rot, and by thin storage faulty fruit is more easily detected, and the labour of sorting reduced. Apples will keep well in cellars, provided they have no windows facing south into which the sun can shine. It is not, however, the fruit-room or its construction that is all-important, but the

Harvesting of the fruit at the right moment. All fruit that is to be stored must be carefully picked, as any bruising, however slightly, quickly develops and eventually spoils the fruit. Another point is a thorough knowledge of the variety, so that it may not be gathered till quite ready. Those without the convenience of a fruit-room might adopt the plan of storing in boxes, barrels, or tubs, leaving these open for a few days in order to let any moisture escape, keeping them closely covered and arranged one on top of the other in a cool loft or spare room. Never place straw or hay under Apples, nor use them for protecting them, as they quickly become musty and taint the Apples.

A very good fruit-room used to exist in the old Royal Horticultural Society's Gardens at Chiswick, which was a lean-to built against a north wall. In this the shelves, which were in tiers, were latticed and ran from east to west, with a flat shelf running along the centre of the room on which specimens of each kind were kept for reference. To enter it one had to go down three steps, and the floor was an earthen one. A path went right round the whole room, so that it was easy to get at any of the fruit when wanted. The windows were fitted with shutters, which, if the weather was severe, were always closed. I never knew frost to do any harm—in fact, during a period of thirteen years I never knew frost enter. The Apples were always kept on the north side, the Pears being on the south side. The fruit, both Apples and Pears, used to keep and ripen well. A great point I think in the proper keeping of fruit is always to have an equable temperature, the earthen floor going a long way towards this. The temperature in this fruit-store ranged from 40 degs. to 45 degs.

W. P. T.

Late Apples and Pears

The weather of late has been highly beneficial in hastening the swelling of late Apples and Pears. Unless climatic conditions such as we are now experiencing are forthcoming both the keeping qualities and flavour of these late varieties are bound to be adversely affected. It is surprising how both late Apples and Pears in a genial sunny autumn will, under these influences, rapidly increase in size and put on colour. Another very important matter, and which must be strictly observed, is that of deferring the gathering of these late varieties to as late a date as possible, so that sun and warmth may exert their due influence on the maturation of the fruit. So many err in respect to this all important detail, and gather and store the fruit far too early, and are then surprised to find it shrivels. The flesh of Apples gathered too soon is deficient of juice and lacking in flavour. As regards Pears the effect of too early gathering is even more disastrous, as owing to a deficiency of saccharine matter due to premature gathering the high flavour which characterises some of our best late Pears will never become properly developed. Take the variety Glou Morceau as an instance. If the fruits are gathered before the last week in October or first week in November it is seldom that the perfection of flavour is attained, otherwise they become when fully ripe what the designation Glou Morceau is supposed to imply—*i.e.*, "dainty bit" and very delicious. W. W.

Reliable autumn-flowering Roses

WHILE the Rose is associated with the height of summer, the modern Hybrid Teas are, in many respects, as good, or better, during late autumn as they are in summer. Not, of course, that every variety is a success late in the season, but those growers who wish to have a really fine display during September and October would do well to choose, among others:—

WM. F. DREER, a variety that is somewhat disappointing in summer, but in autumn is superb. Early in the season it hangs its head, but in autumn the lovely blooms are held on stiff, upright stems that show off the delightful creamy-yellow blooms suffused with carmine in the centre to perfection. It is distinctly one of our finest autumn Roses, a free bloomer and excellent grower.

LADY PIRRIE, grand in summer, is superb all through the autumn. It is only in the latter period that the glorious glowing centre is produced. The plant is of vigorous, branching habit and blooms profusely.

COLONEL OSWALD FITZGERALD seems to thrive much better here in the north than in the south, and is one of our best Roses, both early and late. It must be well disbudded to give it a chance.

BETTY UPRICHARD, although not a very profuse bloomer, is a splendid grower and gives superb colour in autumn.

LADY ELPHINSTONE in autumn is much deeper in colour than early in the season, and is really very beautiful. Of dwarf yet sturdy habit, it blooms very freely.

COVENT GARDEN is invariably good late in the season. The blooms are produced on long wiry stems and the foliage is extra fine and free from mildew. It requires little or no disbudding.

FRANCES GAUNT, one of our best all-round Roses, is richer in colour in autumn. It is a Rose of upright habit of growth and a free and constant bloomer. It must be well disbudded.

LORD CHARLEMONT, of dwarf yet branching habit, is one of the best of the newer red Roses for garden decoration, blooming freely all the season.

LADY ROUNDWAY is a splendid grower, a free and continuous bloomer, and in autumn of superb colour. Here it quite outclasses Emma Wright, Mrs. Farmer, and Mrs. Redford, growing and blooming much better, while the colour equals, if indeed it does not surpass, that of these three older favourites.

PHARISAER, although now an old variety, is unsurpassed by any other pale Rose, especially late in the season. This never seems to fail.

CHRISTINE probably produces more flowers, and that over a longer period, than any other yellow Rose. The blooms, if not very large, are ideal in shape, while the rich yellow colour does not soon fade.

MABEL MORSE is superb, even quite late in the season, and yields quite freely, its blooms being always shapely and with beautiful foliage.

GOLDEN EMBLEM is also very good until it passes the half-open stage.

LIEUTENANT CHAURE, a delightfully fragrant, deep red Rose, is an excellent autumn bloomer, as is the old favourite

GENERAL MCARTHUR, which produces sheaves of bloom until hard frost sets in.

LOS ANGELES cannot be said to be very free-flowering in autumn, but the blooms are superb in form and colouring.

MRS. C. V. HAWORTH is by far the best of its colour, and is deeper in tone in autumn.

MRS. BERTRAM WALKER, although rather sparing of its blooms at any time, gives glorious colouring in autumn.

MRS. DAVID MCKEE is the only white, or nearly white, Rose that is of any use in autumn.

GUSTAV GRUNNERWALD is always finer in autumn than in summer.

MARJORY BULKLEY, given dry weather, is very fine, but wet causes the blooms to "ball" badly.

PAUL LEDE blooms profusely, and usually gives superb colour in the latter part of the season.

MME. MELANIE SOUPERT flowers profusely, but the colour is not quite so rich as in the earlier part of the season.

BETTY is, invariably, beautiful, and no less so in autumn.

REV. F. PAGE ROBERTS produces dance of its lovely blooms, but these somewhat smaller than at the beginni the season.

MRS. EDWARD POWELL strongly rese General McArthur, but is more brillia shade if less fragrant. It blooms free autumn and well retains its colour.

NOBLESSE, although it can hardl claimed as a reliable autumn bloomer been really splendid this autumn as has MRS. HENRY MORSE, but both are s to attacks of mildew.

Linlithgow.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plan be named should send fair examples of each stem, leaf, flower, or fruit. (Snippets of and points of shoots are useless.) Not more four plants should be sent in any one week b same correspondent. Where more than one is sent they should be numbered. Of conifer cones should always be sent.*

Naming fruit—*Several specimens in diff stages of colour and size of the same kind g assist in its determination. We have rec from several correspondents single specime fruits for naming, these in many cases bein ripe and otherwise poor. We undertake to not more than four varieties at a time.*

FRUIT

Autumn-fruiting Raspberries

(R. W.).—The treatment of autumn-fruiting kinds is quite different from that given to the summer fruiters. In the case of the autumn-fruiting kinds the canes should be cut close down to the ground in February or early in March, as it is on the young canes made in the current year that the fruit is borne. When growth commences, the canes should be well thinned and all superfluous growths cut away.

Diseased Peach foliage

(P.).—The Peach leaves sent evidence a severe attack of red-spider, which has sucked the sap from the leaves, and left them in the condition yours are. Red-spider is a most minute insect, which fastens on the undersides of the leaves, and so exists on them. It is too late, we fear, to do much good now, except that you can give the trees a good washing with very strong soapy water after all the fruit has been gathered. By forcing that on to the trees most of the brown leafage would fall. That should be at once gathered up and burnt. It would do your trees great good, no doubt, if you could, so soon as the leaves have fallen, take off all the soil down to the roots, replace it with some fresh, to which are added good loam, old mortar refuse, and a half-pint to 3 bushels of basic slag. That should cause the trees to make new surface roots, and if that were so, you would soon see the effect in more healthy growth. But as the wall and wood may still harbour the insects or eggs, you had better also, so soon as the soil renovation has been done, have the trees sprayed with the caustic soda solution, giving them a second spraying in January. That should destroy all insect pests. It is very possible that the glass coping, which we assume projects somewhat, keeps the trees too dry.

Pruning standard Apple and Pear trees

(B.).—There is no harm in pruning at the time you name, but if you cut very hard it is safer to wait till leaves have fallen. In your case you could, with advantage, cut back to admit light and air, but we think you would get better results by severely thinning out thick wood, cross branches, and bare stems in preference to complete topping dow one level. By following the latter yo courage a forest of weak shoots and cut all your fruit-buds. If thinned, you s good portion of the latter.

Apples from pips

In January, 1925, I sowed several pips as an experiment in a small pot. plant only resulted, and this, by the e the summer, had developed seven or leaves and reached a height of some 3 i or 4 inches. In November, when the had fallen, I repotted the plant into a pot (6½ inches diameter). In the early s of the present year a second plant ma appearance in the pot, evidently from the pips sown 12 months before. Perh would have been wiser to destroy this s plant, but I was curious to see what happen and let it remain. Both have on together during the summer in the pot, which has been kept indoors on a dow-sill, where it gets plenty of light. older plant is now 1 foot 10 inches in h and the younger one 1 foot 4 inches. former has, I think, suffered from th sence of the other in such close quarter is much the healthier in appearance two plants. Would it be best now to tr both plants to larger pots or destro younger one and to let the other remain is till the spring? The soil, I may me has grown very mossy lately. There I suppose, be no question of removal open air at this time of the year. I s very much like, if possible, to rear at one of these seedlings, having sown the seen them grow to their present size.

G. H. Pow

[Your best course would be to stan pot containing the seedling Apples ou at once to harden the growth. Then, the leaves have fallen, knock them out pot and shake the soil from among roots. Disentangle the roots and then them out where you would like them to and fruit. By this you will gather we think it necessary to sacrifice the young the two seedlings. If you find tha slender stems should die back at all c the winter cut them back to first bud live wood. In case you are not aware fact, seedling Apples are very capriciou

es fruit in from six to eight years e time of being raised, but more y in from 10 to 15 years. The best est their merits, and the quickest, is as the wood made is sufficiently to graft it on to the branch of an ed tree in the spring. Another way , if you have some young stocks, to on the latter during July or August, g to the season. By these means a iod of waiting would be averted.]

nd Nectarine trees

Γ.).—For a heavy clay soil you would to add such aids as plenty of old ubble to get good results for Peaches cots, also to give a fair amount of . Plant early but not deeply, and ace a mulch of short strawy litter, n manure. The best Apricots would : Early, Shipley, or Powell's Late; es, select Early Alexandra, Early Dymond, Stirling Castle, Crimson Barrington, and Bellegarde. These od, and ripen in the order named.

in bad condition

ou tell me what is the matter with sed Grapes and the best method of vith them? They went the same in state, but not so pronounced. The unheated. The Vines are planted a border 5 feet wide, then a path, order, and then a plant-house. In- ouse is a narrow border, a concrete another border under the stage. I sing over-hauling them as soon as should be very glad of your advice.

WOLDINGHAM.

ave examined your specimens and o trace of a fungus likely to cause le. We would not, however, state that a fungus is not the cause of e. The specimens arrived in rather ndition, so that we had not a fair f examining them. It would be other time to pack the bunch fairly d also to send in some foliage and Ve should certainly advise you to vith your suggestion of thoroughly g the border. Is it not possible to inside border? We are of the at Vines are much more under con- the borders are inside. You should Vines pruned when the leaves have the houses well washed down with oap and hot water. After the wash- is completed remove all rubbish floor and also the top inch or so of of the house. All this should be Be careful that rubbish is not left in rs in the house, behind pipes, etc. e the slightest sign of the Grapes ong next season please send us in imens at once and we will try again ut what exactly is causing the

failing

some Quince trees in orchard Apple trees. They are from 15 years old and crop fairly well, but ys open about this time of year, ourse, rot sets in with the first situation is rather on the dry side soil with clay underneath. Is thing I could add to the soil to em from cracking open? F. F.

ince, as a rule, will succeed in any good soil, and if Pears are satis- the orchard there ought to be no vith Quinces. The cracking of the bviously due to the clay subsoil. ce is impatient of such, but if the not too large the cracking can be . As the trees are but from 15 years old, and as the Quince is a er, the chances are that they may be handled with comparative ease. At the end of the present month lift them carefully and with a good ball, remove the soil to a depth of 3 feet, and replace it with roughly-chopped turf to which have been added a little lime and some coarse bone-meal. Tread this firmly and form a mound about 1 foot above the present level, and plant the trees carefully, taking special pains not to bury the stems more deeply than was previously the case. This treatment will, almost certainly, effect a cure, and, in addition, will ultimately lead to greater fertility.]

ROSES

Making a Rose bed

(Southport).—Your plan would be the correct one if you wished to kill the plants. The rich soil alone would do this, but by preventing water from escaping you would simply make a grave for the plants. Remove the sandy soil to a depth of 3 feet, then obtain a cartload or so of good loam, have this put upon a vacant piece of land, and mix with it one part of the sand dug out and two parts of good, well-decayed manure from a farmyard. Some of the poultry manure could be incorporated, but only very moderately, as it is a very strong manure. Suitable loam would be the top spit from a meadow, putting the turfy part into the bottom of the bed. A bed 6 feet by 10 feet would take seven standards and 20 dwarfs.

Rambler Roses

(E. D.).—The only thing you can do is to cut out all the old and useless wood, retaining all the growths made this year. Then give the plants a thorough soaking of water and in the coming spring apply a heavy mulch of rotten manure, keeping this thoroughly soaked, so as to wash the goodness of the manure down to the roots of the plants. If this fails to benefit the plants then it would be advisable to grub them, clear away the old soil, and replace with good loam. Plant strong, healthy specimens as soon as you can procure them in the autumn.

VEGETABLES

Improving soil in Tomato house

(E. G.).—Undoubtedly Tomatoes succeed much better in fresh soil every year. You might go on growing them successfully in the same soil for a number of years, and you might have an entire failure in the midst of the growing season, when this would mean not only great annoyance, but heavy loss. If you could expose the soil to frost by opening the ventilators and doors wide the whole of the winter, and throwing the soil up roughly, much good would be done. Soot is one of the best of sweeteners of the soil we have, and it is also good for Tomatoes. In turning over the soil mix the soot with it, repeating the operation occasionally.

GREENHOUSE

Wintering Cannas

(C. W.).—As soon as frost destroys the foliage take them up, cutting the stems down to within 6 inches of the soil. The small shoots may be left on them. Store them away in any cool place, where frost does not come, until May, when they may be planted out.

Treatment of indoor plants

(C.).—Lapagerias will do in a cool greenhouse. They should be planted in fibrous peat, with a dash of leaf-mould, and must have a well-drained position. This plant does not like hot sunshine. If grown in a pot the drainage must be perfect. Camellias also will do best in greenhouse with a night temperature of 45 degs. to 50 degs. They may either be planted in borders in good peat, leaf-mould, or loam, or a mixture of the three, but in limestone or chalk districts do not use loam; they succeed well in pots, or large plants may have tubs. Good drainage is essential. Gardenias and Pancratiums should be grown in the stove, chiefly in peat and leaf-mould, though the Pancratiums may have a little turfy loam.

Fuchsias for exhibition

(P. T. C.).—To get fine plants strike as early in new year as possible, and grow in rich soil in warmth and moisture. To get plants of the size you name we would advise growing on young plants struck this summer, give a slight rest in November and December, and then encourage free growth. Single varieties flower best, and also grow more freely, Ballet Girl, Lord Wolseley, Cannell's Gem, Bride, and Maud are all good.

Calceolarias from seed

(Be).—There must be something wrong in the treatment. Calceolarias want a cool position. A cold frame on the north side of a wall or fence is the best place during summer and until frost is expected, then take to a cool greenhouse where the frost is only just kept out. Again, the soil must not be close and heavy. Equal parts good loam and leaf-mould, with some sand to keep it open, will be suitable. With the last shift a little artificial manure may be mixed. Sometimes insects eat off the young plants.

Treatment of Gloxinias

(G. R.).—The bulbs will now be going to rest. As soon as the foliage begins to decay, gradually withhold water. When the leaves turn yellow shake out the bulbs and store away in sand in a warm house or room until March.

FLOWER GARDEN

Gladiolus bulbs

(M. T.).—Gladiolus bulbs are not hardy enough to remain in the ground all the winter with safety. Directly the leaves turn yellow lift the corms, dry them gradually in an open shed, and when thoroughly matured remove the roots and stems, storing the corms in paper bags in a dry place until next March, when they should be again planted.

Foot-rot in Primula stellata

(L. E. B.).—The specimens of Primula stellata are affected with a foot-rot disease caused by a fungus Pythium sp. It occurs to us that there has been some error in cultivation—*e.g.*, over-watering the plants would render them extremely liable to attack by this fungus, as also would growing the plants in too close an atmosphere. You should burn all the affected plants, soil and all. The plants that are not affected should be watered with Cheshunt Compound. This compound can now be purchased from some of the horticultural sundriesmen, mixed ready, so that water only has to be added to prepare the fungicide for use.

Polyanthi and Primroses failing

(Primroses).—Your specimens are affected with a fungoid disease which causes a dry-rot in the centre of the root-stock. The fungus which is causing the trouble is of the Rhizopus type. We advise you to burn all the affected plants and commence again with a clean stock. Judging from your letter it appears likely that the site where you are trying to grow your Polyanthi and Primroses is too wet for the purpose. It would be best to try and drain the site before you replant. If you could give a year's complete rest from any of the Primula family it would give you a better chance of stamping out the disease.

Try growing the common Foxglove as a change. We believe it grows fairly well in your district under wild garden conditions. If you are troubled with this disease in the more cultivated parts of your garden you should burn all the visibly affected plants and water the rest with Cheshunt Compound. Spring would be the best time to use the fungicide.

MISCELLANEOUS

Seed sowing

(Vic).—Most of the seeds you name should have been sown early last summer to flower next season. The Pansies may flower if they live through the winter, but Canterbury Bells, Sweet Williams, Columbines, Wallflowers—in fact, all biennials—should be sown not later than May if they are to bloom next season. It is useless giving liquid-manure at this season to little seedlings just coming through the ground. You might prick off some of the strongest plants into boxes in the cool greenhouse. This would hasten growth a little.

Convolvulus, destroying

(A.).—The only way of doing this will be to keep the tops cut off with the hoe immediately after they make their appearance—indeed, if the ground is kept constantly hoed the shoots will have no chance of appearing above ground and the roots will then in time die from the want of that support they can only obtain from leaves and shoots.

Weedy lawns

(Tennis Lawn).—At this time of the year worm-casts are very prevalent on lawns, especially during wet weather. Constant brushing and rolling are the best remedy. If they are unusually thick in your case a soaking with lime-water would get rid of some of the worms. Much of the weed you are troubled with might be got rid of by thoroughly raking the surface in February, choosing a dry day, and sowing the first week in April grass-seed, at the rate of 25 lbs. to the acre, scattering over the lawn some finely-sifted soil, afterwards rolling the whole quite firmly.

Size of Chrysanthemum exhibition boards

(Constant Reader).—The rule regarding the size of boards for incurved blooms should be for 12 blooms 24 inches long and 18 inches wide, with holes 6 inches apart from centre to centre, to be 6 inches high at back and 3 inches in front. Two twelve boards may be used for 24 blooms, the six stands to be 18 inches deep and 12 inches wide. Stands for 12 Japanese blooms to be 28 inches long and 21 inches wide, the holes 7 inches apart from centre to centre. Stands for six blooms should be 14 inches wide and 21 inches deep, the height at back to be 7 inches and 4 inches in front. All stands should be painted green.

Making a bowling green

(J. Williams).—In order to get the ground level you will have to trench it all over. If the turf is good enough for relaying you could lift this before trenching, and after removing all weeds use it for forming the lawn. If, however, it is very rough and weedy the best thing will be to trench it in. Do this now and let the ground lie till the spring, so that it may settle down. Then in April break it down, tread it well, and level it. Then re-turf it or sow some good grass seed on it. Do not use that from a hay loft, as this is full of weed seeds and will give a lot of trouble. If the ground is very wet you will have to drain it. An article on this subject will appear in these pages shortly.

SHORT REPLIES

Mr. Poland, Betchworth.—The Sea Buckthorn (Hippophæ rhamnoides), apparently the male form. Flowers are borne on both forms, but the bright orange-coloured fruits are produced on the female plant only. This may be obtained from any tree and shrub nursery. It is necessary to have both sexes to produce a full yield of berries.

A. Donovan.—See reply to queries *re* Narcissus-fly, in our issue of October 9th, p. 618.

Hood-a-wink.—The only thing you can do is to thoroughly trench the ground, and, as this goes on, you must remove every bit of the Bishop weed which you can find, otherwise you will have trouble as time goes on.

W. Streeter.—Your safest plan will be to burn the infected bushes and procure a clean stock from a distance, planting in the garden in which no Black Currants have been grown.

NAMES OF PLANTS

Harold Ostlers.—We cannot undertake to name florist flowers.

H. N. W.—1. Primula helodoxa; 2, P. Maximowiczii (K.W. 5817); 3, P. sphærocephala (Chinese form of P. capitata).

W. Streeter.—1, Caucalis latifolia, a coarse Umbelliferous herb; 2, Linaria repens (the creeping Toadflax), quite pretty, but a great spreader.

Busuthouse, Cuckfield, Sussex. — Rose Eblouissant.

L. S., Dublin.—1, A. cordifolius; 2, an old variety, Mrs. Parker; 3, A. vimineus; 4, A. Lil Fardell.

J. F. T.—1, Euonymus japonicus; 2, Garrya Thuretii; 3, Ceanothus Gloire de Versailles; 4, Cratægus Pyracantha; 5, Akebia quinata.

V. Sheppeard, Banstead.—Tradescantia virginica (the common Spiderwort or Flower of a Day). It is common in gardens.

A. P. T.—1, Caryopteris Mastacanthus; 2, Senecio Greyi; 3, Sollya heterophylla; 4, Coriaria torminalis.

NAMES OF FRUITS

Beecamp.—Apple Alfriston.

H. B. O.—Apples: 1, Lord Grosvenor; 2, Sturmer; 3, represents two different Apples, neither of which is recognised.

A cup for the encouragement of fruit production

The Council of the Royal Horticultural Society, Vincent Square, Westminster, S.W. 1, are desirous of drawing attention to the Jones-Bateman Cup. This cup was presented to the R.H.S. in 1920 by Miss L. Jones-Bateman, of Cae Glas, Abergele, and is a valuable silver-gilt replica of the Warwick Vase. It has been decided to award the cup for the encouragement of fruit production. It is offered triennially for researches in the growing of hardy fruits, Figs, Grapes, and Peaches in the open or under glass.

Candidates should submit accounts of their work by October 31st of the appointed years. The work dealt with must have been carried out by the candidate in the United Kingdom, mainly during the preceding five years. The cup will be held for three years by the successful candidate, who must give a bond for its safe return.

The holder will be eligible to compete on the next or any succeeding occasion. When the cup is relinquished the holder will receive a commemorative gold medal.

The assessors shall be two appointed by the Royal Horticultural Society and one by the Federation of British Growers, who shall report to the R.H.S. Council upon the originality and comparative potential value fruit-growing industry of the work candidates.

The Council will award or withhc cup at its discretion.

It will be seen that candidates' acc work must be submitted by October 3 year, and the Council sincerely hop there will be a response from those ested in fruit culture.

Chelsea Show, 1928

Competitive classes for stove a greenhouse plants

In commemoration of the prospect auguration of the new hall in 1928 the cil of the Royal Horticultural Socie decided to offer a 100-guinea challen for specialised groups, the subject of tion and allotted space of which will be from year to year.

The competition will be open to a and trade exhibitors.

The subject chosen for 1928 is "Sto Greenhouse Plants," with a group si 300 square feet, and it is hoped that by this early notice amateur and trade tors will make a special effort to stag prehensive groups and the cultivat these ornamental and interesting plan be generally encouraged.

The prizes offered will be:—First 100-guinea challenge cup and £30; prize, large silver cup and £20; an prize, small silver cup and £10.

CATALOGUES RECEIVE

The Fairseat Nurseries, Wrotham, Annual plant sale, concluding Christm

W. Wills, Junr., Hardy Plant Nu Merstham, Surrey.—Hardy alpine a baceous plants.

E. P. Dixon and Sons, Ltd., Nursery list, 1926-1927.

Amos Perry, Enfield. — Empire bulbs.

F. Cant and Co., Braiswick Rose G Colchester.—The home of the Rose.

F. Gifford, Hornchurch, Essex.— offer of new Delphiniums.

Elisha J. Hicks, Hurst.—Roses.

H. Pains, Wisbech.—British and grown bulbs.

En-tout-cas, Ltd., Syston, Leic En-tout-cas specialities.

W. Power and Co., Waterford.— bulbs.

Tomatoes: Plants in beds vs plants in pots

I wonder what the general experi of growing Tomatoes planted out, o of boxes or pots, and which is the n munerative from a cropping point o I have tried both, and incline to th that in the long run planting out is the It is, of course, the method mostly p by trade growers, who have to consi question of expense from every poin of the arguments for culture in pots o is that one is more likely to get fru the first set than when plants are put ground within the house. Against tha up against this fact, that though miss the first bunch of fruit near the plants grow taller and are much more so, to use a well-known phrase, "Wh lost on the swings is gained on the abouts." In other words, though miss the first bunch of fruits on bed plants, they crop more heavily in the gate. The labour of watering, too, siderably less when Tomatoes are out.

LEAH

GARDENING ILLUSTRATED

485—Vol. XLVIII. OCTOBER 23, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

iteflowering 636
nongolica ... 639
Tupehensis 636
hinums, ... 648
, the 637
se of 648
t 647
rowing, in fibre 643
x polyrrhiza 637
ONS, PER-
.. AUTUMN
IENT OF ... 635
Chrysanthemum Blanche Poitevine ... 645
Chrysanthemum, the early 645
Clematis tangutica ... 636
Crocus and Gladioli ... 648
Cyclamens 643
Figs, outdoor 642
Fuchsias, hardy ... 638
Garden, kitchen, manuring 648
Geranium argenteum album 636
Greens, winter 645
Glass substitute and the ultra violet rays, a 636
Grapes, tying up shoulders of 642
GROUNDSEL (SENECIO PULCHER), LARGE CRIMSON ... 638
Helianthemum umbellatum 636
Honey Plant or Wax Flower (Hoya carnosa), the 643
Imperial Fruit Show 636
Iris lacustris 638
Ixoras 643
Kingston Chrysanthemum Show 636
Lawn making, autumn 638
Lilies from seed 637
Medlar jelly 648
Modiola geranioides 636
Mushrooms 645
NARCISSUS FLIES, THE 637
PAMPAS GRASSES 639
Peach trees, spraying 648
Pea Improved Alderman 645
Perennials, some choice hardy 638
Planting season, the 647
Plants for garden ... 647
Potato Ben Cruachan 637
Potatoes, the flavour of 637
ROYAL HORTICULTURAL SOCIETY'S FIRST FRUIT SHOW, THE 640
Roses, climbing and dwarf 648
Saponaria officinalis 637
SOUTH AMERICAN AND OTHER PLANTS FIND THEIR WAY TO AN OLD WORLD GARDEN 646
Strawberries going to leaf 648
Turnips 643
Yuccas, treatment of 647

Autumn Treatment of Perpetual Carnations

By Laurence J. Cook

ie non-gardener autumn is a some-
sad season, with its shortening
and promise of the winter. To the
r of the garden, however, it signifies
ınd the gathering of the results of
r.

Carnation grower it is a period of
orward no less than the spring it-
it is in the autumn that he gathers
flowers of his novelties, and what
ns only the grower of them may

st step at this date is to make sure
ything which is required for winter
is under glass, as the heavy dews
mnal rains which make the plants
ıb make the plants too soft for
in dull winter
ıd just as in
aim to get the
't to make them
in autumn we
n to ripen them
vhat, to induce
flower and
he foliage to
disease. The
pot on the leaf
s it is generally
lt of leaving
tside too long.
course, a good
ıoroughly wash
ıarts of a house
roducing clean
afters, benches,
's well cleansed
trouble in the

date thrips are
and normal
The attacks of
easily recog-
vhite stripes on
s of scarlet,
n, and cerise
or through
d pale pinks
formed. When
case it is neces-
fumigate the
or three times
s of 10 days, or,
d, a fine mist
ny well-known
or nicotine may
on all buds
of shoots, re-
or three times
intervals, will

certainly have the effect of destroying them.

If not recently fed a top-dressing of Carnation fertiliser will help keep the roots active for some time, but a softening manure should not be used just now.

Carnations grow so rapidly in autumn that shoots which have not recently been secured quickly get out of hand and break off. It is always a pity to see this, for each shoot means a flower. Whether one elects to tie one's plant or secure the shoots by a wire support it should be done immediately.

One is frequently asked when one should commence to give fire-heat to Carnations, yet the Carnation requires no more artificial heat than the Chrysanthemum, and just as when cold, damp nights cause Chrysanthemum blooms to "damp off," and so require a little warmth to dry up this moisture, so Carnations benefit to the same degree when these cold, damp nights arrive. Much, however, can be done in the way of ventilation to obviate fire-heat, not, of course, by closing ventilators, but by so ventilating the house that the dampness is dried up.

Autumn the reverse of spring

As has been shown, the autumnal treatment of Carnations is the opposite in many respects to that of the spring. Just as in the early year we aim to keep our plants soft, so at this season the tendency is to ripen the growths. For the same reason, just as in spring we give them a little shade, so now we take it off. Should there be any shading left on the houses at this date it should be immediately and completely removed.

Washing down the benches between the plants, and the syringing of them so beneficial in spring and hot weather, must be discontinued.

Disbudding, the regular routine work of the Carnation grower, now assumes a new phase, for instead of removing the buds so quickly formed in summer on old plants, the young ones come in for the same attention, although with the shortening cooler days they do not develop so quickly.

There is a new charm in the autumn Carnations produced on young plants. In hot summer days old plants may appear tired, but the vigour and bloom of youth are found on the young plants which give fresh enthusiasm for our favourite flowers.

A curious phenomenon is often observed in the first blooms of autumn through the varied ways the first flowers open. That old variety, Bishton Wonder—a mauve—used to come pink. Several of

The Perpetual-flowering Malmaison Jessie Allwood, colour deep yellow
This belongs to a new class of Carnation with a bright future

the whites open with a little colour in the petals, while salmons appear with deeper flecks of colour in the petals. These vagaries disappear later in autumn, and flowers in due course return to their normal shades.

NOTES OF THE WEEK

Imperial Fruit Show

THE Imperial Fruit Show to be held at the Holland Park Skating Rink, London, from October 29th to November 6th will be formally opened by the Rt. Hon. Walter Guinness, M.P., Minister of Agriculture, at noon on the former date. In view of the fact, which is becoming every year better recognised, that fruit should form a more considerable part of human dietary, and also of the importance of the fruit industry both at home and in the Dominions and Colonies, the Imperial Fruit Show has become an annual event of great and increasing interest, not only to those engaged in fruit-growing, but to the general public. The show is organised by a Committee representative of all sections of the home and Colonial fruit interests, and its object is to stimulate the demand in Great Britain for Empire-grown fruits and encourage their better packing and grading for the market.

Kingston Chrysanthemum Show

The annual exhibition of the Kingston, Surbiton, The Dittons, and District Chrysanthemum Society takes place on November 3rd at the Assembly Rooms, Surbiton. There are four open classes and the others are open to all growers within 10 miles of Kingston. Cups, medals, and valuable prizes are offered. Schedules may be had free from the Hon. Secretary, W. H. Divers, V.M.H., Westdean, Hook, Surbiton.

Helianthemum umbellatum

In general appearance this resembles a small-leaved Rosemary. It is one of the easiest plants to grow on a sun-baked spot in the rock garden or in wide fissures between two rocks closely packed with gritty loam. It grows about 1 foot high, is evergreen, and bears an endless succession of flowers in summer. The flowers are white with a patch of yellow at the base of each petal, which adds considerably to their charm. In spite of the fleeting character of the flowers they are effective for a short time and are succeeded by a similar crop next day. The plant thrives in the sunniest position in a soil of moderate quality, and is easily increased by cuttings. It is advisable to grow the plants on in pots for the first year in arid quarters in a cold frame, ultimately plunging in ashes in the open air. Transfer to permanent quarters in autumn or spring.

H. STEVENS.

Late flowering Abelias

During September and October these shrubs are very attractive by reason of their bountiful display of flowers and in the former case polished leaves. A. chinensis grows into a shapely and quite elegant bush, and succeeds in any open soil, withstanding, even enjoying, our hottest days. Its pretty tubular flowers are white, tinted with rose and pleasantly fragrant. Bushes from 4 feet to 6 feet high are attractive over a long period. I have seen this shrub furnishing walls up to 5 feet in height. It is well worthy of such a position, as it does not object to judicious pruning. Cuttings inserted in sandy soil at the present time, and kept in air-tight frames, strike freely. A. Schumani, of more recent introduction, has proved quite hardy in the open here (Sussex). Its flowers are much deeper in colour, being of a pale rose shade, and the young growths are tinted bronze. The flowers are also larger and broader than those of A. chinensis, and have a yellow, woolly throat, which enhances their charm. They are also borne in sprays 1 foot or more in length. This pretty late-flowering shrub is occasionally listed as A. longituba. A group of three or five plants would be very effective at this season if planted well up on the large rock garden where Cistus, Broom, and Spanish Gorse are often planted too freely.

E. M.

Clematis tangutica

One of our prettiest and most effective climbers at the present time is this Clematis. The distinct drooping, yellow flowers are borne in the greatest profusion, and intermixed with them are numbers of the large silvery seed-heads which appear among the yellow blooms. This interesting climb easily raised from seeds, so that it within reach of even the smallest grow flowers freely in the early part of summe lowing which it appears to take a rest to burst upon us with its profusi fascinating clear yellow flowers again summer and early autumn. When from seeds the seedlings in the first two or so of their growth have a habit of c their leaves and remaining temporaril mant, and many have come to the conc that their plants were dead and have them up. Such plants invariably burs free growth later. This happens only the first year or two of the plant's life. I admirable subject for open fences or fo nishing worn-out trees and shrubs, and of Clematises should not hesitate to freely.

E. MARKH

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Geranium argenteum album

I WAS interested to read in Mr. S. Arnott's note on Geranium argenteum that there is a white variety of this beautiful species. I have always felt that there ought to be one, and have always kept a lookout for it, but have never seen the plant offered or mentioned anywhere, either in books or catalogues. I should be most grateful if Mr. Arnott can tell me where this plant could be obtained, or at any rate where it can be seen.

For some time I have grown the white form of Geranium cinereum, which species is for all practical purposes a green-leaved form of G. argenteum, though it is, of course, a distinct species.

I grow also the attractive purple-crimson variety of G. argenteum, which Mr. Arnott mentions. This is a very handsome plant.

A most curious thing has occurred here in connection with this Geranium argenteum purpureum. We planted out a specimen of it on the rock garden, and within a year it had altered, changed, reverted, transmuted, or whatever is the correct term, into Geranium cinereum purpureum. That is to say, the leaves changed from their beautiful silvery state to the velvety green leaves of G. cinereum; so now we have not only the dark form of G. argenteum, but the dark form of what certainly appears to be G. cinereum.

Geranium argenteum seems to vary very little in nature. I collected it many years ago on the ridge of Monte Baldo. I was with Farrer at the time, and it was on this occasion that we simultaneously discovered that interesting little Saxifraga—Saxifraga Aizoon Baldensis. We ranged over many acres of turf which was thickly studded with Geranium argenteum in full bloom, and we both spent much time in hunting for distinct varieties, either white or notably dark forms, but although we hunted over many hundreds of thousands of plants, we found nothing that varied from types sufficiently to be worthy of special note. It would be interesting to know where and when Geranium argenteum purpureum first made its appearance. My own first plant came from a friend in Ireland. Can Mr. Arnott tell us anything as to the origin of the white variety of G. argenteum he names; also where he has seen it? An amusing incident occurred when Farrer and I were collecting our G. argenteum on Monte Baldo. The turf in which it was growing, we found, in one neighbourhood, to be pitted all over with little pock-marks where plants of the Geranium had evidently been dug up by some collector not long before. I at once remarked that it looked as though Mr. M. M. (a professional Italian collecto been at work here, and sure enough, we got to the refuge hut at the top of there was Mr. M. M.'s name in the vi book, dated three days prior to our visit only this, but a week or two after my home I received a catalogue from Mr. offering me Geranium argenteum at tempting price, but although I had se very holes from which they were dug not require any Geranium argenteu then.

CLARENCE ELLI

Stevenage.

A glass substitute and the ultra rays

I shall be glad to hear if any o readers have had experience of "Windo glass substitute. If what the makers is true—that it admits ultra-violet which ordinary glass does not, and obviates the scorching and drawing of —this material ought to be more widel and yet I have not been able to d among my horticultural acquaintanc authentic opinion of its merits. App this material, which is transparent an forced by fine wire-netting, is bein ployed for numerous purposes in the (hand-lights, cloches, screens, etc poultry-houses, and other portable bui and its adaptability would seem to many advantages over window glass. readers who have used "Windolite cessfully would give details in your c I am sure these would prove of interest to the gardening community.

HEAD GARDE

Anemone hupehensis

I have grown Anemone hupehensis first time this year and feel a little pointed with it. Only about 15 inc 18 inches tall, it is an almost exact mi of the pink A. japonica. It flowers wi great freedom and comes a little be bigger relatives. The outer edge of th is a little more regular, giving the l almost a cup-like form. I am told tha bed of it at Kew looks very well.

Sittingbourne.

Modiola geranioides

This is one of the plants that have in the warm and very dry autumn. grown it for many years and it is no the good old gardeners describe as piece." I am often told that it is not but planted in a rock garden with southern exposure it has never been s injured. Last winter we had on sever

o degs. of frost, with a southerly wind searched out all my most sheltered ; but though I lost a good many es, Modiola came through it well. ower, which is as nearly as I can e it rosy-magenta, is very beautiful ely produced. CHARLES PRENTIS.
ighbourne.

The Narcissus flies

VERY good description of these two sts was given in issue October 9th age 618), but I think I can add one or ints about the identification and tion of the larger fly (Merodon eques- hich may be of service to some Daffo- owers who are troubled by this fly. identification. Personally, I use my re than my eyes in searching for the er. His wings give a higher note ose of any bee; it is more of a " than a " buzz." One of the Hover- akes a similar note, but it is not as that of the Merodon. Another ing to help one in spotting the enemy eculiar habit of flight. It hovers for seconds and then darts off at a tan- nd it takes a very quick eye to fol- flight. Hover and dart, hover and at is the method of the beast. Now as ing this lively customer. It begins sit its eggs just as the Daffodil begins to fall over—the first sign of . This will, of course, vary with the This year I find by my diary that the e captured on June 5th, and this was ripening season. Method of cap- good butterfly-net is the weapon. is walk very quietly by or among the with both eye and ear on the qui vive. spotted a fly wait until it settles, ve quietly but quickly—they never ny seconds—and when within reach net smartly over him, pinning him to und. Then lift the bag of the net hand and he will buzz upwards and ly be pinched with finger and thumb s no sting—and there is one enemy er! It is no use to take out the net ll or windy day. The hotter and the day the greater chance of sport. other hand, I have heard of good having been made on dull days by looking over the bulb beds and find- flies sitting in a lethargic state on s of the Daffodils. Hot-water treat- tainly makes an end of the grubs of , but I would never advise an to take such extreme measures for ly. If eelworm were present as well e the bulbs a hot-water bath by all nd two birds will be killed by one The smaller Narcissus fly (Eumerus) s to not knowing by sight, though s or larvæ I know only too well, and r it the more dangerous of the two Having had to treat an enormous of bulbs for eelworm in past years I nd these two flies have become an negligible quantity, the hot-water t having most effectually cooked well as the greater pest (Tylenchus ix). J. DUNCAN PEARSON.
am, Notts.

Lilies from seed

s of a note on Lilium regale in last GARDENING ILLUSTRATED may be in- to hear of a stem which bore 20 his year in my Hampshire garden. t was from seed of 1921 or 1922. erb Lily, as is well known, flowers or even two, years from seed. n in a greenhouse as soon as germinates at once. The seedlings icked out into deep boxes and moved frame early the following spring, ext year some of these may flower.

Lilium philippinense formosanum is even more rapid, but unfortunately of doubtful hardiness. Plants raised from seed sown in November, 1925, flowered in my greenhouse in August, 1926. No artificial heat after early April. ARTHUR J. HORT.
Hurstbourne Tarrant, Andover.

Saponaria officinalis

I read with interest an appreciative note on the beauty of Saponaria officinalis in a recent issue of GARDENING ILLUSTRATED. I wonder if the writer knows the semi-double white form? I had a plant and a spike of bloom given to me recently, and was very much struck with its great charm. Like the type, I fear it is a sad runner, but too good to be kept out of fairly big herbaceous borders. C. P.

Calceolaria polyrrhiza

"Who shall decide when doctors disagree?" Mr. Arnott finds this neat little Calceolaria worthy of appreciation. Mr. Blair, whose opinion also carries weight, finds it but a troublesome weed. Without attempting to decide the matter it may be permissible to say that here, in the rock garden, I find it rather attractive and not at all over exuberant in its season. It is planted in a pocket rather more than 3 feet in diameter, and which it has entirely furnished. The soil is very poor, the pocket is well "stoned in," and is close upon a hard gravel walk at its edge. Probably the poorness of the soil and the fact that it cannot escape from its bounds are responsible for the favour with which I confess I view C. polyrrhiza; and I submit that if Mr. Blair cribs, cabins, and confines it in his rock garden he will modify his opinion of this interesting plant.
Mabie. W. McG.

Mr. J. Duncan Pearson sterilising Daffodil bulbs
Eelworm and the grubs of Narcissus flies are controlled by the hot-water treatment of the bulbs

The Apple crop

My experience, I think, differs from that of the majority in the present year, when so many record an entire or a partial failure. Here the crop may be fairly described as well up to the average. The following varieties, in particular, have done well: James Grieve, Peasgood's Nonsuch, Cellini, Worcester Pearmain, Allington Pippin, Bismarck, Golden Spire, Grenadier, Annie Elizabeth, Kerry Pippin, Beauty of Bath, Schoolmaster, Irish Peach, Lady Sudeley, Duchess of Oldenburg, Lord Suffield, Mere de Menage, Ecklinville Seedling, and some very old trees the names of which are unknown to me. Other varieties bore fair crops. There was not an entirely barren tree. Unfortunately the fruits of Worcester Pearmain are rather spotted, although individually large and well coloured. W. McG.
Mabie.

Potato Ben Cruachan

I can hardly think that the Potato which Mr. A. J. Davis so ruthlessly condemns is Ben Cruachan. I have grown the variety since it was put into commerce, and I consider it to be one of the best Potatoes, in all respects, which have been sent out by the distinguished raisers. As a disease-resisting variety I can recommend it. It is a heavy cropper, the tubers are shapely, it keeps well and cooks well. Such is my experience of Ben Cruachan. It is a fact, however, that certain Potatoes do not succeed equally well in all soils, and if the variety fails with Mr. Davis it may be his soil and not the variety which is at fault. I agree with him in his appreciation of Duke of York.
W. McG.

—— I planted 14 lbs. of this variety, together with King Edward, Great Scot, and The Bishop, in my garden without any sign of disease, while the latter three varieties were more than half diseased. It is the best crop I have had for six years of any variety. A nice floury nature, and not at all soapy when cooked. I also planted 28 lbs. for my employer, together with seven other varieties, with by far the best results. The early varieties did not take the disease with us this season. It would be interesting to know where your correspondent obtained his seed tubers—whether they were of the true variety—seeing he had such bad results. W. A.
Near Cardiff.

The flavour of Potatoes

Did anyone ever eat a really well-flavoured Potato from a cold, stiff soil? I never did. The soil explains the good flavour of Irish and Belgian Potatoes and the fine ones that come from the Lothians in Scotland, and that for long years have supplied London with its best Potatoes. It is vain and wasteful work trying to get eatable Potatoes from cold, wet, or over rich soil. I mean to give up growing the Potato in my cold soil, beyond a small plot of the earlies in the warmest ground I have. Another mistake is growing it in shaded ground. Better buy the main supplies grown in the open field in soil that is free and well drained. T.

Some choice hardy perennials

AUTUMN is a suitable period for rearranging herbaceous borders which were not so pleasing as one would desire during the past summer. I am mostly concerned just now with herbaceous borders in particular, having made notes during the summer of hardy plants of outstanding character, plants which are as useful and charming for cutting as they are ornamental. It is a gratifying feature of modern times that most garden lovers now realise the true value of hardy plants. Below are a few good subjects for the herbaceous border. As I have stated, they provide excellent blooms for cutting, but if only for their magnificent display in the border they are worth growing.

INULAS OR FLEABANES.—In these we have a family of plants noted for their large flowers. I. grandiflora grows quite 4 feet, and has splendid foliage together with large orange-edged flowers. When planting this particular sort allow plenty of space, say 4 feet square. I. glandulosa is a favourite with many, but differs from the above in that it grows 2 feet high and has a compact, bush-like growth covered with bright yellow blooms. Another variety of Inula is Hookeri, smaller than I. glandulosa, and with paler flowers.

HELENIUMS.—Amongst plants that are becoming increasingly popular may be numbered the various sorts of Heleniums. They form compact clumps and bear a multitude of elegant flowers in various shades. H. Riverton Gem is a good kind to grow and has gold-coloured flowers overlaid with terra-cotta, which later turns to bright red. Golden Beauty, Hoopesii, and Bigelowi are also good subjects for the border.

RUDBECKIAS OR CONEFLOWERS. — More attention might with advantage be given to these attractive perennials. Suitable sorts for the herbaceous border are :—R. speciosa (syn. Newmani), with bright orange flowers and maroon centre; height, 2 feet. R. maxima grows 6 feet high and is therefore a good plant for back of border. The colour is brilliant yellow with maroon centre or cone. R. purpurea has rosy-purple flowers.

GALEGAS.—The pretty pea-shaped blooms borne by the Galega appeal to many. G. Hartlandi is a newer introduction and is in demand on account of its charming lilac shade of colour. G. officinalis is an old favourite with its blue flowers, while G. alba is also well known.

HEUCHERA.—Here we have a plant bearing crowds of flowers on exquisite sprays which are invaluable for bouquets as well as being attractive in the border. H. sanguinea has bright scarlet blooms.

ANCHUSAS.—These beautiful blue-flowered plants should be grown in every border where their intense blue shows off to advantage. Good sorts are italica (Cambridge blue), and Dropmore and Opal (deep blue). L. D.

Hardy Fuchsias

I think it is a pity the above are not more frequently seen in hardy plant borders, especially where there is a background of some evergreen to show them off to advantage and also to afford a little shelter, not that shelter is really necessary in the milder parts of England, for in West Surrey I only had them partially destroyed twice in 25 years. I should strongly advise their inclusion in any planting operations that may be contemplated, for there is really nothing quite like them in the outdoor borders, and they supply occasional scarlet blocks all through the autumn not to be had in many hardy plants. It is not necessary to lift the stools every year, but this should be done as soon as they show signs of pushing out of the ground. A portion of the healthiest and most vigorous of each should be replanted, adding a bit of good soil to give them a start. After cutting down each autumn, if lifting and replanting are not required, put on a heavy mulch of anything that will serve to keep out frost, half-rotten manure or leaf-soil answering well. The best sorts are coccinea, corallina, macrostemma, globosa, gracilis, and Riccartoni. They make a splendid effect when used on sloping ground to face and flank clumps of Pampas Grass.

T.

Autumn lawn making

There is no better time for making a lawn, especially in a season when there is abundant moisture. The average man with a small place feels that spring is the proper time to do lawn work, but he is wrong. When grass seed is sown in the spring, and especially when it is sown late, the grass does not get

The large crimson-flowered Groundsel (Senecio pulcher)

Autumn flowers on plants grown as biennials

well started until summer comes, and then it has to contend with several weeks of hot, dry weather, during which it often suffers badly.

When the lawn is made in September the grass has an opportunity to become well established before winter sets in, and then has the entire spring in which to become firmly anchored. Of course, it is just as important to prepare the ground in the fall as in the spring, and that means providing for drainage. Many a lawn suffers not from lack of water but because the surplus water does not drain away. If the water table is close to the surface, it is very difficult to get grass to grow well.

Home owners often shy at the idea of installing tile drains, and yet this practice is not expensive, and often works wonders in making land available for lawns and for gardens. A 4-inch tile placed 2½ feet deep, with a drop of ⅛ inch to a foot, is surprisingly successful in carrying off excess water, a g of 1/16 inch to a foot is safe if the tile is fully laid.

Perhaps there is no lower ground or l to receive the water. In that event a well should be constructed. This n digging out the ground for several feet l the lower point of the drain and filling with stones. Then the water works through the stones and gradually seeps

It is important to carefully grade the where a lawn is to be made, giving it a slight pitch so that surface water will ru It is important to have soil that is loos free from stones. There ought to be at 3 inches of good loam.

It is true that one can gradually impr lawn by regular and generous top-dressi screened compost or rotted manure, but better to do the work right at the start old-fashioned, well-rotted stable manu available use it generously. It is the fertiliser. If it is not to be had at a re able price use pulverised sheep manure o verised poultry manure. The last name the way, is proving very satisfactory lawn dressing. Some gardeners prefer sheep manure.

Large crimson Groundsel (Senecio pulcher)

LIKE some other growers, I some ago began to think this plant rather cult to manage rightly in order to sure of its late autumnal blossoms. N find it best to treat it as a biennial as foll In November or December dig up such plants as are not showing flowers an will find to each several long white ro thick as a crow-quill, or thicker if the be strong. These roots cut into lengths, and inserted as cuttings in a p coarse sand, root and break into leafy gr freely if they be watered occasionally placed on a shelf near the light in a te ture of 50 degs. during the winter. In each will have become a plant with se leaves varying from 1 inch to 2 inch length. Pot them off separately into pots, using leaf-mould, loam, and sa equal proportions, and place the plants cold frame, which should be kept rather until new roots are made. They may have air during fine weather, and m planted out in a well dug sunny bor May. Thus treated, they make stron rapid growth. Some of the stronges throw up a spike the first year, but all strongly the second season. Any plants fail to flower the second season, or show a tendency to break up into se weak crowns instead of one strong should be broken up for stock, usin thick quill roots for cuttings as before tioned.

Iris lacustris

Not nearly so well known as Iris cri the closely allied I. lacustris is well dese of the notice of those who cultivate the ture Irises. It is the smallest of the in cultivation and is really a miniature better known I. cristata, but with d flowers. It blooms in spring and, happy, will also bloom in September October. It is said to be only found shores of Lake Huron. It is a very species, only 2 inches or 3 inches high a good group is very charming wh flower. It loves a rather damp positio low part of the garden, in vegetable soil small stones incorporated for the sake o serving the moisture which it loves. I. tris is not difficult to grow in a half-s position when these requisites are attend It is increased by division or seeds.

S. ARNOT.

Pampas Grasses

MONGST the showiest plants at the present time few can compare in effectiveness to well-grown groups of Pampas Grass Cortaderia argentea, or, as it is sometimes called, Gynerium argenteum. all gardens where space is limited the ary type is too large to be suitably , but the dwarf variety, Cortaderia a, is a plant for the smallest garden. lower-spikes of this variety vary from t to 5 feet in height and are very produced. Two small plants which I last April are now showing 21 flower-

those who have room for the giant type is nothing finer than the variety known nningdale Silver. This is far away or in beauty to the kind commonly , and I strongly advise all gardeners to this in preference to the ordinary kind.

pas Grasses are not particular as to hough they seem to thrive best in the e of lime, and they certainly pay for us treatment. Like all grasses they be planted in spring and not disturbed mn or during the winter months.

Pampas Grass, as the name implies, from South America. It was first dis- d growing near Montevideo in 1819 by t collector of the name of Frederick , a German, but it was not known in Britain until 1843, when seed was sent the Argentine to David Moore, the r of Glasnevin, who flowered it there ears later. L. B. W.

s.

Where bold autumn effects are de- the Pampas Grasses in all their varied and colours are indispensable. These w at the height of their beauty, their lumes rising high and clear above the ufts of graceful arching foliage. They n to great advantage when massed at t of sheltering summer leafing trees, in their dress of rich nut-brown , constitute an admirable setting to oble plants, and at the same time pro- ir stately plume-laden shafts from the storms, which destroy—even before e fully opened from their sheaths—a ercentage when planted in bleak, ex- positions. Only just recently these Grasses outshone everything, their of beauty usually lasting from the of October until the latter part of No- , when they collapse under the weight r collected by their plumes during the and continuous rains which usually about that time.

Pampas Grass loves a good loamy soil, vided this is given when plantations formed very little after-attention will ired—at least for a number of years, hich I have found it more satisfactory divide, and replant in fresh ground apply manure, etc., to the roots; for period of flowering—and well-grown Grasses flower profusely—it will found that the centre of the tufts is g, rendering division necessary. This, quite easily performed by driving two forks down through the heart of the nd levering them outwards, repeating il the desired size for future planting ned. Such plants will flower the fol- summer, and will attain increased if mulched with Bracken or similar l, which not only assists them in be- re-established, but protects them summer from drought and from frost r, as these noble subjeets are none too many parts of our country.

are several species and varieties in on, all of which are graceful and dis- th as regards size, colour, and form, and when a few of each kind are grouped together, the whole forming one plantation, their effect, when in bloom, is decidedly noteworthy. Their great beauty is even more fully revealed when groups of other autumn flowers are permitted to encroach upon them, and in certain instances between them. For this purpose few subjects are better adapted than the Torch Lilies (Kniphofias) and the purple, blue, and mauve shades of Michaelmas Daisies, the colouring and elegant flower sprays of which form an admirable setting to the stately rose and silvery plumes of the Grasses. Here, in Sussex, we grow these noble plants in large, spreading groups, above which rise vine-clad Apple trees at distances of 30 feet to 40 feet apart. It is surprising what beautiful effects we get each year by employing them in this way, the plumes appearing just as the Vine leaves and Apples are ripening.

"One of the showiest plants at the present time"
A bold group of the Pampas Grass (Gynerium argenteum)

VARIETIES.—One of the tallest and most graceful of this genus—and one thought very highly of here—is the pale rose-flowered

GYNERIUM RENDATLERI, which carries its beautiful drooping plumes to a height of 14 feet to 16 feet, the slightest breeze swaying them to and fro, rendering them both charming and picturesque. This lovely kind is too rarely seen.

G. ARGENTEUM is the best known of the Pampas, and reaches about the same height, bearing its silvery plumes on strong shafts. Used in the right way, it is a most valuable plant, but, like many others, it is too often planted as an isolated specimen, when the effect is poor. I have in mind a steep hillside in Sussex, bordered by handsome red-brown Beeches and Oaks, where it might be massed with telling and even striking effect, but, instead of that, there are in some instances isolated plants, and in others two or three dotted at intervals over a couple of acres of Bracken-covered hillside. The effect is spotty, and as bad as it could be. Even in small gardens these plants should be grouped in threes or fives, according to space available. A very fine, bold variety reaching from 9 feet to 10 feet in height is that known as

SUNNINGDALE SILVER, the plumes of which attain an immense size, some measured here being 2 feet in length and 2 feet in width, and of silvery whiteness. This is one of the most attractive of the Pampas Grass family, and one which in time will supplant many of the thin-flowered varieties. It should be planted at least 8 feet apart, by which means the graceful outline of each plant—although forming part of a group—would be fully revealed, and the effect rendered more beautiful. I would mention

The FOX BRUSH PAMPAS (G. argenteum var. pumilum), a very pretty form, the plumes standing more erect and rarely exceeding 6 feet in height. This is a very desirable Pampas for small gardens or for grouping in the foreground of the taller kinds.

There are many others, some of which are good, while some are thin seedling kinds, and in effect and lasting beauty cannot be compared to the foregoing kinds. There are at least two varieties with variegated leaves, the plumes of which are of much beauty. This variegation of the leaves, however, does not, in my opinion, add to their charm. The varieties are album lineatum, with silvery striped leaves, and aureum lineatum, with stripes of a golden colour.

Wherever this can be done with safety to surrounding subjects, the best way to clean out very old specimens is to set fire to them, following which they may be lifted and divided, or left as desired. M. G.

Achillea mongolica

A capital border Achillea is that named A. mongolica, often appearing in gardens and catalogues as A. sibirica. It is much superior to A. ptarmica, being much neater and having better flowers. It grows about 2 feet high and has larger flowers than those of the latter. Associated with dwarf blue Campanulas, it is very pretty and effective in the border. A. mongolica is absolutely hardy and readily increased by seeds or division.

S. ARNOTT.

The Royal Horticultural Society's Fruit Show

The success of the Royal Horticultural Society's Fruit Show was one of the surprises of the year. The Hall was filled with Apples, Pears, and other British grown fruits, and competition was good in practically all classes. The quality throughout was of a very high standard. Grapes were shown far better than in previous years, and the Apples were more highly coloured than usual. It was evident from this exhibition that even in one of the worst Apple years on record we can produce Apples of finer quality than those from any part of the world

FRUITS GROWN UNDER GLASS OR OTHERWISE.

THERE were four splendid entrants in the class for a collection of nine dishes of ripe dessert fruit. First prize was won by the Duke of Newcastle (gardener, Mr. S. Baker), Clumber, Worksop, who had grand, well-coloured bunches of Muscat of Alexandria and Gros Colman Grapes, Hero of Lockinge Melon, Golden Eagle and Sea Eagle Peaches, wonderful Cox's Orange Pippin and Ellison's Orange Apples, and grand examples of Pitmaston Duchess and Doyenne du Comice Pears. This exhibit was a grand example of cultural skill. Second prize was awarded to Capt. Drummond (gardener, Mr. L. A. Smith), Cadland Park, Southampton, also with a splendid collection.

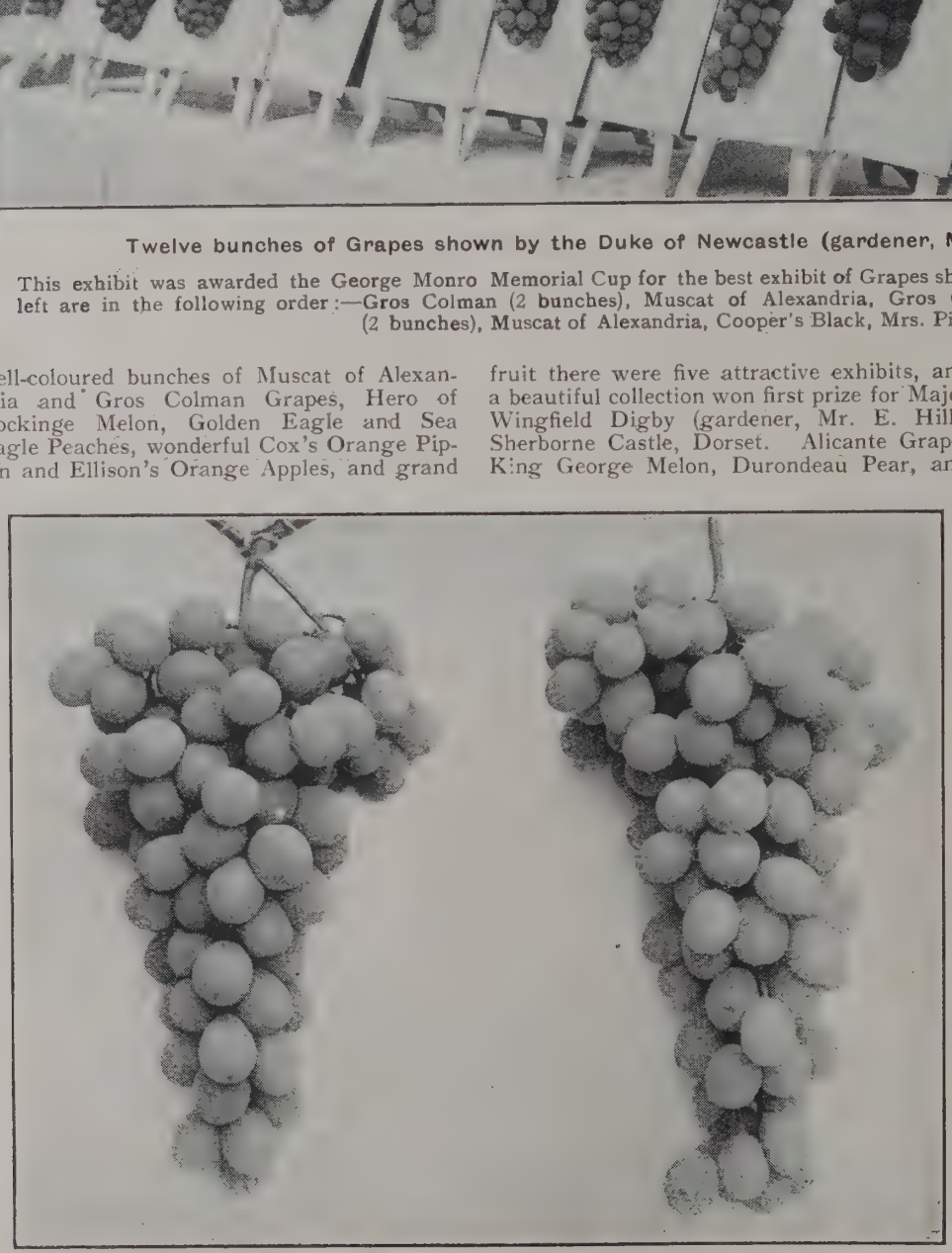
In the class for six dishes of ripe dessert fruit there were five attractive exhibits, and a beautiful collection won first prize for Major Wingfield Digby (gardener, Mr. E. Hill), Sherborne Castle, Dorset. Alicante Grape, King George Melon, Durondeau Pear, and rather large Cox's Orange Pippin A were especially noteworthy. Second was awarded to Mrs. Hornby Lewis dener, Mr. A. E. Friend), Danesfield, low, Bucks.

The four entrants in the class for bunches each of four varieties of Grapes of which must be white, was a grand fea First prize was well won by the Du Newcastle with good, even bunches b fully coloured. The varieties shown Muscat of Alexandria, Cooper's (grand), Mrs. Pince, and Gros Colman

A noteworthy class for two bunches Alicante brought eight entrants. Two even, well-coloured bunches secur first for Mrs. H. Tufton (gardener, Mr. Brown), Castle Hill, Englefield Green. two bunches Muscat of Alexandria there again eight exhibitors. A superbly fin of bunches, having large berries, gr coloured, easily won first prize for Durning Lawrence (gardener, Mr. J. R ford), King's Ride, Ascot.

Twelve bunches of Grapes shown by the Duke of Newcastle (gardener, Mr. S. Barker), Clumber, Worksop

This exhibit was awarded the George Monro Memorial Cup for the best exhibit of Grapes shown by an amateur. The bunches from right left are in the following order:—Gros Colman (2 bunches), Muscat of Alexandria, Gros Colman, Muscat of Alexandria, Cooper's Bla (2 bunches), Muscat of Alexandria, Cooper's Black, Mrs. Pince (3 bunches).



Muscat of Alexandria. A magnificent pair of bunches shown by Lady Durning Lawrence (gardener, Mr. J. Rutherford), King's Ride, Ascot

These bunches, awarded first prize, were beautifully finished, perfect in shape and size, and of good amber colour.

FRUITS GROWN IN THE OPEN

For a collection of hardy fruits grow the open air, and shown in a space n ceeding 12 feet by 3 feet, there were thr hibits. Major Wingfield Digby was p in the premier position with many exa showing the highest culture. The noteworthy Pears were Pitmaston Du Triomphe de Vienne (grand), Duron Charles Ernest Roosevelt, St. Luke, De du Comice, Beurré, and Alexandre L The better Apples were Rev. W. Y Gloria Mundi, Lane's Prince Albert, ley's Seedling, and Peasgood's Nonsu the culinary kinds. Of dessert sorts, of the Pippins, Cox's Orange Pippin Rival were excellent. Plums: Pres Rivers' Golden Gage, Coe's Golden and Primate. Figs Brown Turkey, Pe Sea Eagle, Golden Eagle, Goshawk Lady Palmerston were all noteworthy very close second was found in Capt. I mond; Eclipse, Loddington, Warner's Mere de Menage, Newton Wonder Stirling Castle Apples were grand, a Pears, Pitmaston Duchess, Durondeau,

THE FRUIT SHOW AT VINCENT SQUARE

he first-prize table of Apples and Pears for which the Silver Gilt Hogg l Medal was awarded to Messrs. Laxton Bros.

basket of the deliciously flavoured Plum Coe's Golden Drop. The fruits are ize, golden amber in colour, with small purple red spots on the sunny side. for walls.

3 Mr. J. C. Allgrove's beautifully arranged group of pot fruit trees and baskets of choice Plums, Pears, and Apples.

4. Autumn fruits of the vigorous and productive Raspberry Lloyd George, shown by the raiser, Mr. J. J. Kettle.

5. A cultivated form of the Chinese Sand Pear (Pyrus sinensis). This interesting fruit was shown by Messrs. George Bunyard and Co.

guerite Marillat, President Roosevelt, and St. Luke were of the finest quality. A smaller class of the same character to be exhibited on a space 8 feet by 3 feet found three competitors. A good first prize was found in Sir Chas. Nall Cain, Bart., who had a splendid lot of fruit. Pears Beurré of Bedford, Marguerite Marillat, and Pitmaston Duchess were noteworthy, as were Apples Bramley's Seedling, Peasgood's Nonsuch, Gascoigne's Scarlet, Emperor Alexander, and Brabant Bellefleur. Salway Peach was wonderful for its colour. Plums also were interesting.

OPEN TO NURSERYMEN.
FOR FRUIT GROWN IN THE OPEN AIR.

There were three classes in Division II. The leading class was for a collection exhibited on a table 30 feet by 6 feet. There was only one competitor, the Barnham Nurseries, Ltd., Barnham Junction, Sussex, who put up an attractive group of a representative character. In a similar class shown on a table space 20 feet by 6 feet there was again only one exhibitor. This was Messrs. Laxton Bros., Bedford. This firm arranged a very excellent exhibit that was much admired; it included several excellent novelties.

DIVISION III.
OPEN TO MARKET GROWERS ONLY.

In the class for six British standard boxes of Apples, two dessert varieties, three boxes of each, there was only one entrant. First prize was not awarded. Second prize was awarded to Lt.-Col. H. Lumley Webb (gardener, Mr. J. Holloway), Ham Green, Upchurch, Kent, who had King Pippin and Ben's Red set up in attractive fashion. The fruits were of useful size and nicely coloured. In a somewhat similar class for six standard boxes of Apples, two cooking varieties, three boxes of each variety, there were three exhibitors. First prize was won by the Hollesley Bay Labour Colony, Hollesley, Suffolk, who showed nice even examples of Lane's Prince Albert and Lord Derby. Second prize was secured by Mr. Blofeld, Hoveton Fruit Farm, Wroxham, Norfolk. He showed Bramley's Seedling and Lord Derby attractively. The packing in almost every instance in the foregoing classes left little to be desired. A most attractive class was that for Apples shown in three Peach boxes, three dessert varieties, one box of each. First prize was awarded to the Hollesley Bay Labour Colony for well-packed boxes of beautifully even, nicely finished fruits of Cox's Orange Pippin, Allington Pippin, and Ribston Pippin. A very showy lot was awarded second prize. This came from N. J. Russel, Esq., The Lower Farm, Hatfield Peverel, Chelmsford. Highly-coloured examples of Rival, King of the Pippins, and Cox's Orange Pippin were the varieties staged.

For three boxes of Conference Pears the Hollesley Bay Labour Colony was again first with a good lot, and Lt.-Col. H. Lumley Webb, with a praiseworthy exhibit, was placed second.

An interesting competition was that for three boxes Doyenne du Comice Pears. First prize was awarded to a capital exhibit from C. L. Levitt, Esq., Hoo, Kent.

DIVISION IV.
FRUITS GROWN IN THE OPEN AIR.
OPEN TO AMATEURS ONLY.

APPLES.

For 24 dishes, distinct, 16 cooking and eight dessert, a splendid exhibit from Capt. Drummond won first prize. He showed well-grown fruits in pleasing variety. Especially noteworthy were Peasgood's Nonsuch, Cox's Pomona, Bramley's Seedling, Newton Wonder, Rev. W. Wilks, Gascoigne's Scarlet, Stirling Castle, Lane's Prince Albert, a marck of the culinary sorts, and s examples of dessert such as Rival, W Cox's Orange Pippin, King of I Ellison's Orange, Coronation, and Ross. The other exhibitor, who was second, was Sir Chas. Nall Cain, Bar had a splendid exhibit of well-grow Mere de Menage, Striped Beefing, Wright, Beauty of Kent, Alfriston, a peror Alexander were good cooking so the dessert sorts, Lord Lambourne, E Orange, Laxton's Superb, and K Tompkins County were excellent.

For six dishes dessert Apples there v entrants. First prize was awarded t Stidston, Esq., Bishopsteignton, mouth, who had Wealthy, King Madresfield Court, King of To County, Lord Hindlip, and Ribston in splendid form. For six dishes of Apples, distinct, there were four exh Leading honours were won by J. H. I Esq. (gardener, Mr. J. Bond), C Towers, Wye, Kent, who showed specimens of Lord Derby, Lodd Bramley's Seedling, Bismarck, W King, and Rev. W. Wilks.

For 18 dishes Pears, distinct, the five splendid exhibits. Premier honour with Capt. Drummond, who staged magnificent exhibit. The more not sorts were Durondeau, Conference, S de Congrès, Doyenne Boussoch, Superfin, Marguerite Marillat, Hardy, Pitmaston Duchess, and Doy Comice. A fine series from Major W Digby was placed second.

The monster bunch of Grapes that turned the scale at 37½ lbs.

This remarkable bunch of the variety Alicante, described in our last week's issue, page 622, was on view for a short time during the first day of the Fruit Show at Vincent Square, after which it was the gift of Mr. Harry Marsh to be auctioned at the Mansion House on behalf of Fleet Street Week for St. Bartholomew's Hospital. Sir Alan Cobham, of flying fame, was the auctioneer, and Sir Charles Wakefield secured the bunch at £15, after which it was offered and resold again and again. Finally it was cut up and sold.

Tying up shoulders of G

No doubt by spreading out the bun their fullest extent they look mucl than they otherwise would do, I bunches are far from pleasing when the dish. I do not go so far as to say bunches should be shouldered, as varieties as Barbarossa, Trebbiano, a like shouldering must be practised some bunches are to be obtained. O ally a few bunches of other kinds, Muscat of Alexandria, or extra large of Black Hamburgh may be improv little judicious shouldering. What I see are nice tapering pyramidal bun the ugly shoulders, if any, having be ously removed. It takes a lot of co remove portions of clusters of bunc growers who practise it never have on this point, knowing full well th portions which have been removed ado to the symmetry of the bunches nor of the crop when finished. All t shoulders should, of course, be remo as the bunches are being formed, throwing all the strength into t bunch.

Outdoor Figs

Wherever there is a risk in southr dens of losing the crop, if the trees unprotected, detach them from the trellis, and, after tying the branches t venient-sized bundles, bring them c close to the alley as possible, so that be conveniently covered in with sa Bracken. The bundles of branches held in position by fastening them stakes driven into the alley close to of the wall. Another way is to work in between the branches without them, and then cover all with ma former plan is the more economica two, as neither so great a quantity of nor so many mats is required. In and northern gardens it is better t the crop which has no chance of ripe

Growing Bulbs in Bowls in Fibre

AT perfection has virtually been ached by some may be gathered from magnificent exhibits set up from time at the meetings of the Royal Horti- l Society. No system of pot culture know could excel these for sumptuous ; none retaining or promoting in degree the characteristic beauty of the s concerned. These, indeed, are the d and visible signs of success, and, ng in fullest measure, are singularly ing. It may be seen in the compara- uniform stature of a variety, whether case of a single bowl or a number of in the development and perfecting of flower; and not less so of colour.

less in these respects, it has more than curred to me that an even greater re- it and higher excellence had been by these fibre-grown bulbs than by thods of cultivation. It may be said ind it all there is a fineness of judg- orn of ripe experience and practice but few amateurs could command. these also, probably, well-tempered tructures—frames or houses—which important part, and which to the veller are impossible.

such things count there is no gainsay- at there are other things that matter indisputable. They are first-class uitable varieties, and correct treat- Saying this, I have, I believe, in a indicated the cause of most failures esses. Not all varieties are alike suit- t every type of bulb will do; and in- treatment will not suffice. Root dry- e root action has begun, is a fruitful f failure. Too early introduction into and arid conditions of the sitting or room is equally bad. The daily on of water is wrong. Then an early most important. Bulbs planted in er are afforded a good opportunity to r part. Those left till November have e against them, and the best-grown y yield but indifferent results. This said now, not because of its season- but rather to indicate how and why arise, and with a view to combat ther year. Most of all would I urge erested in the bowl-fibre cult to leave ion of varieties to the specialist. Not iety of Tulip that is a success in the s to be recommended for the bowl- , and taking a fancy to such an one n be attended by failure. To these ers akin even the specialist has to apprenticeship, and the amateur who find consolation in the fact that not of his professional brothers' cards out trumps. Knowledge of the sub- quick discernment will, however, in good stead, and prevent many or ses; and, with the experience gained on, his clients presently reap an ad- if all unwittingly.

at extent or variety bulbous-rooted y be successfully cultivated in Moss- owls is at the present time a matter iment, though the knowledge that s, Narcissi, and Tulips may be so d, with intelligence and care, attain ection as great as others grown in ordinary way has stimulated not a s a phase, too, of gardening that is increasingly popular, and if, for ce and from want of a better name, red to here as domesticated garden- with a view to showing how happily es with the home life, how particu- suited it is for town and suburban and how entirely independent—for the moment—its devotees may be of the garden, the greenhouse, and the florist. It would appear, indeed, to have been created to meet a special need in the home. In many cases it has met a great want, and, while contributing its quota of ornament and beauty, affords not a little pleasure to those who indulge in it, and in particular to those whose efforts are attended by anything like a full measure of success. There are failures, it is true. Happily, however, they are not insurmountable, while more often than not they are the result of ignorance or neglect, or a mingling of the two.

T. V.

Ixoras

These handsome stove-flowering plants are not so often met with as they deserve, yet there are few plants to equal them for making a display in the stove during the summer and autumn. Cuttings should be taken during the spring. These should be firm and short-jointed and should be inserted into small 60-sized pots containing a fine sandy compost. Place them in a brisk bottom heat. When they have become sufficiently rooted pot on into 48-sized pots, using a compost of two parts peat and one part good fibrous loam, with sufficient silver sand to keep the whole open. Place them in a temperature of 65 degs. to 70 degs. Ixoras delight in plenty of heat and moisture during growth. Watering should be carried out with great care, failure to do this resulting in a weak and sickly growth. Keep well syringed and shaded from all bright sunshine. When these have well filled their pots with roots pot on into 24-sized pots. For this potting use a little coarser rooting medium than that advised for above. These pots will be found quite large enough for them to flower in. Drain the pots well and pot firmly as this will result in a more sturdy growth. After flowering gradually withhold water without actually drying the plants right off. During the latter part of the autumn prune them back to ensure making sufficient growth to bloom the following year. When these have broken into growth again turn them out of their pots, shaking away as much of the old soil as possible, and pot into a size smaller pot, growing them on again as advised for young plants.

Ixoras are subject to attacks of scale and mealy-bug. This can be eradicated if the plants are sponged with a weak solution of XL All, using a pair of rubber gloves. When these have been well sponged lay the plants on their sides and give them a forcible syringing with clear water to dislodge all traces of loose scale, bug, etc., that may have been left behind. Among the best varieties are Duffi (syn. L. macrothyrsa) (deep red, tinged with crimson), Williamsi (reddish-salmon), coccinea superba (bright orange), Pilgrimi (bright orange-scarlet), floribunda, (reddish-scarlet), and odorata (white).

E. BAKER.

The Gardens, Garston Manor, near Watford.

Cyclamens

To raise a stock of Cyclamens for general purposes—*i.e.*, plants to bloom throughout the winter and spring, a commencement should be made at once by sowing seed of the different varieties, making a similar sowing towards the end of the present or early in the new year. The resulting plants, if accorded the correct treatment, and grown on freely, will come into bloom in about 12 months from the time of sowing and continue to flower over a long period. If a considerable number of plants is required pans are best in which to sow the seeds. A mixture of one-half loam, a quarter each of peat and leaf-mould, and a liberal quantity of sand form a suitable compost. Well drain the pans and fill them half full with this, and not quite to the rims, with some of the same compost which has been passed through a fine sieve. Press it down firmly and then dibble in the seeds from ¾ inch to 1 inch apart over the surface, and just deep enough so that they are covered. Water, cover with glass, and shade. A shelf in a house where the temperature ranges from 60 degs. to 65 degs. is the best place in which to raise the seeds.

The Honey Plant or Wax Flower (Hoya carnosa)

Would you please name the enclosed specimen and also tell me what is the best compost to use for growing same? Does it require to be fed during growth? If so, what kind of manure should I use? How should I strike cuttings of same, and what kind of compost? Please give cultural hints.

L. L.

[This is the name of the plant flowers of which you send. The best soil for this plant is peat with a small proportion only of yellow loam (about one-sixth). The peat should be full of fibre, so also should the loam, the finer or dusty particles in both instances being cast aside, for this plant does not thrive for any length of time in a close or retentive soil. To the peat and loam should be added some charcoal broken up to about the size of nuts, or in lieu thereof some clean, broken pot-sherds would be a good substitute, the object in either case being to aid in keeping the soil porous. Silver sand also should be freely added. In potting take particular care to pot firmly, as by so doing the soil will remain much longer in a condition favourable to healthy root action. For a time after potting some considerable care should be taken in watering so as not to sour the new soil. At no time is Hoya carnosa a moisture-loving plant as compared with the average run of plants. Before it is watered it should be seen that the soil is on the dry side. The extreme of drought should, of course, be avoided. The leaves should not at any time become soft or flaccid. Rather more water will be required when new growth is being made both at the root and in the atmosphere, with an occasional dose of weak liquid manure. A sunny, warm position from the spring onwards will do much to encourage flowering. As young growths proceed do not tie the shoots to the older wood, but allow them either to trail about or train them upwards on small strings. In potting, be careful to use clean pots, also drain the pots liberally. If it be practicable we should advise that your plants be planted out, using the same soil as in potting, only in a considerably rougher state. Under this treatment the plant would, if favourably circumstanced, grow more freely, and in all probability flower sooner if not eventually so profusely. A deep border would not be needed, but this and many other plants enjoy an extended root-run. Hoya carnosa is a very good plant for training on a wall; grown thus, if the wall be a little damp, it will, Ivy-like, root into the wall. It has a tendency even to throw out these roots under pot culture. When the flower-trusses eventually appear do not cut them, for the same trusses will go on flowering continuously for several years at least once, and often twice, the same season; thus it will be seen that cutting the trusses robs the plant of much of its beauty. It is easily increased from cuttings inserted in any open soil and plunged in a moist heat.]

REMINDERS FOR THE WEEK

Southern and Midland

Celery

Where not already done the latest batch of Celery should have its final earthing-up. Any leaves that are badly affected with rust or maggot should be picked off and burnt. The soil should be well banked up around the foliage and made firm by beating the sides with the back of the spade. In this manner the rain will run off quickly.

Manuring vacant land

It is always advisable to get the manure wheeled on to vacant land early. It may be left in heaps until the time arrives for trenching and digging. This also applies to old hot-beds and the contents of the rubbish-heap, where vegetable and other matter have become thoroughly decayed. Wood-ashes from the bonfire should be kept in the dry.

Black Currants

It is surprising how well these thrive on stiff, heavy land. Even on water edges excellent crops can be grown. Planting may be done at any time from now on, and if planting on heavy soil it is well to incorporate a dressing of partly decayed manure well beneath the roots and fork in around the bushes a few handfuls of lime. Seabrook's Black and the Blacksmith are good strong growing varieties.

Cordon Pears

Possibly there is no fruit that is so suitable for growing as cordons as the Pear if a sunny, warm position on a wall or fence can be given it. The fruit from these trees when established is of excellent quality. Two feet apart is a good distance to plant, and the soil should be trenched or double dug. For small town gardens this class of tree can be strongly recommended. William's Bon Chrêtien, Doyenne du Comice, Conference, and Josephine de Malines are good varieties to grow as cordons.

Raspberries

During the next week or two is the best time to plant Raspberries. When once planted they will remain undisturbed for a number of years. The ground should be thoroughly prepared by trenching at least 2 feet deep and adding a good quantity of cow or farmyard manure to the bottom spit. Five feet to 6 feet should be allowed between the rows, and the plants, which should be strong and well furnished with roots, may be set out 18 inches apart. It is essential that these should be cut down to within 9 inches of the ground in the spring.

Tamarisks

This useful and graceful shrub is becoming popular in many gardens, and where an increase of stock is required there is no better way than taking cuttings at this season. These may be taken from partly-ripened shoots with a heel attached, and inserted in shallow trenches beneath a north wall or fence. These form roots readily and in two years will make serviceable little plants for setting out in permanent quarters.

Spiræas

For a shady part of the garden where the soil is on the moist side, and not apt to become dried up during the summer, these useful plants are worthy of consideration and are ideal for cutting. They are best when planted in groups of three to five of each variety. There are many varieties to select from, ranging from 1 foot to 4 feet in height.

Rhododendrons in pots

These are very easy to grow for flowering during spring in the cool greenhouse. Plants that are well set with buds should be procured, and if not potted up when received should be dealt with without delay. Pots that will take the balls of roots comfortably should be used, and a compost of peat and sand should be rammed firmly around the roots. They may stand in the open for a few weeks before placing in the greenhouse. The dwarf varieties should be chosen for this purpose.

Schizanthus

The seedlings raised during the latter part of September are now large enough for potting-up into small 60's. A compost containing ample sand should be used. Pot the plants firmly and keep them in as cool a temperature as possible. A shelf near the glass and close to the ventilators is to be preferred. Pinch the tips of the plants when they attain 4 inches in height.

Bulbs

Examine the bulbs that were plunged during September, and when they have made 3 inches of growth remove them to a cold frame and shade the glass for the first few days, gradually inuring them to the daylight. Give air on all favourable occasions and see that the roots do not suffer from want of water. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Plant houses

All watering should now be done in the morning, and while fire-heat in the conservatory has not, up till the time of writing, been necessary, a spell of wet weather will make the lighting of fires imperative. To have flowers in good condition from now onward there must be no damp, and a little pipe-heat, combined with intelligent ventilation, will expel this. For some time now much reliance will be placed on the Chrysanthemums, and large blooms are soon affected and spoiled by damp. Those who have specimens of Camellias, Azaleas, Luculias, or other hard-wooded plants of that description are reminded that these things must now receive a little encouragement. Nothing, I think, is better for such things than weak soot-water. Tuberous Begonias, now past their best, ought to have their supply of moisture gradually reduced. These are now less missed since the advent of the winter-flowering types, and B. Gloire de Lorraine in particular. Among the older forms B. fuchsioides and B. insignis have yet a certain value for early winter blooming; so, too, has B. Weltoniensis.

Pelargoniums for stock

Those who still grow a few beds of the once popular tricolor and other Pelargoniums with variegated foliage ought to pot up sufficient plants for propagating in spring. The roots may be reduced considerably, and, as a rule, 4-inch pots are quite large enough. The plants can be placed in a low span in which a brisk heat can be raised when occasion requires. Water sparingly. Beds of tricolor Pelargoniums and blue Tufted Pansies in mixture are always admirable in the flower garden scheme.

Cool house

The cool house and a cool corridor have their uses at this time. In such a place Cyclamens, Primulas, and Cinerarias from cold frames will succeed perfectly, and they are under one's eye, so that their few needs may not be overlooked, as at times ha in the case of plants in cold frames. roses, hitherto in the latter structure now be given a brisk heat. The flower will soon push in a temperature of 60 to 65 degs.

New beds and borders

In almost every garden there are ne or new borders to be made yearly, or ones to be rearranged. Now is the for such work, and it ought to be unde as opportunity offers. Such beds or b must be thoroughly prepared and ma It is courting failure to plant in ground has been insufficiently manured or whi not been thoroughly dug. If the sta thin and shallow manure from the co or piggery is best. On heavier soil manure is preferable. Work it in a 12 inches deep, breaking up the subsoil work goes on. The sooner this is do better, and planting may be done (if t is in a workable condition) till quite t of October. After that time it is be wait until spring.

Flower garden

The early frosts having to a great marred the appearance of the summer- ing plants, these may be dispensed wi beds lightly manured and dug, a spring-flowering plants and bulbs subst If the flower garden be on grass it n necessary to run the machine over it week or two longer, but if the turf be a ally soft it may be more serviceable the roller than to run the risk of mark sward.

Mowing machines

When the grass cutting ends for t son it is a good plan, if it is consider any particular mower needs to be hauled, to send it off to the makers w delay. Many appear to forget tha mowers, and especially motor mowe all the better of periodical visits makers, and while most gardene nowadays fairly conversant with n mowers, yet it is true economy to hav thoroughly examined and put to rights perts.

Violets in frames

Double varieties, of course, have l the frames for some time, and those w the long-stemmed single forms will quire to get the plants into their l Keep them well up to the glass, but th may be kept off for the present excep there may be a heavy rainfall. A stirred surface is always beneficial to and decaying foliage ought to be promptly.

Kitchen garden

The earliest-planted Cabbages a ready for drilling-up, and a light spr of any good fertiliser can be applied the work is done. There is yet time a final planting. Lettuces, too, may transplanted to stand the winter. accumulation of garden rubbish sh disposed of by burning or by burying trenching is going on. This is a go at which to give the soil a light dres salt. That known as "agricultural" a undoubtedly the best. It is especiall able on soils of a light and porous tion, and 1 lb. to the square yard, forked in, will make its presence felt course of the succeeding season.

W. McGu

Mabie Gardens, Kirkcudbrightshire

The Early Chrysanthemum

the beginning of the season, or rather hen the young plants were planted out, pearances were in favour of an early ng. The land was unusually moist for e of year and the plants started away . But generally the blooms are late. y and position have, of course, some on the matter; still, the behaviour of s is most curious. Sorts relied upon he first to open the flowers are by no so, and on the other hand some which counted October varieties are before ber ones proper. Probably the more d of colours in these Chrysanthemums en garden are white, yellow, and of various shades. Anyway, mixed not find much favour unless indeed e particularly bright in what are as autumn shades.

v notes on varieties as seen just now be seasonable as well as helpful to who have no experience of them. A list is not desirable, for really the orts may be named without taking a eal of space. If, then, to begin with, ites be taken, there is nothing earlier oi des Blancs. This has faults, for it menable to disbudding or thinning to ssoms of enhanced size. It is a good for sprays. Mayford White follows behind in time, and is exception- e for either purpose named above. ramfield Early White, and lastly . This, by selection of early flower- s, may be had in bloom by July, and voured variety for the production of specimens.

ot Yellow is about the earliest of that Golden Polly may be before it in re- time, but the latter is looked on as a or massing variety. The stems are r cutting. A splendid spray yellow is one named Cranford. This may be yard-long branches full of bloom. A oured kind is Cranford Cream, also t in sprays. Framfield Yellow, a form white, follows in order of flowering taking variety. At the same period ranford Yellow, a fine variety for the tively large flower. So, too, is Mrs. nilton, a variety distinct in a semi- g shape of bloom.

rst of the bronzes to open its flowers Jack Pearson, a distinct type which popular when distributed. Polly had been the first to bloom, but this court now except for bedding. So is hly-coloured form called Crimson ronze Goacher is early and good, and owing is Almirante, with its red as ts yellow-tinted form, the three being good a trio of sorts as one could or late September Mrs. Wm. Syden- l Crimson Circle are a pair of crim- good as any in commerce. I should ntioned pink as one of the shades most cultivators, a colour not by any ommon. Normandie is about the but there is not much pink in the or is there in Delight, which is later. ofusion and Cranford Pink are as anything we have up to now, and all he first-named are more useful in orm than in a mass of bloom.

rly-flowering strain of the Chrysan- is probably more difficult to improve n any other section of this favoured ubject. In the first place seed is not ripen in this country, and to judge r 1,000 plants reared from the better- varieties in this way—from careful eding—if one out of every hundred ering be selected for further trial the re will not be considered a bad one.

A timely cultural item would be what to do with the roots after the bloom has passed. Although the plant being noticed is hardy enough to withstand considerable cold, it will not survive very severe frosts, and what is the more damaging, perhaps, continued wet. There may be isolated instances where the roots would be safe outside, but the better plan certainly is to lift them. Do this, and then by shaking away all the soil the eggs of slugs will be removed. Then pack closely in shallow boxes and scatter just a little fine dry earth over the fibrous portion of the roots. Put these boxes under cover of glass—preferably a cool frame which may be protected in severe weather. The class dislikes warmth. This should be a guide even in early spring, when thoughts are on increasing by the aid of cuttings. The roots indeed may be divided, and when there is no desire for a large number of young plants this should be a suitable method.

H. S.

Chrysanthemum Blanche Poitevine

White Chrysanthemums to-day are numerous and good, but one which will surely appeal to the owners of small and moderate-sized greenhouses is Blanche Poitevine. It belongs to the Japanese group; the flowers are of purest white and are incurving. It is best disbudded and gives a good account of itself in October and early November. The plants are exceptionally dwarf, some of them not more than 12 inches in height, and can be grown successfully in 6-inch or 7-inch pots provided that during the summer they are partly plunged in the ground, or in ashes. I have a number of this variety so grown and find them exceedingly useful for table and window decoration; also for filling window-boxes in a sunny window. I cannot find that it is very well known, certainly not so much as it ought to be by amateurs who have not much accommodation for plants of tall habit. I commend it to the consideration of those who have not room for many plants in their houses as one worth noting for procuring and working up a stock of plants from cuttings.

LEAHURST.

VEGETABLES

Mushrooms

WHERE Mushrooms are in demand from now until the spring beds should be made up every fortnight to ensure a good supply. These need not be very large beds, as those of medium size constructed at more frequent intervals afford a much more regular succession and constant supply. The greatest difficulty now is, of course, obtaining the manure. However, with the right kind of manure, and if its preparation is properly carried out, the beds made up and spawned when the temperature ranges between 75 degs. and 80 degs., there should be no difficulty in raising the requisite crops, provided the house in which they have to be produced is adapted to the purpose. Spawn of good quality is very essential, and it should be in as fresh a condition as possible. Another matter is that of soil for casing or covering the beds with after spawning. When it can be spared nothing is better than pure loam chopped to pieces and passed through a fine sieve afterwards. For covering the beds after soiling hay is as good as anything.

In a well-constructed house free from draughts and in which a moist, still atmosphere can, without difficulty, be maintained, the warmth given off by the beds is usually sufficient to keep the temperature ranging between 55 degs. and 60 degs., which is quite warm enough for Mushrooms. Never employ fireheat if it can be avoided, and when it has to be resorted to take steps to counteract its drying influences by sprinkling floors and syringing walls occasionally with tepid water, a supply of which may be always at command if buckets or cans filled with water are stood over or near the hot-water pipes. Should occasion demand the sprinkling of the surface of a bed which has become unduly dry always use water for the purpose at no less a temperature than 85 degs. and see sufficient to moisten the soil only is afforded.

Turnips

Turnips have not been at all satisfactory this season round here. I wonder how GARDENING ILLUSTRATED readers have found them in other parts. I do not grow them through the summer, for mine is a small garden and I have to confine myself to the staying vegetables—that is, those from which one gets the most from a given area. I have had some brought in on two or three occasions with the remark "that I should find them all right." So they were externally; but on cutting several I found them very pithy and woolly, in fact, practically uneatable, and yet they were small, about the size of a tennis ball. I was surprised to find them like this because the variety Snowball generally does well, but it was probably due to the harsh condition of the ground, which prevented them getting away kindly. Not much ground was turned up in autumn owing to continued wet, followed by frost and snow, and after it was turned up there was little frost to pulverise the soil, with the result that when seed sowing time came the allotment ground, which is a stiff loam with a clay subsoil, instead of being in a nice workable condition, was just a lot of hard lumps, very difficult to break down. The consequence was that the tender rootlets had little chance, and the Turnip is one of the vegetables that wants to come away quickly to maturity without any check to be at its best.

E. BURRELL.

Aylesbury.

Winter greens

During dry spells in late autumn, if it is possible to give winter greens copious supplies of water, along with liquid-manure occasionally, the worth of the work will be seen by a better development. I can testify to this in the case of Brussels Sprouts and Kale, which, at the time of writing this note (early October), after an absence of rain, have come on rapidly. All loose leaves which have dropped should be gathered together and burnt, especially where caterpillars have shown themselves, as is general this season. It is a good plan to dust about winter greens with slaked lime just now, and a few pence spent in this direction and the little trouble involved will do much to keep down insect pests.

TOWNSMAN.

Pea Improved Alderman

As a second early and maincrop variety to grow where a large demand has to be met, the variety named at the head of this note stands unrivalled. It is not only a prodigious cropper but the pods are very large and well filled with Peas, large in size and of excellent flavour. It is a tall-growing variety—about 5 feet in height—but on deeply-stirred, well-manured ground it exceeds that height by quite a foot, and a few rows grown on an open quarter of the kitchen garden are a pleasant sight to behold about the time when the pods are ready for gathering. As an illustration of its fertility eight rows, each about 20 yards long, yielded about 50 bushels altogether in July last.

A. W.

South American and Other Plants Find Their Way to an Old World Gar

IN all our gardens along the southern and westerly shores of Britain the influence of Chilean shrubs and plants is very marked. But this is never so manifest as during the later summer months, when a long list of subjects of the highest merit, and all hailing from the slopes of the Chilean Andes, are in full flower. Indeed, our western seaboard seems to be particularly agreeable to these South Americans, which here enjoy a more equable climate than that which prevails in mid-England and the eastern side, and they undoubtedly appreciate our more humid atmosphere.

Prominent among the above is the Flame Nasturtium (Tropæolum speciosum). If this splendid climber does not always "grow like a weed," as it does in parts of Scotland, it often makes a brave show of colour. In a cool part of my garden it is firmly naturalised, and from early July to late autumn its ropes of scarlet flowers will be festooning a thicket of Azaleas and clambering over many other shrubs with that exquisite grace in which it has few rivals. The orange-yellow T. polyphyllum is, generally speaking, a more uncommon plant than its compatriot. Though it flourishes abundantly in a few gardens, I find it more difficult to start than the Flame Nasturtium. Even so, it is such a beautiful thing, and so useful for clothing a hot dry bank or low wall in poor stony soil, that I am still hoping to get it "agoing." The fact is that, although they come from the same country, these two Tropæolums ask for precisely opposite treatment. The one delights in the cool mountainous atmosphere of the North and detests the South, whereas the other enjoys all the sun it can get and languishes without it.

One of the finest shrubs which ever came from South America is Desfontainea spinosa. In some of our westerly counties this makes huge bushes, and when the dark green and glossy Holly-like foliage is afire with a multitude of big tubular flowers in a vivid scarlet and yellow, the effect is singularly arresting. I find that this gorgeous subject will withstand over 20 degs. of frost. It comes freely from cuttings, commences to flower when no more than about a foot high, and is always an easy-tempered, robust grower. D. spinosa begins to bloom about mid-June, continuing throughout the season. It is preceded by another magnificent shrub, or rather tree, from the same country, Tricuspidaria lanceolata, and this, in its own way, is as handsome as the other. In Sir Herbert Maxwell's famous garden at Monreith, Wigtonshire, I have seen several specimens of this noble subject nearly 20 feet in height, and few trees can rival their splendour when hung with their countless "Chinese lanterns" in a bright carmine-crimson. The prolificacy of T. lanceolata is amazing, for it does not only bloom with the utmost freedom, but before the crop of blossom is well over the branches become laden with the drooping buds of next year's yield. Odd as it may seem, this is a species which does admirably with a northern or eastern aspect.

The uncommon and beautiful Berberidopsis corallina, which hails from the same country, also enjoys a similar position, and an old plant of mine was, in mid-August, covered with its clusters of fleshy, globular, blood-red flowers. Though a twining shrub, B. corallina shows no little affinity with the Barberries, both in the formation of the blooms and the glaucous, horny, and rather spiny leafage. Flowering at the same time is the rarer Mutisia decurrens, which is another Chilean climber and the only composite plant which supports itself by means of tendrils. Though introduced many years ago, this superb species has never become common. Indeed, it is very seldom seen, for it is not only rather tender, but difficult to please and to propagate. With a habit of growth somewhat like that of an Everlasting Pea (Lathyrus latifolius), it climbs to a height of about 8 feet, the forked tendrils being an extension of the mid-rib of the leaf, while the blades of the latter are continued down the stems, giving the latter a winged effect. The flowers, borne on 8-inch stalks, are about 5 inches across; the 14 or 15 broad rays which issue from the maroon centre being a glowing orange. Seen against the dark foliage of an evergreen Cotoneaster, up which the plant has climbed, these fiery suns are extremely handsome. To Chile we owe the beautiful Eucryphias, with their creamy-white goblets, the magnificent Fire Bush (Embothrium coccineum), Solanum crispum, of which the variety autumnale provides us with clusters of its lavender-blue, orange-eyed blossoms throughout the later months of summer, and many another shrub of outstanding merit.

I must pass on from this engaging topic and come to a few of those stately he the waterside, which are so invalual carrying on the feast of colour now th Irises and most of the Meadowswee over. Conspicuous among these are gigantic Ragworts, Senecio Clivorun Veitchianus, the one bearing enormous of broad-rayed orange flowers and the stalwart towering golden-yellow spir 6 feet to 8 feet, both having a bold and ornamental foliage. Here also are s American Loosestrifes (Lythrum), r Winged Loosestrife (L. alatum), which our own natives and their garden fo the delicacy of its purple and more growth.

The Musks are still maintaining m their earlier splendour, a broad belt of Monkey-flower (Mimulus luteus) and proved Water Forget-me-not (M palustris var. stabiana), making a del array of yellow and blue—two complem colours which are always so harm Another noteworthy Musk is M. Bartor whose very large flowers, borne on

Tricuspidaria lanceolata (syn. Crinodendron Hockerianum)
A lovely shrub from Chile that requires a sheltered garden. The drooping flowers are rich crimson in colour

tems, are a bright rose-pink with a throat. In writing of Musks I am d that the mystery of the loss of fra- n the Musk plant (M. moschatus) is in being discussed by those learned problems, and I wonder whether this nt, once so cherished an object in our windows and gardens, and now en- entless, is still in possession of its in its native America. The Musk s introduced to this country from the n River region exactly 100 years it is strange that the plant, having its perfume for so long, should have lost it. Scented Musk plants are are that long prices are being offered

owers are not the rule in the later if we except the Ornate Gentians rs of their race. But some of the ongues (Cynoglossum) and their at their best and in flowers of a bril- husa-blue few plants can equal the allichianum, which makes amends only biennial by seeding freely. spectabilis is another Boragineous th bell-shaped flowers of a deep and so vigorous is this hearty (once known as Cynoglossum longi- hat if cut back in July it will im- put up fresh sheaves of blossom -on into late autumn.

grass-leaved subjects there is the garden in late summer to equal ice the Wand Flower (Dierama na), whose slender, wiry stems, g and tough as whalebone, arch the utmost grace and bear towards emities drooping clusters of large rs in most entrancing shades of purple. There is also a lovely white ough a South African, the Wand quite hardy here in well-drained plants resent moving, but seeds n plenty and these, germinating ovide seedlings which transplant quickly come to the flowering stage. South Africa comes the charming primulinus which, in its various l hybrids, is fast becoming one of popular flowers of its kind in our So hardy are these primulinus at I have left the corms in the wet of a waterside throughout a hard hout the slightest injury.—A. T. J., *rs' Chronicle* of America.

The planting season

e is now with us when prepara- anting must be considered, whether carried out this autumn or spring, be borne in mind that, though the vour the former, there are others the latter, and it is certain that any things succeed much better r removal is deferred until the

ds fruit trees, unless the ground npoverished with other things, the n of fresh manure is most harm- najority of cases, and granted that make greater headway in a rich erally means transplanting again r two to bring them to a fruiting whereas if set out in moderately that has been prepared for other mulched during summer, success Lime plays a very important part t garden and should be well in- into the soil. It would be difficult ruit tree which is not greatly bene- use in some form or another. s another ingredient which, when tly dry before using, and mixed ary soil, forms a capital compost for working in among the roots at planting time.

Turning our attention to ornamental trees, shrubs, and bushes of practically every kind, there are some that delight in leaf-soil and well-decayed manure when well incorporated with the original soil. Thoroughly break up all lumpy soil so that such can be well worked down among the roots at planting time. The actual pits should not be opened until ready to plant, but they may be located with a stake so that all may be in readiness for a start. The month of September has been somewhat dry, and on clayey soil it may be found difficult to break up as yet, but it should be tackled the first opportunity, as so much depends upon getting the soil into a working state if success is to crown the efforts of the planter. Better plant in a dry soil than in one that is sodden. Some of our finest summer-flowering plants give of their best only when a fair percentage of peat is added to the loam, although half-decayed leaf-soil is a good substitute but not so lasting. Rhododendrons and Azaleas must be put in the forefront, although there are others that are improved by this addition. Roses require plenty of manure, and that of the best, well blended with the other soil, which must be deeply dug and thorough drainage ensured. Herbaceous borders well made last some few years, yet the plants quickly show when readjustment is necessary, and the sooner such work can be carried out in October the better. It gives the divided plants a chance to lay hold of their new surroundings ere much hard frost is expected. These positions should be well manured, keeping the manure about 15 inches from the surface, as it is well nigh impossible to fork in very much once the plants are set in their place, although an autumnal mulch and its properties washed into the soil go a long way in keeping the plants in a thriving condition. Should it be decided not to plant until the spring it is best not to introduce any manure, but to thoroughly trench the site or double dig it to a depth of 30 inches, adding the manure early in the spring previous to planting. Where there is a deal of planting and replanting to be done it is absolutely necessary to get some of it done in the fall of the year or the whole would not be got through ere the summer caught us up, while on some soils things are more of a success when carried out during the next few weeks, while on others the work is more satisfactory when done during March or April. Mulching with some light material protects the roots of all newly-planted things during severe frosts, as well as in the spring, and to a certain extent enables the recently-planted ones to withstand a period of drought.

Where it is practical a good stack of prepared soil that can be kept from heavy rains is most valuable where much planting has to be done. Such compost should be worked well down among the roots and be made firm.

JAMES MAYNE.

Eltham.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House Fleet Street, London, E. C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

TREES AND SHRUBS

Treatment of Yuccas

(M. A. Pilkington).—We should not advise the cutting away of the portion of the plant which has recently flowered, as there is always the possibility of its breaking back and producing growths which in due course will flower. We have seen Yuccas succeed remarkably well in your county, and in your particular district the soil should be eminently suited to them. In your case the plant may have become somewhat exhausted and is in need of a stimulus at the roots. If you have some thoroughly decayed manure or old hot-bed manure you may spread a good dressing of this over the roots to as far as the roots extend. If this can be just buried beneath the surface without damaging the roots well and good. If not, first lightly loosen the surface, then spread the manure as previously advised, tread it down fairly firm, and if the appearance of the manure on the surface is objectionable cover it with an inch or two of soil.

Box edging

(Roy Clayton).—It is the variety of the common Box (B. sempervirens), known as B. sempervirens var. suffruticosa, that is used for edgings. It too often happens in gardens that the Box edging is neglected and not kept hard clipped. Then it becomes tall and ragged, and is very hard to renovate. Box, when planted, should stand about 3 inches above the gravel, being first neatly cut with a knife before it is planted. Then each summer the edging should be hard clipped back to its original height or thereabouts, of course, allowing it to become a little broader every year. Box edging so treated will remain good for 20 years. Your better plan will be to first draw back from the edging all the top gravel some 12 inches wide, then lift the Box and lay it in thickly by the roots. Then fork up the ground where it grew, adding some fresh soil and a little manure, as the soil will be very poor. Then stretch a line, chop down a straight furrow 4 inches deep, have the Box hard trimmed, tops and roots, to about 7 inches, then plant it thinly and evenly, so that it will form a perfect edge. Put back the soil against it, tread it hard, then replace the gravel.

FLOWER GARDEN

Plants for garden

(F. G. Walsh).—(1) May-flowering and Darwin Tulips would go very well with the Irises under the slope against an Ivy-covered wall. These may be followed by autumn-flowering Gladioli. Aquilegias also associate and do not encroach on their neighbours. Canterbury Bells also look well in such a position and come into bloom when the Irises are over. We have also had good results from planting Polyanthi and Sweet Williams in the foreground of an Iris bed. (2) Seeing

that your tenancy is of only three years' duration we do not think it advisable to turn the depleted tennis lawn into a Heather garden, as you have already Heather growing in another part of the grounds, and these plants do not show at their best when growing on the flat. They adapt themselves more for growing on gentle slopes. However, if you adopt this course it would be advisable to lay the plot out in a succession of raised beds, having a fairly wide path, either of turf or stones, laid in crazy fashion. The price of Heather plants varies according to variety. Erica carnea, E. ciliaris, E. cinerea, E. vulgaris, and E. vagans being the most common average from 9s. to 12s. per dozen. As regards quantity, much depends on the size of beds. The above-mentioned plants should be set from 12 inches to 18 inches apart. Such varieties as Codonodes, Mediterranea, Veitchiana, arborea, and stricta, which grow to a height of 3 feet to 5 feet, may be allowed 3 feet to 4 feet from plant to plant. These, of course, are more expensive. We advise you to well dig over the site instead of ploughing it, and if you prefer a more inexpensive and brighter show that will give you a better return during your tenancy, we should plant beds of such flowers as Dahlias, Gladioli, Sweet Peas, Pentstemons, border Chrysanthemums, Carnations, and other bedding plants, or otherwise dig and manure during autumn, and level and sow down with fresh grass seed during spring.

Name of Aster

(J. M., Gravesend).—It is impossible to name the enclosed flower of Aster. It may be a small late side bloom of a large-flowered type or it may be a flower of the miniature Bouquet Aster. We must have a better specimen, as also particulars as to size of flower and height of plant.

Diseased Antirrhinums

(J. L.).—Your Antirrhinums are affected with a disease which is caused by a fungus called Phyllosticta Antirrhini, Syd. In your letter you do not state if you raise your plants from seed, cuttings, or both. In any case it appears to us that the whole of your present stock is badly infected. If this is so, then the soil in which the plants are now growing will be full of spores. Antirrhinums planted in infected soil next spring are almost bound to become diseased. The best plan for you to follow would be to burn the whole of your present stock and start with a clean stock next spring. The new stock should be planted out in a site that has not carried Antirrhinums for at least two years. If it is impossible to carry out the change of site policy you should sterilize the soil before you put out your clean plants next spring. To obtain a clean stock you should obtain seed from a reliable firm. Your own saved seed is liable to carry the disease. The new seed should be sown in boxes of soil that has been previously sterilised either by heat or chemical means. We have from time to time published replies dealing with chemical soil sterilisation. If you have any doubts as to the procedure please write to us again.

Crocus and Gladioli

(Snap).—The large bulb, or corm, you send is of no use, and the same applies to the old bottom, crownless ones of Gladioli. The flower is already made in the bulbs supplied by nurserymen for planting in autumn, and the young bulbs you refer to are developed during the plant's growing season, and become flowering bulbs for the following year, the original old bulb being useless. Therefore, when lifting takes place these should be discarded altogether. Only one, and that the smallest of those sent, was of any use, the other two being blind. Montbretias should be lifted, divided, and transplanted to good fresh ground every third or fourth year, otherwise they lose their vigour.

FRUIT

Strawberries going to leaf

Can you tell me what I can do to prevent my Strawberries going to leaf? The foliage was so thick this year that the sun could not get to the fruit, much of which went mouldy in consequence. Mine is a strong clay soil.

ERICA.

[To check the Strawberry plants from making such exuberant growth in future afford a dressing of agricultural lime. Spread this between the rows and round the plants, the quantity to use being from 6 ozs. to 8 ozs. per square yard. This may not prove entirely effectual the first season, so if the plants again produce too many leaves do not hesitate to remove enough of them to enable sunlight and air to exercise their due influence on the growth and ripening of the crop. Until matters right themselves withhold manure from the roots.]

Spraying Peach trees

(Norfolk).—If the trees have been attacked by red-spider and thrips then it is necessary to syringe the Peach trees to clear off these pests. You must also see to it that the roots of the trees are moist, as if they are allowed to get dry the fruit is liable to fall, and fails to stone while red-spider and thrips are rampant.

ROSES

Climbing and dwarf Roses

(Snap).—We consider that this has been a very good year for these. If your Rose growths are weak it is probably due to lack of nourishment at the roots. If they are of the Rambler type (Wichuraiana) then your proper course was to remove all old and worn-out growths, leaving just sufficient of the best and strongest young growths to cover the space they are desired to furnish, averaging 1 foot to 16 inches apart when the growths are tied out. This should be carried out as soon as their flowering period is over, and any weak young growth not required should at the same time be cut away also. If continued your treatment would result in a mass of old, weak wood and small flowers. We certainly do not approve of the drastic treatment of your dwarf Roses.

VEGETABLES

Manuring kitchen garden

Part of my kitchen garden has a good many slugs in it. It has only been cultivated about two years, having previously been a grass field. The soil is good loam and bears good crops. I want to put some manure into it and would be glad if you would kindly let me know whether I should manure the land this winter and put lime on it in the spring, or what other treatment should be adopted? Is agricultural lime the best to use?

F. W. M.

[We think your best course, seeing the land has been so recently broken up, would be to give it a good dressing of lime this autumn or early winter, and apply the manure in the spring. Procure agricultural lime fresh from the kiln for the purpose and place it in small heaps on the ground you are desirous of treating with it, and cover with a small amount of soil. As soon as it has become air slaked, and reduced to a fine powder, distribute it evenly over the surface and lightly dig or prick it in with a fork. The lime should be what is termed agricultural lime. It should be allowed to slake naturally by absorbing moisture from the air. The adoption of any other means of slaking wou its caustic properties, and the proper ca to apply is ½ bushel to the square rod.

MISCELLANEOUS

Medlar jelly

(Mrs. N. Lucy).—Take sufficient ri lars—they need not be mellow, but is quite ripe. Place in a preserving pan wi peel of a Lemon and enough wa cover. Simmer very gently until the u pulped. Pour the contents of the pan large sieve and allow the liquid to dri gradually. Do not press the pulp thro the jelly will be cloudy. Measure the and allow ¾ lb. of sugar for every pin the liquid into a clean pan and boil for 30 minutes, skimming off the necessary. Heat the sugar in the ov add to the contents of the pan. Stir u sugar is dissolved, and continue boilin f minutes. Drop a little of the syrup or to see if it sets. If not, boil for a few m longer, or until the syrup jellies wh Pour the jelly into small glass jars an in a sunny window for several hours next day lay a round of white tissu dipped in the white of an egg on top jelly and cover with parchment pape in usual way.

SHORT REPLIES

A. B.—In the circumstances it wi better to lift the Lily bulbs as soon a growth dies down and to store them silver sand, replanting in March. A a Belladonna is flowering well in may dens this autumn. See notes in recent s It is probable that yours have been la too deeply. We suggest lifting the bu and replanting shallow.

B. C. H.—Polygonum cuspidatum Japanese plant, and, because of its v habits, best treated as an isolated sp on a lawn or in the wild garden. Yo have to dig out every particle of its o your bed and trace each running in from beginning to end, as every joinle the ground will renew your trouble quite a striking plant where it can be l to colonise, but must be kept strictly i

F.R.H.S., Donegal.—Sorry there a trace of any grubs in the box you sen soil was rolled into small pellets.

A. Donovan.—It is impossible to s is wanting in your soil unless you a analysed, which you had better have m

NAMES OF PLANTS

W. C.—Rose Excelsa; tubular lo Cuphea platycentra; spotted leaf, Pulo officinalis (syn. P. saccharata).

Miss Rae.—Pteris cretica major.

Moray.—Cassia corymbosa, ha native of Buenos Ayres.

A. B., Suffolk.—Hedychium (r ianum, native of the East Indies. This species is nearly hardy if given win tection. The crowns may be lift stored similar to those of the Dah Canna. It is usual, however, to gi greenhouse treatment.

A. M. Norris.—Aster vimineus.

Canon Morrice, Bath.—The blue-w shrub is Caryopteris Mastacanthus. It the appearance of being a sun-lovin but we have grown it in dense sha success after it had looked as unhapp specimen you send. Yes; replant it to it better soil. It is worth all the trou bestow upon it, for during a fine aut gives a pretty display, and flowering are not too plentiful in October. The shrub is Akebia quinata. It is erg only in mild winters, but is perfectly in your district.

E. H. C., Thames Ditton.—Fa

a, the Alder Buckthorn; a native n hedges and bushy places.

J., I.O.M.—Rhododendron Falconeri. res a lime-free soil and a sheltered . It flourishes in good Rhododendron eat and leaf-mould and should be top- annually with leaves, but it will not ugh winds.

NAMES OF FRUITS

ley.—Apple Adam's Pearmain.

.—1, Scarlet Nonpareil; 2, not recog-, Fearn's Pippin.

Williams.—Apple Yorkshire Green-

n.—Pear Brown Beurré.

L.—Pears: 1, Probably Beurré du ; 2, Fondante d'Automne; 3, Beurré

Mackay.—Apple may be Ashmead's The others not recognised.

tcher.—Pear Doyenne du Comice.

.—Apple Scarlet Permain.

Ellis.—Apples: 2 and 4, not recog-, may be Ashmead's Kernel. Pear gnised.

Obituary

T. W. SANDERS, F.L.S.

with regret that we record the death riend Mr. Thomas W. Sanders at the 1 after a brief illness.

early 40 years he edited "Amateur ng," and he was the author of many ul books on gardening.

ife was part and parcel of modern ure, and he was ever abreast of new the craft. His sure instinct in many ng matters was really due to the fact knowledge was founded on deep and perience—an experience that began when, out of his salary of 12s. a week, he paid 2s. a week to the head gardener for the privilege of working under him! He travelled extensively, and when he visited Sweden as chairman of a party of horticultural experts, King Oscar invested him with a knighthood of the first class and the Royal Order of Vasa, Sweden.

New Horticultural Hall

THE foundation stone of the Royal Horticultural Society's new hall was duly laid by the Rt. Hon. Lord Lambourne, P.C., C.V.O., V.M.H., President of the Society, at 3 o'clock on October 19th in the presence of a distinguished gathering of horticulturists.

The new hall will be in close proximity to the existing hall in Vincent Square, will have twice the floor area, and the building is to be completed before the Society celebrates its 125th anniversary on March 7th, 1929.

It is anticipated that the new hall will be sufficiently large to meet the requirements of the present and future for many years to come.

DESIGN.—The Council entrusted the design to the architects, Messrs. Easton and Robertson, who were the successful architects of the British Pavilion at the Paris Exhibition, and for the engineering portion of the work they appointed Dr. Oscar Faber, their consulting engineer.

PROPORTIONS OF THE TWO HALLS.

	OLD HALL.	NEW HALL.
Length	141 ft.	182 ft.
Width	75 ,,	125 ,,
Height to deck lights	48 ,,	67 ,,
Floor area	10,000 ,,	20,000 ,,
Administrative offices	—	Nine extra committee rooms. Restaurant.
Type of roof	Steel frame	Reinforced concrete. Arches with two side aisles.

We understand that special care has been taken with regard to light, heating, ventilation, and all general arrangements required for exhibitions. It is hoped also that the acoustic properties of the hall will be satisfactory.

The decoration of the building interior will be of simple character—the walls panelled with suitable material for the display of flowers and the main arches with plainly-treated surfaces. There will be a large dais at the end of the hall, and this will be treated more richly with marble. The Housing Committee are paying special attention to the decoration that it may be everything that is pleasing and artistic.

The exterior of the building will be kept on severe lines, and the new front elevation will be built of Portland stone in the lower portion and brick above.

Devices for the comfort and safety of visitors have been thought of and every requirement of the London County Council complied with to the fullest extent.

The contractors have promised to complete the work in 16 months.

The Society will possess a fine, if not the finest, exhibition hall in central London, where not only will it be able to carry on its own work with great success and comfort to its Fellows, but also kindred Societies will be able to avail themselves of the better accommodation. On other occasions other Societies and authorities will be able to rent the hall for their meetings.

SPECIAL CHEAP OFFER OF FLOWERING BULBS

uitable for naturalising purposes in Garden Walks, Drives, Plantations, etc., etc., o.r. Wisbech Station, cash with order, packing free:

NARCISSUS

	112 lbs.	56 lbs	28 lbs.	14 lbs.
r Watkin	80/-	42/-	22/-	12/-
rnatus	80/-	42/-	22/-	12/-
mperor	60/-	32/-	17/-	10/-
olden Spur	70/-	37/-	20/-	11/-
ictoria	60/-	32/-	17/-	10/-
arri Conspic.	40/-	22/-	12/-	7/-
orsefieldi	60/-	32/-	17/-	10/-

	112 lbs.	56 lbs.	28 lbs.	14 lbs.
Empress	60/-	32/-	17/-	10/-
White Lady	100/-	52/-	27/-	15/-
Van Zion (old yellow double Daff.)	40/-	22/-	12/-	7/-
Pheasant Eye	30/-	16/-	9/-	5/-
Princeps	30/-	16/-	9/-	5/-
Scilly Whites	30/-	16/-	9/-	5/-
Mixed Narcis. and Daffodil Bulbs	30/-	16/-	9/-	5/-

DARWIN TULIPS

	112 lbs.	56 lbs.	28 lbs.	14 lbs.
lara Butt	60/-	32/-	17/-	10/-
glescombe Yellow	60/-	32/-	17/-	10/-

	112 lbs.	56 lbs.	28 lbs.	14 lbs.
Rev. E. W. Ewbank	60/-	32/-	17/-	10/-
Mixed Darwin Tulips	50/-	27/-	15/-	9/-

This is a very cheap way of buying. Worth double the money.

owdrop Bulbs (singles and doubles) ... ... 20/- per 1,000
yacinths (mixed) ... ... 30/- per 100
rape Hyacinths (heavenly blue) ... ... £2 and £3 per 1,000
ilium Candidums (old Madonna Lily) ... ... £2 per 100

Crown Imperials ... ... £2 per 100
Dutch Iris (earlier than Spanish Iris, mixed) £1 10s. per 1,000
Dutch Iris (,, ,, ,, ,, to name) £2 & £3 per 1,000
Blue Bells ... ... £1 10s. per 1,000

CROSS & CO., ELM ROAD HOUSE, WISBECH

GARDENING QUERIES and ANSWERS

are inserted free of charge in our pages

The Name and Address of the sender is required in addition to any *nom de plume* under which the query appears.

Each query should be on a separate sheet, the name and address being added to each.

No queries answered by post.

The advice of our Experts is at your disposal

ADDRESS —
The Editor, "Gardening Illustrated," Bouverie House, Fleet Street, London, E.C.

"The Boiler (No. 1) warms my Greenhouse nicely at a cost of about 2d. per day. I am a new beginner with a greenhouse, so had no experience of Heating Apparatus till I got

The 'HORSE SHOE' BOILER

which took my fancy, and I have not regretted it," writes Mr. F. G ....., Clifford, Boston Spa, Yorks, 26/3/26.

HAVE YOU BOUGHT YOUR HORSE SHOE YET? COLD DAYS COME ANY TIME NOW

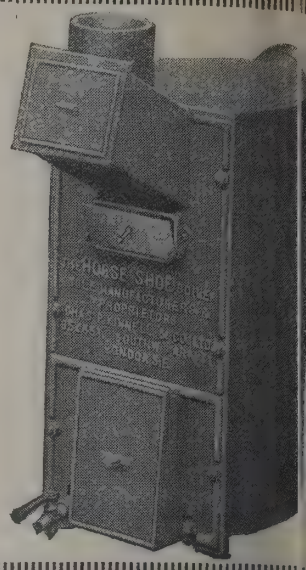
To CHAS. P. KINNELL & CO., LTD.,
Engineers, Southwark St., S.E.1.
Please send me Booklet C, "Making the most of your Greenhouse," and price of complete Outfit to suit § Span-roof (lean-to) greenhouse .....long.....wide inside, sides of § (wood) (brick).....thick

Name.....

Address.....

Strike out particulars not needed. Cut out and send by ½d. post.

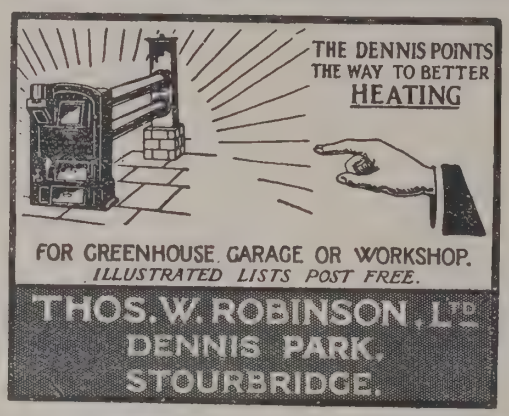
CHAS. P. KINNELL & CO., LTD.,
65, Southwark Street, London, S.E. 1.
Wire: "Kinnell-Boroh-London." *Phone:* Hop 0362 (Three lines.



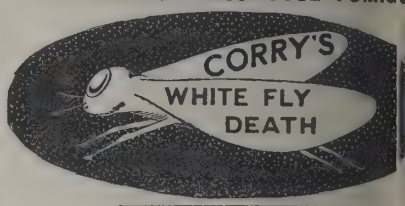
RUSTIC POLES, GARDEN STAKES AND FLOWER STICKS *Free on Rail*

ASH POLES, 10 ft., 1½ in. to 2 in. butts, **7/6** per doz.
12 ft, 2 in. to 2½ in. butts, **9/6** per doz.
14 ft., 2 in. to 2½ in. butts, **11/6** per doz.
Garden Stakes, 10 ft., 5 in bdle., **1/6** 7 ft., 10 in bdle., **1/6**
9 ft., 6 in bdle., **1/6** 6 ft., 12 in bdle., **1/6**
8 ft., 8 in bdle., **1/6** 5 ft., 20 in bdle., **1/2**
Hurdles, 3/- each. 4 ft., 26 in bdle., **1/2**
All kinds of rustic wood. Larch poles, all sizes, cut to lengths.
PRICES ON APPLICATION.
MARTER & SON, Coombe Road, Kingston-on-Thames

PLEASE MENTION "GARDENING ILLUSTRATED" WHEN WRITING



THE LEADING GLASSHOUSE FUMIG



Autumn & Winter Wa

(Corry's). For Fruit Trees, NON-POISONOUS, CAUSTIC. DESTROYS APPLE and PEAR CANKER, and AMERICAN BLIGHT.
1 pt., **1/6**; 1 qt., **2/6**; ½ gal., **4/9**; 1 gal., **8/6**.
From Seedsmen.
CORRY & CO., Ltd., Shad Thames, London, S

SEND FOR THESE BOOKS "ON APPROVAL"

These practical little books, by Mr. F. J. FLETCHER, F.R.H.S., will help every Gardener, whether working for pleasure or profit, to get the best results from his plants. They are issued at the uniform price of **2/6 each**

GLASSHOUSES AND THE PROPAGATION OF PLANTS

CONTENTS IN BRIEF.—The Nurseryman—Greenhouses—Propagation—Seedlings—Cuttings—Practical Cutting Making—Potting—Index.

SPECIAL GLASSHOUSE CROPS

CONTENTS IN BRIEF.—Tomatoes—Cucumbers—Melons—Grapes—Sweet Peas—Forcing Bulbs—"Lifted" Chrysanthemums—Catch Crops—Index.

ROSES FOR MARKET

CONTENTS IN BRIEF.—Some Business Considerations—Propagation by Cuttings—Stocks—Budding—Propagation by Grafting—Rose Cuttings under Glass—Roses in Pots—Roses Planted Under Glass—Things that Matter—Marketing—Index.

CARNATIONS AND PINKS

CONTENTS IN BRIEF.—The Perpetual Flowering Carnation—Propagation by Cuttings—Potting and Growing on—Summer Treatment—Enemies—Cutting and Packing the Flowers—Older Plants and Indoor Planting—Border Carnations—Raising Border Carnations from Seed—Layering—Planting or Potting?—Perpetual and other Border Carnations—Dianthus Allwoodii—Garden Pinks—Index.

CUT FLOWERS FOR MARKET

CONTENTS IN BRIEF.—Annuals—Biennials—Herbaceous—Roses (outdoor)—Carnations and Pinks—Chrysanthemums—Glasshouse Flowers—Bulbs—Asparagus Frond and Smilax, etc.

DECORATIVE PLANTS, TREES and SHRUBS

CONTENTS IN BRIEF.—Hedge Plants—Flowering Shrubs—Conifers—Window Box Evergreens—Hardy Climbers, etc.

EACH VOLUME DEMY 8vo. PRICE **2/6** net each. (Postage 2d. extra or 6d. for four.)

COUPON

ERNEST BENN, LTD.,
Bouverie House, Fleet Street, London, E.C. 4.

Date.....

SIRS,—
Please forward to my address ..... cop..... of .....
(*a*) on three days' free approval; or (*b*) for which I enclose .....

Name.....
Address .....
.....

("On approval" offer available in the United Kingdom and Ireland only.)

GARDENING ILLUSTRATED

486—Vol. XLVIII. OCTOBER 30, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

s, Espalier 661
ees, mice 661
er, the 659
he Novæ 659
a polyr- 650
a fenestrel- 650
a Moretti- 651
Dayana ... 654
aticus ... 651
CATTLEYAS AND THEIR CULTIVATION 653
Cyclamen persicum ... 657
CYMBIDIUMS, THE CULTIVATION OF 652
Cypripedium, the Long-tailed (C. caudatum) and its varieties 652
Dahlias, new 660
Brodium chamædryoides roseum 650
Exochorda macrantha 651
FLOWER, A REMARKABLE BLUE WINTER 649
Fruit garden: Seasonable hints 661
Fuchsia, the Californian (Zauschneria californica) 650
Gardens, lime for 662
Grasses, the Pampas (Gynerium) 650
Greenhouse in autumn, the 649
Haw, the Scarlet (Cratægus coccinea) 650
Hybrids from Rhododendron ponticum and the Indian species 662
Kew and the introduction of Para rubber to the East 660
Lilies, Belladonna, flowering well 651
Oncidium flexuosum 652
Orchids at Bouverie House 650
Orchids, cool 653
ORCHID SHOW, THE 654
Pelargoniums, Zonal 657
Penistemons 659
Plumbago Larpentæ 649
Primrose, Evening, the Missouri 650
ROLLING STEPS, THE 651
Saponaria officinalis fl.-pl- 650
Silene Schafta 660
Strawberry beds, manuring 661
"Sit down and travel!" 650
Sweet Peas, classification of (1927) 659
To our readers 649
Vallota purpurea planted out 650
Vanda Sanderiana 656
Vegetable soil, improving 661
Vitis Thunbergii (Fig-leaved Vine) 650
Wallflowers, protecting 656

The Greenhouse in Autumn

October marks a period when pro- n must be made for the more severe itions of winter. About now most mer-flowering subjects will be over, ooms are desired during the winter spring some renewals and altera- necessary. While it is the custom e with bulbous and winter-blooming those plants that have finished , the perennial sorts should not be . Such plants include Lilies, , and Tuberous Begonias, which ave water gradually withheld until ey are dried and stored away until ng. Fuchsias, too, need very little d can be placed under the staging sides for the winter. Cacti, and s generally, will do best if watered each month from now and until f February.

egard to the plants we rely on for a splay, these, of course, need different . Usually it is the plan to have nding in cold frames or th outdoors. Azaleas, Camellias, Chrysanthe- Perpetual Carnations, Cyclamens, etc., are I refer to. If they are dy in the greenhouse a hould be made at once, the pots clean before em inside. A little fire- w needed on cold nights lays, but nothing will be undue forcing. Open tors during every calm, eriod to allow excess to escape. A suitable re for heated houses is month is 50 degs. by 60 degs. during the Watering should be at- with extreme care or off will ensue. Allow become almost dry be- ing fresh supplies. and Camellias benefit ly from soot-water ad- twice weekly. Other ects for forcing include spectabilis, Astilbe flori- d Hoteia japonica. Pot place in cold frames ember, when they can t into heat.

HOUSES.—These have itations and are often air of their owners. care and foresight a number of bright flowers can be had throughout the winter. Those whose houses are unheated would be well advised to renew any badly-cracked panes of glass. This, and not slopping water over the staging and floor, go a long way towards creating a dry, healthy atmosphere. Use the top ventilators whenever possible to admit fresh air and allow moisture to escape; also water only when soil is on the dry side, taking care that none settles in the leaf axils. There are a number of fine bulbs suitable for cold houses, including Hyacinths, Narcissi, and Tulips generally, also Scillas, Crocuses, Chionodoxas, Snowdrops, Fritillarias, Irises (including Spanish and English), Muscaris, Erythroniums, and Ixias. Arum Lilies, Ranunculus, and Anemones are also suitable. I wonder if any readers have tried alpine plants for cold houses. These, when potted up, do wonderfully well and make a welcome addition to spring displays.

Space forbids a larger list of cold house plants, but there is an ample choice in hardy Primulas, various fine-foliaged plants, flowering shrubs, annuals, and perennials. L. D.

A winter-flowering greenhouse plant: Pycnostachys Dawei native of Uganda

The flowers are pure blue, borne in a compact globe crowned with a cone of unopened buds. It may be grown from cuttings or seed

NOTES OF THE WEEK

To our readers

WITHIN the last few weeks we have enrolled a great many new readers, more especially among professional gardeners and experienced amateurs in country districts. To our new readers we extend a hearty welcome, confident in the hope that we can make them regular readers. As the demand for this journal steadily increases it becomes more and more difficult to obtain GARDENING ILLUSTRATED on chance sales, and lately we have received several complaints from readers who have experienced this difficulty. To avoid disappointment readers should place a firm order with their newsagent for the regular delivery of GARDENING ILLUSTRATED each week.

A remarkable blue winter flower

The plant here illustrated, having the misfortune to bear the name Pycnostachys Dawei, is full of promise for winter flowers. It belongs to the same family as Coleus and bears some resemblance to the blue winter-flowering Coleus thyrsoideus. Blue flowers in the greenhouse are welcome, especially in the dull winter months, and these two plants should be much more widely grown than they are for conservatory and greenhouse decoration.

Plumbago Larpentæ

A first-rate plant for retaining walls and rocky places is this wiry Chinese Leadwort, which comes into bloom in late summer, reaching its greatest perfection late in September and all through the month of October. The leaves at that season develop a delightful purple tint, which enhances the mass of sky-blue flowers. A good-sized colony of this dwarf plant is always an attractive feature at this season, and, like most things of this kind, is best grown in that way, it being quite impossible to do it

justice when limiting it to a single plant such as we occasionally see in the foreground of herbaceous borders. We cannot all plant in large numbers, but where it can be done, not less than five plants should be used to form a group. It is one of the easiest plants to grow, flourishing alike both in sun and partial shade. It is certainly one of the most reliable and attractive alpine plants we possess during October and early November. Plants bear division well and may be so treated at any time between October and April; the present, however, is the best time. M. G. M.

Erodium chamædryoides roseum

This charming Heron's Bill is rarely out of bloom, and at the beginning of October the plants were freely sprinkled with flowers, this growth being due to the cooler and moister nights, I suppose, the foliage showing a refreshing activity and the plant spreading freely. This plant forms low mats of little leaves quite interesting in themselves, but when freely sprinkled with prettily-striped rose flowers, as at the moment of writing, it becomes one of the most interesting of autumn-flowering alpine plants. It is easily increased by division of the roots, and the present is a good time for making fresh plantations. E. M.

The Californian Fuchsia (Zauschneria californica)

Retaining walls from 4 feet to 5 feet in height have been ablaze with this brilliant flower for the past three months. So abundantly are the spikes of scarlet flowers produced that the face of the walls appears veiled in bloom and remarkably effective. I know no better plant for garnishing walls of this kind, as its wiry roots invade every little crevice, and display their flowery sprays so freely as to clothe the whole wall-face. It requires little or no care over quite a succession of years. It repays for massing, and even where but a few are grown they should be kept together, never dotted about. The present is a good time to plant, as the roots then gain a little activity before the soil loses its warmth. Although a warm soil is an advantage it does quite well in ordinary garden loam. As the woolly-leaved kind rarely blooms satisfactorily in this country, intending planters should make sure of securing the true form here described. M. G. M.

The Scarlet Haw (Cratægus coccinea)

When laden with its large trusses of bright red fruits this is a very attractive and imposing tree, and such it has been this year with me, a group of three or four, averaging 20 feet to 25 feet in height, being very beautiful with their crop of pendulous bunches of fruit. The bunches are several inches across, each individual fruit measuring ½ inch in diameter. It is also a very handsome tree in May, when covered with its white corymbs of flowers, the latter nearly an inch across. Such a lovely tree always attracts attention and is a very desirable subject to have, either as a lawn specimen or in a group. It is a native of North America, and allied to it are several interesting and varied forms, remarkable alike for their large thorns and fruits. M. G. M.

Vitis Thunbergii (Fig-leaved Vine)

The leaves of this Vine are now colouring freely and are interesting as having been confused with the handsome and largest-leaved form of Vitis Coignetiæ, which has leaves a foot or more across. Growing upon a south-west wall, its deeply-lobed leaves assume quite a medley of pretty tints, which are not, however, very conspicuous, being yellow and brown, with just a splash of crimson on well-exposed leaves, the largest of which are from 5 inches to 6 inches across. Growth is quite free with me, but of a more slender nature than in the majority of Japanese Vines. E. MARKHAM.

Sussex.

Campanula fenestrellata

A fine autumn bloomer is this dwarf Harebell, which is now (late October) quite gay with its starry violet-blue flowers. The plants were well clothed with bloom early in the year. After a few months' rest another crop appears to brighten the later months of the year. SUSSEX.

The Pampas Grasses (Gynerium)

These noble Grasses have surpassed themselves this year in the height of their graceful plumes. Especially does this apply to the choice and rather uncommon pink kind known as G. Rendatleri, which is grown here in quantity. Scores of its handsome pink plumes are now in the heyday of their beauty and provide a feature of great interest as they are tossed to and fro on their 12 feet arching stems. Although the most striking group of these plants occupies a high and exposed position it is advisable to provide some kind of shelter for such tall and stately subjects, otherwise they are damaged by stormy weather, and many of the plumes, after having been soaked, prove too heavy for the stems to carry. Another very lovely silvery Pampas Grass grown here is that known as G. a. Sunningdale Silver. It is of excellent constitution and furnishes annually immense, loose, silvery plumes of great beauty on stems from 8 feet to 9 feet in height, a little forest of these stately plumes appearing from a single plant. G. a. pumilum is yet another distinct and charming Pampas Grass which does not exceed 6 feet in height with me. Its plumes stand erect and in some respects resemble a fox's brush. They are creamy-white and borne very freely. I find th useful, when planting large group working into the foreground of taller I use Michaelmas Daisies among the thus I get a charming effect.

Sussex. E. MARK

The Missouri Evening Primrose

The dwarfer Œnotheras or Evening roses usually appeal to the gardener able subjects for the front of the bo for the rock garden. It is a pity tha of them are disposed to disappear af short a life, but in Œ. missouriensis macrocarpa we have one which app defy the vagaries and hardships of o ters if planted in dry, well-drained s may not have the charms of the lov cæspitosa or Œ. eximia, but it has a of its own, and, while some of the oth coy beauties, this responds well to our tion and gives us its pleasing yellow for a long time each summer and a If it were erect it would be a border than a rock garden plant, but it is pr and can be utilised either to hang o stones or banks and show to the full it yellow blooms. It can be easily raise seeds or increased by root cuttings.

S. ARN

Orchids at Bouverie House

The greenhouse on the roof of o offices in Fleet Street is a constant so pleasure and interest. At the prese the following Orchids are in flo Cattleya Mantinii nobilior, Oncidi curvum, O. flexuosum, Cypripedium ianum, C. barbatum, and Odonto crispum. We are indebted to the k of Mr. A. T. Sutton, Hassocks, Suss collection of easily-grown Orchids wh flourishing in the warm greenhouse roof.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Calceolaria polyrrhiza

I AM sorry that Mr. Blair (p. 609) finds this little Slipperwort so troublesome. In my case the rockwork where it was grown was permeated by the roots of shrubs and was always comparatively dry. It loves moisture, and was highly recommended for the bog by the late Mr. Reginald Farrer. He spoke of it forming large mats in the bog, and concluded by calling it an "indispensable and indestructible charmer." But Mr. Blair's warning undoubtedly suggests caution. In places where C. polyrrhiza seems to run riot it may be necessary to box it in by stones, as some other plants require. I have not found this necessary, and regret that Mr. Blair, whose knowledge of plants is so good, should have a different experience from my own. I once saw it growing freely in loam in the late Mr. Farrer's Craven Nursery.

S. ARNOTT.

Vallota purpurea planted out

Fine specimens of this plant can be grown in pots, but to see it to perfection it should be planted out in the flower garden. I have had one small bed for some years containing a dozen or more fine clumps of bulbs. Last March I decided to increase the plants, so lifted the lot and carefully separated each clump into three or four parts. There were enough to plant two fair-sized beds made up of a compost of two parts loam, one part decayed manure, and the remaining part leaf-soil and coarse sand. When planting, sand was placed round each plant and the bulbs covered with the above compost to the depth of 2 inches, the beds being finished off slight covering of sand on the surfac result has astonished everyone, for tho have been a blaze of bloom for some between 80 and 90 perfect heads of being produced. The foliage is als ornamental, being of an intense darl colour. The plants die down to the in November, when a light layer of I is put on for the winter.

North Devon.

Saponaria officinalis fl.-pl.

I quite agree with "C. P.," issue 23rd, page 637, that Saponaria off fl.-pl. is much superior to the old fo was to this form that my note was i to apply. It is one of the most beauti one of the most free-flowering Saponarias. It throws up a large nu erect shoots, flowers freely, 30 to 4 spreading cluster. The plant loves light loam, but where a place has to pared for it, it is advisable to add ph leaf-soil. The rootstock is thick and and it spreads slowly by under shoots. In a somewhat shaded pos attains the greatest size and beauty, it thrives well in exposed borders, and increased by division when the pla down in autumn. H. STE

"Sit down and travel"

In his interesting notes on "Sit Do Travel," I see Mr. Hay mentions panula found on Crusoe Isle. Poss the isolated spot memorable for M kirk's solitude, but hardly where

Crusoe was wrecked, for if my serves me rightly we read when the is caught in the last storm it was away from the Amazon to the f the Orinoco, and plant life on any that latitude would naturally be very from that on Juan Fernandez. Any-connection with the location of plant an interesting study, and in these hen partial failure of sight has re-ading and writing to a minimum, I ink of the many different wild plants e come under my notice in many our own land, and conjecture as to first found their way to the different Not far from where I write, for in-here is a bank sloping from the road r some 50 yards by 2 yards is simply with Tussilago fragrans (the Winter pe), and I know of no other plant of in a very wide area. E. BURRELL.

Campanula Morettiana

ve Mr. T. Ashton Lofthouse is right says that he thinks that Campanula na is not offered at the present time atalogue in this country. I am glad at I last year received a couple of this extremely rare species and it for the first time this year. It is dsome and quite unlike any other la that I have ever seen, with its olet bells like those of C. porten-a, but larger and more brilliant, on erect stems. I hope now, having to secure the true plant, to be able up gradually a stock of Campanula na, so that it may once again estab-in English rock gardens.

hlaspi limosellæfolium which Mr. e mentions is a plant which I col-d grew many years ago. It is in the neighbourhood of Valderi in time Alps, and also just across the s at the Boreon. It is very near otundifolium, but my recollection is mything I like it more even than ious Alpine.

ummulariæfolia, although it grows eighbourhood of Thlaspi limosellæ-I have neither seen nor collected.

The long Cypress hedge

What I liked best about Farrer's description of it in his catalogue were the words that Mr. Lofthouse quotes: "Beyond praise or price," and if I remember rightly the price beyond which it was, but at which he offered it, was 7s. 6d. CLARENCE ELLIOTT.

Stevenage.

The rolling steps

FOR hedge-trimming, Apple-picking, and others of the various garden jobs that require a step-ladder, we find the contrivance illustrated of much use. The range of six steps was bought at a sale with other items, and it occurred to the buyer to have it made up as shown. It is a long job to clip 400 feet of Cypress hedge with the hand-shears, and the operator, standing on the ground, cannot reach above a certain height; and though a new invention seems likely to supersede this tedious labour there will still be heights requiring some such thing as the rolling steps. The way it is made is clearly shown in the picture. Low iron wheels have straps bolting their axles to the back legs. The handles are bolted both to the steps and the legs, and, with the side piece at the top, give strength and perfect rigidity. The top step is made wider to form a convenient platform for standing. It is a handy thing, in pretty constant use. G. J.

The rolling steps

Coleus sylvaticus

Coleus sylvaticus Guercke, here flowering in mid-October, is little known outside Botanic Gardens. Though this Coleus is decidedly only half-hardy, it is of more than botanical interest. I do claim for it quite exceptional merits consisting in its colour, and foremost in a "manageableness" fully as striking as that of its South African compatriot, Plectranthus, recently presented in your correspondence columns. Everybody associates the generic name Coleus with greenhouse plants, well known for the infinite and somewhat whimsical variation of the colour scheme of their mottled leaves. The insignificant flowers are usually nipped off in order to encourage a continuation in the development of the large leaves. The species C. sylvaticus is, instead, a real alpine from the mountain glades in the highlands north of the Cape. Its most important feature is that it thrives among our alpines, and, besides, is excellently suited to the shady part of a rock garden.

The plant has a charm of its own, consisting in the contrast of the bright leaves against the dark purple stems and leaf-stalks, also in the sky-blue of the flower-spikes in late summer and the autumn. One cannot imagine greater easiness of cultivation. If you keep a root or two unharmed by frost during the winter and gather the first sprouts appearing indoors in March you will, even after a dry summer as our last one, have a display of sturdy growth, and in most parts of Britain many more flowers than the aftergrowth of small cuttings put into sandy soil in April.

HENRY B. GOODWIN, F.R.H.S.

Airedale, Saltsjöbaden.

Belladonna Lilies flowering well

The Belladonna Lilies which I have had in my garden some years have never before bloomed so profusely as they have this autumn. There were 11 spikes of flowers from four bulbs. I am left wondering as to the reason of the flowering, as I have done nothing, to my knowledge, to encourage it this year more than any previous year. At the foot of the Belladonna Lilies is a mass of purple Colchicums.

"IN A HAMPSHIRE GARDEN."

Exochorda macrantha

Can any reason be given for this shrub failing to flower? I have had it now 13 years. It is planted in full sun, is now some 12 feet high, and quite a large bush and perfectly healthy, but I can only recall its having flowered—very sparingly—on one occasion.

Bagley Wood, Oxford. R. SPENDER.

PRESENT DAY ORCHIDS

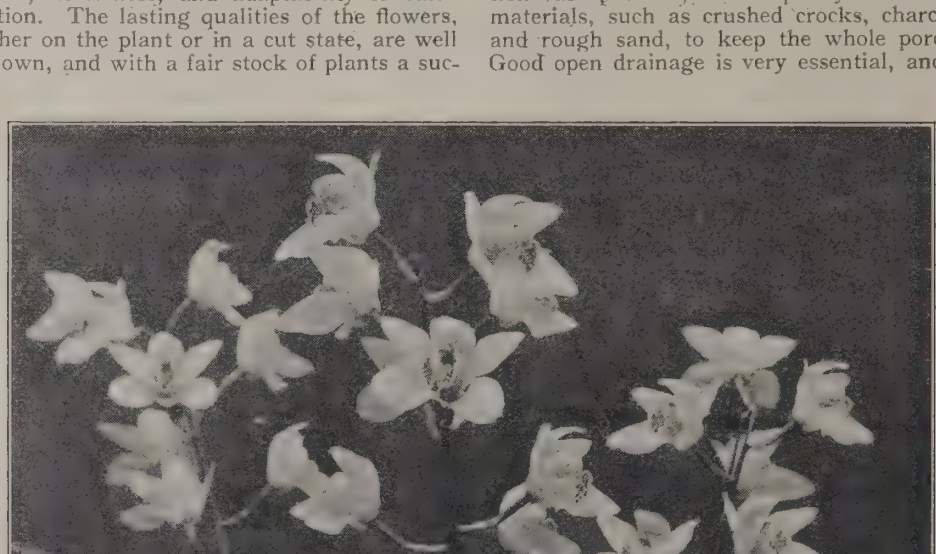
The cultivation of Cymbidiums

By H. G. ALEXANDER, Westonbirt Gardens, Member of the Orchid Committee of the Royal Horticultural Society.

Cymbidiums are, for the most part, strong growing plants, having thick, fleshy roots, and at this season when making up their pseudo-bulbs, a fairly liberal supply of water at the roots is needed, but at all times they should be treated as ordinary greenhouse plants, always allowing them to dry out before giving the roots a further supply of moisture

THE splendid new Cymbidium hybrids are immensely popular Orchids and hold a foremost position on account of their grace, usefulness, and adaptability to cultivation. The lasting qualities of the flowers, either on the plant or in a cut state, are well known, and with a fair stock of plants a succession of bloom may be maintained from Christmas to the end of April. For the beginner there is no better group with which to commence Orchid cultivation, and the cost of growing these plants is no greater, and often less, than the cost of growing the majority of plants needing glass protection, nor, unless unique kinds are desired, is the initial cost of the plants a serious matter. These terrestrial plants are usually found growing at considerable elevations, hence they are, for Orchids, comparatively hardy and cool-growing under cultivation. Cool-growing, however, does not mean a cold, damp atmosphere; far from it, it simply means that the plants may be grown without artificial heat, except in bad weather in winter. The writer has had experience of these Orchids in houses when the temperature has dropped almost to freezing point, and no harm has come to the plants, but at times of such low temperature the plants and the atmosphere must be comparatively dry. One would not advise such a low temperature; 45 degs. minimum in winter is a reasonable and safer figure. The growing of Cymbidiums under heavy shade and treated as bog plants is a very erroneous practice, resulting in deceptive growth. Sunlight and sun warmth are just as important factors in maintaining the general health of these Orchids, and to ensure satisfactory flowering, as in the successful cultivation of the majority of flowering plants, full exposure to sunshine, of course, is not advisable during the summer months, but the aim should be at all seasons to allow the plants as much light as possible without risk of injuring the foliage.

The repotting of Cymbidiums is not required annually, and it is a mistake to disturb plants that are well established in good materials and in pots of sufficient size for further development of growth, as root-bound plants produce the best flower-spikes. These Orchids require a strong soil to grow in, and this should consist chiefly of good turfy, heavy loam, used in as lumpy a condition as possible, with plenty of rough materials, such as crushed crocks, charcoal, and rough sand, to keep the whole porous. Good open drainage is very essential, and in the process of potting the soil should be made firm about the roots. Over-potting should always be avoided, as the plants are more easily managed in the matter of watering, and they flower better when the roots are confined to a moderate amount of rooting material. No manures of any kind should be given these plants, as excellent results may be obtained and the general health of them better maintained without them.



One of the noted Westonbirt Cymbidiums

The Long-tailed Cypripedium (C. caudatum) and its varieties

Cypripedium caudatum is one of the most attractive and curious plants in the whole family. The spikes that are produced on strong healthy plants are generally about 20 inches in length, and they sometimes send out four flowers, but it is more usual to see them with two or three. The individual blooms are large and handsome, sepals being of a pale yellowish colour, with longitudinal deep green lines, and sometimes tinged with rose. The lip is brownish-green, heavily suffused with greenish-purple. Around the aperture it is of ivory whiteness enriched with rich purple markings. The petals are the most striking parts of the flower, ar remarkable for the great length they when fully developed. It is curious interesting to notice that when the fl buds first open the petals are very longer than the sepals, but they gra continue to grow until they attain a l of from 20 inches to 30 inches. These petals are pendulous and have a ribbo appearance. This beautiful Cypripedi a native of the Peruvian Andes. I introduced to horticulture by William in 1847, and first flowered in the once brated collection of Mrs. Lawrence at I Park in 1850.

The delicately-coloured variety Wallis discovered by Wallis about the year 187 caudatum roseum is a brighter-col variety than the normal type, otherwi form and dimensions are identical. desirable kinds are C. caudatum Warsce C. caudatum Luxembourg Variety, a caudatum Lindeni, generally know Uropedium Lindeni. The principal c teristic of the last-named species is th flower is without the ordinary pouch c Cypripedium caudatum is found in its habitat at from 5,000 feet to 7,000 feet tion, growing on rocks in decayed veg matter, sometimes in shade and some fully exposed to the sun's rays. The of temperature in the locality men during the daytime is very considerable meet the requirements of the plant i respect no better place than a light po in an ordinary cool, intermediate tem ture could be found at this season, but c the heat of summer the Odontoglo house is the most suitable place for it. are cultivators who find C. caudatun its varieties rather more difficult to m than most Cypripediums, but if proper tion be given and a suitable atmos afforded the plant will grow freely and profusely. The plants should be grov pots of moderate size, which must be and well drained. In potting keep the of the foliage about on a level with th of the pot, and use three parts fibrous p one of Sphagnum Moss for the plant t into. This species and its varieties need dance of moisture both at the root and atmosphere, but great care should be cised at all times to prevent water lodg the centre of the growths or in the ax the leaves, as they are liable to decay this cause. When in bloom it is desira elevate the plant well above the folia other species that are growing near that its curious long tails may be seen best advantage.

Oncidium flexuosum

This pretty Oncidium was adm shown at the recent Orchid Show. almost always in flower, and the gra racemes of bright yellow blossoms are more useful or welcome than now. long yellow-flowered sprays are capit any kind of decoration, either as cut fl or on the plant, making up nicely for and dress sprays, and very serviceab épergnes and other contrivances for h flowers. If the spikes are cut off ab inches from the bottom I find they i again, and frequently give some useful sprays. O. flexuosum does well in an mediate-house in three parts of Spha Moss to one of peat. Pots are bette ceptacles for the plants than baskets, as show off the flowers to greater advant

O.

A fine plant of Lælio-Cattleya Aphrodite, for which Mr. E. R. Ashton gained the Cultural Certificate of the Royal Horticultural Society

attleyas and Their Cultivation

By E. R. ASHTON, winner of the cup for six Orchids shown by an amateur at the recent Orchid Show of the Royal Horticultural Society

proposition is advanced, founded on tical experience, that, given reason- treatment, the Cattleya section of will best repay the efforts of the without much experience of their on. The thick fleshy leaves and ulbs possess a power of endurance ıperation that is denied to the thin- ecies, and it is an admitted fact that, ection be inadvertently subjected to ıly low temperature, the Cattleyas er less permanent injury than many ol house species. Where difficulties with in their cultivation the fault will e found in the method of watering want of sufficient repotting. To keep ost in a constantly saturated condi- ls to sourness and destroys the roots. tain a sound sweet condition of the it is essential to dry out the centre lant before applying further mois- need for which will be indicated by appearance of the Moss on the sur- ithout laying down a hard-and-fast horough watering should be given week to all plants not at rest, but and quite small plants will require nore frequent attention. During ll plants at rest where roots and ıre inactive, will benefit by greatly supplies of moisture. As a guide to uirements in winter the appearance af and pseudo-bulb should be fol- In a sound healthy plant no water is if no signs of shrivelling are ap- which, in the case of large plants, ı be for a month or more. It is im- however, to distinguish between the ivelling of the healthy plant due to water, from which it quickly re- covers, and even benefits, and the shrivelling of the unhealthy plant from a wet, sour compost and consequent loss of roots. In the important matter of potting, the aim should be to anticipate the wants of a plant and not wait till it has got into a bad condition. Should this occur it usually takes two years to fully recover, by which time it will again require repotting, and the plant will rarely be at its best. As soon as possible after flowering, when a bunch of young green roots appears at the base of the last new growth, is the ideal condition to choose, but with the many modern hybrids of complex parentage many exceptions to the rule will occur. A drastic removal of the old leafless bulbs is imperative, leaving about three behind the young growth. In removing these a greater part of the ball of some decayed compost will come away, to the great advantage of the plants. A small pot of a size to allow of one, or at most two, new growths should be chosen, and a clean hard Osmunda or A1 fibre used. For the large plants little or no Sphagnum Moss should be used, but a few pieces may be added to the surface as a guide to watering. An important part in the routine of cultivation is the periodical overhaul of the collection. This should be undertaken at least twice a year, and preferably more often. Remove one or two rows from one end of the house and carefully examine each plant, and move it on to the vacant space, arranging them in rows to facilitate damping between the pots by hose or syringe. Some in the back rows may have been somewhat overlooked and may require repotting. Examine carefully for scale, and renew stakes and ties where necessary. A somewhat drastic process I have lately seen adopted with advantage is to cut off all roots that appear outside the pots, causing the remaining portion to break into growth again and enter the compost, this conducing to hard sound growth with substance and good colour in the blooms.

Cool Orchids

I am putting up a small lean-to, facing north-east by north, and I propose to grow therein cool Orchids. It will not be ready much before April. What Orchids would you recommend me to start with then? And if this is a bad time to make a start, when would you recommend me to commence?

O. C.

[You should commence purchasing plants immediately your house is completed and ready to receive them. We would confidently advise you to buy such species as Odontoglossum crispum (in quantity), O. triumphans, O. luteo-purpureum, O. Halli, O. cirrhosum, O. Pescatorei, and some Odontiodas now grown by all the leading Orchid growers. There will be an article on cool house Orchids next week which you would do well to read carefully. Odontoglossums are the most satisfactory of all Orchids for a cool house. Other Odontoglossums which, although belonging to the same genus, are quite distinct in habit from those already mentioned are O. Uro-Skinneri, O. pulchellum, O. nebulosum, O. madrense, O. Harryanum, and O. Edwardi. All of the species here enumerated grow thoroughly well in pots, yet it is always advisable to make as much use of house room as possible by suspending some from the rafters of the roof. For this purpose the following varieties are suitable:—O. Rossi, O. Cervantesi, O. Hunneanum, O. aspersum, O. Œrstedi, Sophronitis grandiflora, Mesospinidium vulcanicum, and Cochlioda Noetzliana. These latter are small-growing species, and for which shallow pans are preferable.]

THE ORCHID SHOW

LET no one imagine that Orchids are going out of favour. The fact is they are coming into favour and are becoming more popular than ever. Moreover, they are becoming increasingly beautiful, since great progress is being made by the hybridist. New hybrids are being brought to light that are a great advance on existing species and varieties. Within the last 10 years Orchids have probably made greater strides towards improvement in colour and form than any other flower in cultivation. Orchids were unusually well shown at Vincent Square on October 19th and 20th.

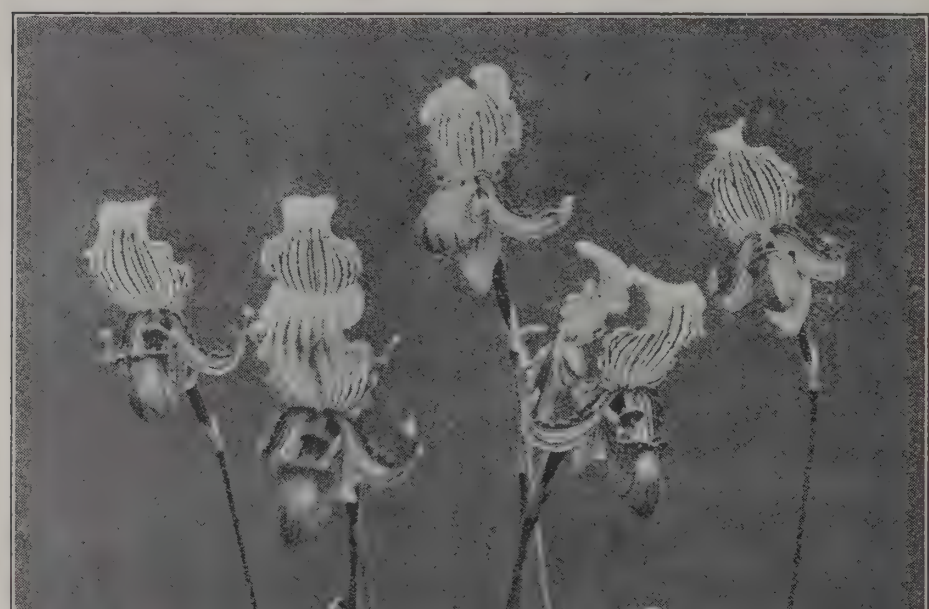
AMATEURS' GROUPS.

Mr. R. Gerrish (gardener, Mr. W. Sorrell), The Manor, Milford, Salisbury, won the Schröder Cup for the finest exhibit by an amateur. This magnificent group, well illustrated on the page opposite, contained splendid specimens of Odontoglossums, Odontiodas, also Cattleya Fabia, C. amabilis superba, C. Peetersii, Lælio-Cattleya Queen Mary, and the rich crimson-purple L.-C. Minos var. rubra, which gained an Award of Merit. It was a highly meritorious collection.

Mr. H. T. Pitt, Stamford Hill, was placed second in competition for the Schröder Cup with a well-arranged group of beautifully-flowered Cattleyas, Brasso-Cattleyas, Cypripediums, and other well-grown specimens, including the gorgeously-coloured Lælio-Cattleya Zeno, which gained an Award of Merit. Finely-grown specimens of Cattleya Peetersii, Cirrhopetalum Rothschildianum, and Odontoglossum Thaisa were noted.

Mr. J. J. Joicey (gardener, Mr. J. McKay), The Hill, Witley, was the only competitor for the challenge cup offered for amateurs' exhibits on a space not exceeding 60 square feet. It was a splendid collection, containing many well-grown specimens of Cypripedium Fairieanum, one of which is illustrated on this page. This group also contained the highly-coloured Dendrobium Phalænopsis, Lælio-Cattleya Linda and its variety splendens, and the golden L.-C. Witleyensis.

Mr. E. R. Ashton (gardener, Mr. C. V. Kent), of Broadlands, Camden Park, Tunbridge Wells, who contributes an article this week on the cultivation of Cattleyas, gained the trophy in the class for six Orchids shown by an amateur. This exhibit included a grand specimen of Sophro-Lælio-Cattleya Anzac Broadlands Variety, for which a cultural commendation was awarded.



A plant of the long-lost Cypripedium Fairieanum with seven flowers, shown by Mr. J. J. Joicey

Sir Jeremiah Colman, Bart., sent from Gatton Park, Reigate (gardener, Mr. J. Collier), a non-competitive group containing superb examples of Brasso-Lælio-Cattleya Antoinette Gatton Park Variety, Cattleya Browniæ Gatton Park Variety, and Cypripedium Maudiæ.

Baron Bruno Schröder gained a First-class Certificate for Brasso-Lælio-Cattleya Ambersolis and an Award of Merit for B.-L.-C. Salta, two brilliant and remarkably fine novelties from The Dell collection at Englefield Green.

TRADE GROUPS.

Among the trade groups of Orchids were two of outstanding merit, viz., those shown by Messrs. Charlesworth and Co. and Messrs. Sanders. Both were awarded the Williams' Memorial Medal in gold, a very high honour that was well deserved in both cases. T magnificent Brasso-Lælio-Cattleya Ne shown by Messrs. Charlesworth form subject of an illustration on page 657. remarkable for its very broad, overla petals, noble proportions, and rich cr colour of the frilled lip. The central m of the golden-coloured spikes of Onc varicosum Rogersii were most conspi In the group Miltonias and Dendro were also well displayed.

The rare and beautiful Vanda Sand (see page 656) was the centre of admirat Messrs. Sanders' group, which con well-grown specimens of Odontogl grande, Dendrobium Phalænopsis, nun Cypripediums, including the shapely which gained an Award of Merit, and Cattleyas in profusion.

Messrs. Stuart Low and Co., who been showing Orchids consistently thr out the year, were represented by a bri and well-grown collection of Catty Vanda cœrulea, Cymbidiums, Oncid and Phalænopsis. They also secure Award of Merit for a rosy-mauve Onc glossum Dusky Prince.

Messrs. J. Cypher and Sons had a interesting and varied collection of C pediums. The variety Ballet Girl, sec for illustration, is remarkable for its white dorsal and ventral sepals. In Cypripediums the ventral sepal is gree in Ballet Girl there is only a faint flu green in the centre, or on one side Other varieties well shown were E Shrubbery Variety, Queen of the Bel and Hannibal

Messrs. Cowan and Co. showed won Cattleyas and Lælio-Cattleyas in a bold, well-arranged group that was re able for its high cultural excellence. A the best were Lælio-Cattleya St. G var. Rex, which forms the subject of illustration. This plant carried four fl remarkable for the rich velvet-crimson lip and the deep golden throat; pare L.-C. St. Gothard x C. Fabia. This n group contained fine specimens of Cal Peetersii alba, C. Princess Royal var. chantress, and many prominent C pediums, including Burfordiæ and Hood.

Messrs. Sutton Bros. showed an int ing group of easily-grown Orchids in we noted Cattleya Mantinii nobilio Fabiana carrying large trusses, the l yellow Lælio-Cattleya Litana, Onci incurvum, Cypripedium barbatum, Harrisianum, C. St. Albans, and Onc glossum crispum. Mr. Sutton contribu article full of helpful suggestions on O for the amateurs' cold greenhouse i next issue.

Mr. Harry Dixon had a small but group of Odontiodas, Cypripedium i Sanderæ, Sophronitis, and Masdevallia

H.

Cœlogyne Dayana

A number of Cœlogynes produce pend racemes often 2 feet or 3 feet in length when suspended from the roof they pre pretty sight. In addition to the one above are C. Massangeana, C. Swa and C. tomentosa, all of which requi same treatment and can be grown wi greatest ease. C. Dayana, which flo for the first time in June, 1884, is fou its native habitat (N. Borneo) growing branches of large trees near the coast, it is very hot. The individual flowers a large, the ochre-yellow sepals and pet off with a white lip striped with chol

well arranged group shown by Mr. R. Gerrish, Salisbury, awarded the Schroder Cup for the finest exhibit by an amateur

Lælio-Cattleya St. George var. Rex

A grand form with rich, deep velvety crimson lip, shown by Messrs. Cowan and Co.

and brown. During the growing season a warm, humid atmosphere is needed, and the soil must be kept moist. Teak-wood baskets or pans are the best receptacles, and these should be well drained. Repotting must be carried out a few weeks after the scapes are removed, and the rooting medium should consist of Osmunda fibre or any similar material with a moderate sprinkling of Sphagnum Moss. Where such a compost is employed, the plants will continue in good health for several years without further disturbance.

Vanda Sanderiana

DISCOVERED by M. Roebelin in 1881 when collecting for Mr. Sander in the Philippines, this species still remains the outstanding member of the genus. The flowers cannot be compared with those of any other known Vanda. The habit is not unlike that of the well-known Vanda suavis, but the stems apparently never attain the height of that species. The leaves are set more closely together and are strongly curved; the flower-spikes are erect or semi-erect and carry nine or more large flowers over 3 inches in horizontal diameter and over 4 inches vertically, set closely together. The colouring, though not intense, is yet rich, but so wonderfully blended as to render description difficult. The broad, flat upper sepal and petals are white suffused with rose or pink-rose, accentuated by a few deeper crimson spots basally. The still larger lateral sepals have the same ground colour, deeper in tint, almost hidden by a suffusion of tawny-red with diffused veins and reticulations of deeper red and crimson, while particularly on their basal portions are tints of green. The lip, rounded in outline, is small in proportion to the sepals and petals, but is both curious and remarkable in structure. The short spur common to Vandas is suppressed, the basal half is concave, dull tawny-yellow streaked with red, the front half nondescript tint. It can better be described, perhaps, as a brownish-purple with a suspicion of green and red. The prominent ridges are apparent centrally and the whole organ is very fleshy.

In colour the species exhibits much variation. The form exhibited by Messrs. Sanders on Tuesday, October 19th, had a much whiter ground colour than usual, so that, by contrast, the coloured portions of the flowers appeared brighter.

As far back as 1883 the late Mr. Lee received a First-class Certificate for a plant, and in 1905 the Earl of Tankerville was given a similar award for a form known as the Chillingham variety.

Several splendid specimens have been known, notably one in the possession of the late Mr. J. Gurney Fowler, which had six or more spikes.

Unfortunately, the plants are not good travellers, and in the early eighties, when the species was comparatively easy to procure, great numbers were lost on the voyage home. To-day, when its cultural requirements are better understood, the species seems difficult to obtain in quantity, and, consequently, is seldom seen in exhibitions.

Given the requisite heat its culture is not really difficult. It enjoys a moist, warm atmosphere with a temperature of never less than 65 degs. to 70 degs. Fahr. The compost should be the same as that given Vanda suavis, but as the roots are particularly long and vigorous no effort should be made to confine them, and a Teak wood basket is preferable as a receptacle to a pot. Like most warmth-loving plants, it is very impatient of draughts, and to avoid these and yet give the plants their maximum of air they are better suspended from the roof, as both roots and leaves seem to revel in a moist, buoyant, but warm atmosphere.

Shading is necessary during strong sunlight, and, properly adjusted, the temperature may be considerably increased by sun-heat during the summer months. In winter the plants must be carefully watered, never allowing the compost to become stagnant.

E. COOPER.

FERNS

Treatment of young Ferns

STORE pots of seedling Ferns in their various stages of development will now require careful watching, as if allowed to form too dense a mass they are apt to fall a prey to damp, on the first appearance of which the young plants should be pricked off into other pots. Early in the year is the best time for sowing, the young Ferns being in a much better position to stand the winter than if sown later. Before sowing prepare some 6-inch pots by filling them to within 2 inches of the top with broken crocks, over which place a layer of fibrous peat, then fill up with soil consisting of equal parts peat and loam, with a slight admixture of sand, the whole being sifted through a sieve with ½-inch mesh and pressed moderately firm. Many sow on very rough soil, but in that case some difficulty is experienced when it becomes necessary to prick them off; therefore, fine soil will be found most suitable. The spores grow most readily on peat alone, but in that case they are liable to be overgrown by confervæ, which on loam are not so troublesome. All things considered, a mixture of the two is perhaps best. After the pots are filled give them a good watering, or rather water them several times with a fine rose till they are thoroughly soaked, then sow the spores. A good plan is to take a frond of each Fern in which the spore cases are just commencing to open, and lay it in a piece of clean white paper a few days before it is wanted. The spores when ripe will fall out, and the paper being white they will be readily recognised. The sowing should be done apart from the fernery, as Fern spores are always floating in the atmosphere and a mixture would be the result. To prevent this, care must be taken to thoroughly wipe the hands after each kind is sown, and no more pots should be brought forward at a time than are wanted for the one sort. Sprinkle the spores as lightly as possible on the wet surface of the soil and place them in a close case, or a pane of glass may be laid on the top of the pot. They should then be kept always moist, and when water is needed it should be either sprinkled with a fine rose or the pots may be placed about half their depth in a pan of water, which will percolate through the whole mass and give all a good soaking. This latter mode is to be preferred, as there is no danger of displacing the spores.

PRICKING OFF.—In about a month the surface of the soil will be quite green with the growing spores. When that is the case they must be carefully watched, and if they commence to damp they must be at once pricked off, an operation which is best done in the following manner:—Prepare some pots as for sowing, except that the soil should be put in them very lightly; then with a pointed stick take a mass about the size of the end of a lead pencil of the growing spores and place on the surface of the soil; then press it lightly with the finger, and so continue till the pot is full, when it may be watered and returned to the case. They will require dividing and pricking off three or four times before they are ready for potting, and in that case large numbers of plants are obtained from a single pot. The above remarks regarding the season of sowing only apply to the evergreen kinds; the deciduous sorts should be sown when the spores are ripe, but the treatment required is the same in both cases. It is, however, absolutely necessary to sow the spores as as they are ripe; many kinds will keep months and even years, but on the other some lose their vitality in a very short tin

Protecting Wallflowers

How to keep Wallflowers safe fr the effects of severe frost and boisterou cutting winds.

AMONGST our popular plants for s bedding there are few, if any, that greater favourites or that more quently disappoint us than the well-kn Wallflower. This is for the most brought about by full exposure to se frost and strong, cutting winds from north, east, and north-east, and should latter greatly prevail after severe frost, t plants are frequently totally destro leaving a sad blank in the spring dis and it is almost impossible to find a suit substitute for their soft, pleasing colours delightful fragrance. The object of article is to show how this can be avo and to have an abundance of stiff, st plants annually. From very long experi I am convinced that it is a mistake to them into their flowering position during autumn or early winter months. Freque too, these plants are allowed to stand thick together throughout the summer, s to become much drawn, and the sudden c they receive in being transplanted at ungenial season causes them to shed muc their foliage, and are thus in a very bad dition to resist the effects of a severe win

I can, with confidence, recommend the lowing method:—Sow the seed about second or third week in April on light soil not overrich from manure. When seedlings are 3 inches high, and before are in the least drawn up by being too t prick them out into beds from 5 inche 6 inches apart each way, the beds to be 4 feet to 5 feet wide, and length in propo to number of plants required. Let the be marked out and the top spit be dug clearing out the loose soil, and leave bottom of the trench smooth and firm; sp a little partly-decayed manure or leaf-m on the firm bottom, then return abo inches or 7 inches of the best soil that taken out of the bed, make firm, and out as above. Keep the plants perfectly from weeds, and water in dry weather ciently to keep them healthy. If the pl are desired to be very dwarf and bushy soon as their side branches are 5 inche 6 inches in length pinch out the point of This will cause them to be very dwarf compact, but, perhaps, at some little sac of length of spikes and size of indivi flower. Previous to frost setting in, rough wood frame be formed round the about 12 inches or 15 inches high. This be simply and economically done by dri in some strong flat-sided stakes at inte and nailing the boards to them; then across the top of the frame some rough from 6 inches apart, and the frame is plete. During sharp frosts and cold, wi ing winds the frame should be covered old mats, rough canvas, with some bundles of straw or long stable litter. pose the plants fully whenever the weath favourable. About the second or third in March, if the weather is favourable, plants may be carefully lifted and plante the beds or borders, where they will, if good strain, produce a charming effect. frame or pit, when the Wallflowers are moved, will be found most valuable bedding plants generally that may re slight protection during the hardenin process until again required for the W flowers.

P. W.

Cypripedium Ballet Girl
The white sepals are very remarkable. Shown by Messrs. James Cypher and Sons

Brasso-Lælio-Cattleya Neptune
Note the very broad petals. Shown by Messrs. Charlesworth and Co.

Zonal Pelargoniums

: valuable and showy plants wil n their popularity for many years. are equally welcome in the large n during the summer and in the house, while many a cottage win- contains specimens of which many ners might reasonably feel proud

bedding, the fine single scarlet Paul mpel still holds pride of place, and itly so when we consider its robust ition, free flowering qualities, and its russes of bloom. In the present note, r, it is intended to call attention to a ieties for the decoration of the green- some of which were grandly exhibited Chelsea Show.

ig the single-flowered varieties will be ieneral Wolseley (a clear rosy-red), Sir iel (brilliant scarlet with a large white rummer Boy (salmon-red), Mrs. W. A. n excellent white), the distinct A. J. (a deep purple), and Western Queen nice pink). Of the double and semi- varieties I like The Speaker (a fiery , the old F. V. Raspail (largely grown ter flowering, scarlet, and most useful ı a cut state or as a pot plant), Mme. : (a good white), King of Denmark almon, and one that has stood the test e), Olympia (soft pink), and Paul (a dark red). The above by no means the wealth of material there is to from, and a small greenhouse from he frost is excluded could be kept gay onal Pelargoniums the greater part ear. They are easy to grow and are attacked by insect pests. It is always advisable to keep young stock going, and here no special propagating case is needed, because the cuttings will readily root in the greenhouse during the spring and summer.

The tops of old plants make excellent cuttings, and after carefully trimming them to a joint they are inserted in sandy soil placed in small pots. When rooted pot off singly into receptacles 2½ inches or 3 inches in diameter and grow them on fairly near the roof glass to encourage short-jointed and sturdy growth. Directly they are nicely rooted transfer them to pots 5 inches and 6 inches across the top. A week or 10 days prior to this pinch out the centre of each plant to promote side growth. The pots should be well drained and the rooting medium consist of fibrous loam three parts, and one part of sweet leaf-mould. Make the soil fairly firm and afford water in moderation for the first few weeks. Specimens intended for winter flowering should have their flowers removed until they are placed under glass in the autumn. T. W. B.

Cyclamen persicum

The best strains are as near perfection, in flower and foliage alike, as it appears possible to get them. Clean, well-drained pans about 4 inches deep are the best receptacles for the seed, filled to within ½ inch with about equal parts of rather fine loam and leaf-soil, previously adding enough silver or river sand to ensure porosity, pressing moderately firm, and watering with a fine rose can. Distribute the seeds ½ inch apart and cover to about the same depth. Cover the pan with a piece of slate or glass and place either in a frame or out-of-doors in a shady position until the seedlings appear, when the pan should be set within 6 inches of the glass so as to make sure the tiny plants grow sturdy from the first—an important point with any seedlings that have to pass the winter under glass. Avoid any crowding of the plants by an early transfer to thumb pots, lifting them carefully with a label, using a similar soil, and only partially covering the corm in case of decay, which is liable if buried too deeply, and to prevent the soil drying up too quickly fill shallow boxes with coal-ash and plunge the pots to the rims, returning them to a like position as before-mentioned, and affording root watering very carefully throughout the short days. A spray from the syringe should be given twice daily in bright weather. Treat the plants with as little artificial heat as possible and fumigate occasionally to ward off green-fly or thrip, their greatest enemies. Before the roots become matted in early spring move them into 2½-inch pots, using a little coarser soil, and apply a light shade from early March up to the end of September, an ordinary cold frame or pit with a base of ashes suiting them best from early May. Towards the end of July or early in August the plants should be ready for their final shift into 5-inch pots, or even a size larger for an extra robust plant, adding a little soot and bone-meal to the soil advocated above. Careful watering, abundance of fresh air, with shade during the brightest part of the day, with a dew from the syringe two or three times daily until closing time, when the syringe needs well working between the foliage, are beneficial. During September when the nights are fine, the lights may be pulled back, the night dew benefiting the plants immensely. J. Mayne.

REMINDERS FOR THE WEEK

Southern and Midland

Spring Cabbage

Plants that were set out during September have made headway, and when the soil is in a dry condition it is advisable to draw a small portion round the stems of the plants. This will keep them firm and help them to withstand severe frosts during winter. Any further planting should be done without delay.

Potatoes

Where these were placed in store some weeks back they should be examined at the first opportunity. The whole should be turned over, and any showing signs of decay should be removed, as one bad one will soon cause many to go. Protection should now be given against frosts, where these are likely to penetrate the building.

Salads

There is usually a demand for salads during the shooting season, and as growth will have practically finished in the open it is well to fill any spare frames with Lettuce plants where they can be given protection. Endive is readily blanched by placing in frames and keeping dark for a week or two. Another good way of blanching Endive is to place a large flower-pot over each plant. When this course is adopted it is essential to see that the plants are thoroughly dry, otherwise decay will rapidly set in.

Cucumbers

Where a succession of these has to be kept up during the winter more care is necessary. A steady temperature, averaging 60 degs. at night, should be kept up, and watering should be judiciously done. The plants should not be over-cropped during this period and a top-dressing of good loam and decayed manure when the roots show on the surface of the soil should be given. When severe frosts prevail it is advisable to cover the pits at night with mats rather than overheat the hot-water pipes.

Tomatoes

Plants placed in their fruiting quarters during September are now swelling their first trusses of fruit, and may require a top-dressing of soil given to their roots. This is best done at intervals of 14 days, giving a little at a time. Nothing is better than good sweet loam to which have been added a few handfuls of wood ashes. It is not advisable to overdo the soil with stimulants during the short days of the year. Water should also be given sparingly until the pots are well filled with roots.

Strawberries in pots

It is now time these plants were given protection against frost and heavy rains, and where spare frames are to hand there is no better place for the plants during the next two months if stood on a bed of ashes and the lights kept off during fine weather. If the pots are buried up to the rims in a bed of ashes beneath a south wall or fence they will take no harm, and the crowns will plump up equally as well as those in the frame. An occasional watering with soot-water is beneficial to the plants.

Cinerarias

Many amateurs fail with these by attempting to grow them in hot and dry structures. These plants are practically hardy and only require enough warmth to keep out frost. A careful watch must be kept against aphides that are very partial to these when growing in warm greenhouses. Fumigation with nicotine is the best method to eradicate the pest, and should be done as soon as they appear.

Cyclamens

The early batches of these are now opening their flower-buds and should be kept well up to the roof glass to keep them sturdy. Weak liquid manure and soot-water may be sparingly given each week, and the plants must never be allowed to suffer from want of water at the roots; neither must they become sodden or the soil will quickly sour and the roots cease to function. When watering, care must be taken to keep it from lodging in the crowns of the plants.

Lawns

The lawn mower may now be cleaned and put away for another season, and all tennis nets should be taken in, dried, and stored. Sweeping and rolling should be regularly done each week when the turf is not frozen. Renovating and turfing may be pushed on as fast as possible.

Dahlias

These are now practically all blackened by the frosts so should be cut down to within 6 inches of the ground and the tubers lifted. Before finally storing them away it is wise to place them singly in a shed to dry for a week or so. To keep the roots during winter they must be kept free from frost and not allowed to become withered up. Ashes are the best material for placing amongst the roots.

W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Hydrangeas

This is a good time to move on any plants of Hydrangeas which may require more pot-room, although it is surprising how long these popular plants will continue to bloom, and to bloom well, in a root-bound state. Young plants which may have been raised from cuttings during the present year and planted out in a bed in a cold frame should now be lifted and potted up. If single trusses are desired a plant may be placed in a 5-inch pot. If two or more plants be placed in 6-inch pots they will give perhaps a better display. Without expressing any opinion as to the desirability or otherwise of blue trusses it may be said that if a 7-inch pot of iron filings be mixed with a bushel of soil the blooms will have a decided touch of the desired colour.

Stove

There ought at this season to be plenty of colour in the stove from foliage and flowers alike. Among the former, Crotons, Dracænas, the Pandanus family, and such like are always bright. Among flowering plants, Gesnera cinnabarina is worth a place, flowers and foliage being alike ornamental.

The Lorraine Begonias

need no testimonial from me. Coleus thyrsoideus, if a trifle ungainly, provides a welcome touch of blue, and the Poinsettias and Euphorbia jacquiniæflora give vividness. Useful, too, in the same shade is Clerodendron fallax, pieces of which in 6-inch pots are useful in many ways. Much can be done with climbing plants in houses which permit of their use. The scarlet Passion Flower (Passiflora princeps), for instance, does well if planted out in a well-drained bed. The blooms, produced terminally and in clusters, hang down in a most attractive manner. value of Ipomæa Horsfalliæ is well know more so than that of Pergularia odoratissi the flowers of which are daintily perfur although not particularly attractive in th selves. Where a few Orchids are grow this house the Cypripediums and Cœlog cristata will either be in bloom or on point of blooming.

Pot vines

Where a batch of pot Vines is grown plants should now, or shortly, be overha and made ready for a start. If they be sta in the end of December the crop ought t ready in May without too much forcing. this time the rods should be pruned cleaned and a top-dressing applied. Ren a portion of the old soil from the pots an place it with some mellow loam to w have been added a small quantity of a fertiliser and a handful of charcoal nod Vines will not make new roots until the begin to move; nevertheless the soil must be allowed to get dry. Prolong the res period as long as possible and there wil quicker motion when the Vines are pu work.

Hardy fruit

The harvesting of Apples and Pears not be neglected during suitable weather. the same time the picking of the latest ought not to be hurried, but it is neces to see that such are closely netted. The always some work to be done among trees, and now, if these have been mulc the manure can be cleared away in order the declining heat of the sun may get a roots and assist in the ripening of the w Old and unfruitful trees are always unpr able. Such should be disposed of wit scruple and sites prepared for younger t Strawberry-beds may need the season's clean down, and while this is being done runners which are of late formation sh be removed. Cut out the exhausted can Loganberries. The crop of this fruit during the past season an extraordin heavy one and has gone a long way tow a revision of my opinion as to the valu the Loganberry.

Ferns under glass

Seedling Ferns raised from spores (t germinate in a week or two) will nov ready for handling. These ought to pricked off into boxes in little tufts, an the early spring these tufts may be br up and the young plants put singly into s pots. Ferns are so easily raised from sp that there is but little point in keeping and worn-out pieces. All shading ougl be removed from the roof, and less moi is now needed.

Kitchen garden

The lifting and storing of root crops (i the exception of Parsnips) should nov shortly be undertaken. Continue the e ing of late Celery. If the soil is bad slugs fine ashes form an excellent blanc medium and will keep the slugs at bay. there be a deep brick pit available it sh be prepared for the reception of Cauliflo before any serious frosts occur. Plants w have formed their curds will keep for a siderable time if lifted on the approac frost and put into such a pit. If Lettuces Endives must be left outside they should be tied up, and when the tying is compl dry tree leaves ought to be packed amon plants. There is no better prote material.

W. McGUFFO

Mabie Gardens, Kirkcudbrightshire.

ıssification of Sweet Peas (1927)

E Floral Committee of the National eet Pea Society presents the following an up-to-date selection of varieties in alphabetical order. The Committee to draw the attention of members to the Too-much-alike Varieties before selec-re made, because in some colour sections ieties recommended may be so nearly ıat they cannot be exhibited together in ne competitive exhibit at the Society's ions.

'asterisk" indicates the variety which the Floral ee considers the best in each of the Colour Classes. agger" indicates a variety of special value for culti-ıder glass.

COLOR (Light).
A.M., 1915)
er

COLOR (Dark).
le

Tey

BLUE.
rd
ue
om Jones (A.M.)

ILUE (Light).
Valley (A.M.)
et Fife (A.M., 1915)
id

ILUE (Dark).
ınder Godsall
e (A.M., 1926)
ornwell, V.C.

LUSH (Pink).
Maid
7
ine

LUSH (Lilac).
ce
Queen

CARMINE.
1
ts Ingman
n

ERISE (Pale).
forn

ERISE (Deep).
ing
ne

RISE (Scarlet).
lier
Scot

CREAM.
il
ess
loy

REAM PINK.
Pickford (A.M., 1924)
e

AM PINK (Pale).
ady
rnold Hitchcock

AM PINK (Deep).
ıark Salmon Pink
t
alifornia (A.M., 1924)

CRIMSON.
y (A.M.)
ie Ryder
Henshaw

FANCY.
George
ıt

FLUSHED.
ıia
ita (A.M., 1926)
. J. Wright

IVORY.
Picture (A.M., 1924)
ie Sarah Grand

ENDER (Rosy).
Frederick Improved

Felton (A.M., 1912, , 1913)

VENDER (Pale).
a
Lascelles (A.M., 1924)
ley (F.C.C., G.M.,

LAVENDER (Lilac).
Gladys
*†Powerscourt (A.M., 1911)

LILAC.
Dorothy
*†Mascotts Helio

MARBLED AND WATERED.
*Birdbrook
May Campbell (A.M., 1911)

MAROON (Red).
Hawlmark Maroon
*Splendour

MAROON (Dark).
The Sultan (A.M., 1921)
*Warrior

MAUVE.
†*Chieftain
King Mauve
Royal Mauve

ORANGE.
Beacon
Royal Sovereign
*†Tangerine Imp.

ORANGE (Deep).
Colorado
Guinea Gold (A.M., 1924)
*†Wizard

ORANGE (Pink).
Crusader
†George Shawyer (A.M.)
*Royal Pink

ORANGE (Scarlet).
Gloriosa (A.M., S.M., 1922)
*†Mammoth (A.M., 1924)
The President

PICOTEE EDGED (Cream Ground).
Cherub
*Jean Ireland (F.C.C., 1915)

PICOTEE EDGED (White Ground).
*Annie Ireland
Elsie Herbert (A.M., 1906)
Youth

PINK (Pale).
Daisybud (A.M.)
*†Supreme

PINK (Deep).
Delice
*Hebe
Miss Philadelphia

PURPLE.
Le Mahdi
Olympia
*Purple Perfection

ROSE.
Empire
Rosabelle
*Sunset (Bolton's) (A.M., 1921)

ROSE (Old Rose).
Wild Rose

SALMON (Orange).
Fordhook Orange
*†Gold Crest
Sunset (Stevenson's)

SCARLET.
*†Hawlmark Scarlet
Mascotts Scarlet

WHITE.
*†Avalanche
Edna May Imp.
Mascotts White

WHITE (Tinted).
*Constance Hinton
Model

TOO MUCH-ALIKE VARIETIES.

following varieties have been grouped much-alike. "Not more than one of d varieties shall be shown on the same itive stand at any exhibition of the National Sweet Pea Society unless otherwise stated." The names are placed in alphabetical order.

The General Committee of the N S P S. has had the List of Too-much-alike Varieties drawn up by the Floral Committee for the guidance and convenience of exhibitors, but it must be clearly understood that the varieties grouped together are not necessarily synonymous, or of equal merit.

BLUE.
Bluebird
Fordhook Blue
Mrs. T. Jones
Sapphire

Boy Blue
Heavenly Blue

BLUE (Dark).
Commander Godsall
Jack Cornwell, V.C.

BLUSH.
Felicity
Valentine

CARMINE
Mascotts Ingman
Renown

CERISE (Pale).
Doris
Glory
Hawlmark Cerise
Hope
Lucifer
Rosy Morn

CERISE (Deep).
Brilliant
Centaur
Charming
Coralline
Royal Salute

CERISE (Scarlet).
Alex. Malcolm
Grenadier
Pimpernel
Royal Scot
2LO
Wonderful

CREAM.
Champagne
Daffodil
Leslie Rundle
Majestic Cream
Matchless
What Joy

CREAM-PINK (Pale).
Cecily
Fair Lady
Mrs. A. Hitchcock
Radiance
Sunshine

CREAM PINK.
Bridesmaid
Edith Cavell
La France
Picture

CREAM-PINK (Deep).
Hawlmark Salmon Pink
Pink (Unwin's)
Pink Perfection

Miss California
W. J. Unwin

CRIMSON.
Charity
Crimson King
Marjorie Ryder
Red Gauntlet
Sunproof Crimson
Sybil Henshaw

FLUSHED (White Ground).
Advance
Britannia
Mrs. C. W. J. Unwin

Mrs. H. J. Wright
Queen of Roumania

FLUSHED (Cream Ground).
Faerie Queen
Imp. Faerie Queen

IVORY.
Ivory Picture
Madame Sarah Grand

LAVENDER.
Austin Frederick Improved
Diana
Orchid
R. F. Felton

LAVENDER (Lilac).
Gladys
Powerscourt

LAVENDER (Pale).
Cynthia
Hawlmark Lavender
Lavender (Unwin's)

Blue Butterfly
Sky
Wembley
Wistaria

MAROON (Dark).
King Manoel
Maroon King
Raven's Wing
Sultan
Warrior

MAROON (Red).
Hawlmark Maroon
Splendour

MAUVE (Dark).
King Mauve
Lady Eveline
Mauve Beauty
Mauve Prince
New Marquis
Pamela
Shamrock

ORANGE (Pink).
Bunty
Crusader
Geo. Shawyer
King Alfred

ORANGE (Deep).
Poppy
Wizard

ORANGE (Scarlet).
Gloriosa
The President

PICOTEE EDGED (White Ground).
Annie Ireland
Youth

PINK (Pale).
Daisybud
Edith

PINK (Deep).
Delice
Hebe
Hercules
Miss Philadelphia

PURPLE.
Mascotts Purple
Olympia
Purple Perfection
Royal Purple

ROSE.
Kenneth
Private Jack Smellie
Rosabelle
Sunset (Bolton's)
Verdun

SCARLET
Hawlmark Scarlet
Mascotts Scarlet

WHITE.
Avalanche
Edna May Improved
Joan Ryder
Mascotts White
Moneymaker
Nora Unwin
White Lady
White Perfection

VARIETIES FOR GARDEN DECORATION.

The Floral Committee recommends the following twenty varieties for general garden cultivation: Bluebird, blue; Bonfire, bicolor; Charity, crimson; Charming, deep cerise; Elegance, blush (lilac); Grenadier, cerise (scarlet); Ivory Picture, ivory; Jean Ireland, picotee-edged; Joan Ryder, white; King Mauve, mauve: Lord Lascelles, lavender (pale); Matchless, cream: Miss California, cream pink (deep); Mrs. Arnold Hitchcock, cream pink (pale); Picture, cream pink; Powerscourt, lavender (lilac); Purple Perfection, purple; Sunset, rose; Supreme, pink (pale): and Warrior, maroon.

The Novæ Angliæ Asters

The few members of the Novæ Angliæ section of Asters (Starworts) are remarkable for their height, their rich colours, and the perfume of their foliage, the latter somewhat aromatic but decidedly pleasing. They are extra tall this year, some of them close on 6 feet in height, and the rosy-pink Lil Fardell, the crimson Mrs. Raynor, and the rich purple Mrs. S. T. Wright are fine companions for such things as Pyrethrum uliginosum, Artemisia lactiflora, and the several tall late-flowering varieties among their Novi Belgii brethren. I was unable to lift my back border plants last autumn, and, thinking they might require a little stimulant, I pricked up the ground between them in the spring and put in a light top-dressing of one part chicken manure to four of soil. A heavy rain followed, and the soaking is doubtless responsible for the luxuriant growth. Certainly I have never had a better or more enduring display from this particular section of Starworts. Several of the dwarfer sections, like diffusus, ericoides, and the varieties of cordifolius, make splendid pot plants for the cool greenhouse for autumn flowering. Sturdy crowns should be potted up in early spring in a good loamy soil and grown along through the summer in a fairly shaded position, as under a north-west wall. When the pots are full of roots an occasional stimulant should be applied to keep the foliage fresh and green.

E. BURRELL.

The Aster border

I have not been able to acquire the newer Asters (Starworts), but with the help of some of the best of the older sorts planted in variety to represent different seasons, one gets a long succession. How welcome they are for cutting, and what a long time they continue in perfection in a cut state. They are equally acceptable and available in large and small gardens, for even in the latter a careful selection of a few good sorts will give a long season; a couple, for instance, of Amellus, of cordifolius, of ericoides, and of Novæ Angliæ and Novi Belgii. Later in the season, at the back of a border where there is ample space for them, I have a delightful group of the giant puniceus pulcherrimus, flanked on either side by Veronicas. Some of the dwarfer kinds make admirable pot plants to help in the autumn decoration of the cool greenhouse. They should be grown along through the summer in a fairly cool, shady place, and helped with occasional doses of stimulant that the foliage may be retained in a fresh, healthy state.

E. BURRELL.

Pentstemons

Cuttings of the named varieties should now be taken and inserted in a bed of sandy, loamy soil made up in a cold frame, where they will pass through the winter unharmed if the lights are covered with mats in severe weather. Some rough litter banked up round the frame also forms a further protection. The cuttings should be watered and shaded until they no longer flag when exposed to bright sunshine. Stock can, of course, be raised from seed, but when a number of plants of a particular shade of colour for bedding is required, propagation by cuttings is the more satisfactory way of securing them. I have generally made it a rule for their propagation to follow that of bedding Calceolarias, and under similar conditions. C. B.

New Dahlias

THERE were more than 80 novelties submitted to the Floral Committees of the Royal Horticultural Society and the National Dahlia Society on the occasion of the annual exhibition of the latter Society, held at Vincent Square, Westminster, S.W., on September 8th last. Practically all types of the Dahlia were shown, and amongst these novelties were many interesting and beautiful additions to the respective types of the flower. The undermentiond varieties were selected for trial at Wisley during 1927:—

ALAN COBHAM.—A very large, coarse, decorative Dahlia of massive build.

J. L. CROWTHER.—Another large decorative flower of massive build. Colour, pale salmon-cerise.

GOLDMINE.—A large Cactus-like decorative of considerable promise, having rather broad florets. Colour, old gold.

CORONACH.—A very promising decorative (some 5 inches to 6 inches in diameter), having broad florets building up a flower of good form. Colour, rosy terra-cotta.

FALSTAFF.—An attractive decorative, having broad, pointed florets building up a flower 5 inches broad. Colour, reddish-crimson, tipped gold.

NIGGER.—A promising dark-coloured Pompon of good form with wiry stems.

ROYAL PURPLE.—As the name implies, this is an attractively-coloured flower of Cactus form, having narrow, evenly-arranged florets.

PEACH BLOSSOM.—This is a distinctively pretty decorative Cactus and is sure to become popular. The florets are narrow and build up a flower of good form about 4½ inches across, on wire-like flower-stems. Colour, pale pink suffused white.

EPSOM STAR.—One of the very best Star Dahlias. The flowers are slightly larger than most of the Star forms. The florets are fairly narrow and build up a flower of exquisite Cactus-like form. Colour, scarlet-crimson.

LADY MADDEN.—A welcome addition to the miniature-flowered Pæony section, and somewhat unique in character. The florets are flat and of medium width and build up a flower about 3½ inches across. Colour, primrose.

MRS. GODDARD.—Another miniature Pæony sort, having broad florets of good substance, building up a flower 4 inches in diameter. Colour, bright crimson.

MILDRED.—A further addition to the Pompon section. The flowers are of good form and are somewhat similar in colour to the well-known variety Glow.

MRS. D. LUSCOMBE. — Another large-flowered decorative Dahlia, having broad, pointed florets, building up a promising flower on stiff, erect stems. Colour, brilliant crimson.

MRS. D. HEPBURN.—A striking-looking small decorative, some 4 inches across. Florets, medium to broad and pointed. Colour, cerise-crimson.

LUSTRE.—This is a useful addition to the Mignon section (sometimes referred to as the Coltness Gem type), the dainty single flowers being borne on erect stems. Colour, brilliant crimson.

AIDA.—Another addition to the miniature Pæony section. The florets are medium to broad and pointed. Colour, purple-rose with deeper base. The flowers measure about 3 inches across.

NEGRO.—A very large Cactus-like decorative, having broad, pointed florets of good substance. Colour, velvety-maroon.

RAPALLO.—This is a decorative flower some 4 inches to 5 inches in diameter, having broad, pointed florets arranged very evenly, building up a bloom of a very distinct character. Colour, velvety maroon-crimson, edged golden-yellow.

GIANT KRIEMHILDE.—A giant Cactus having fairly broad florets that build up a striking-looking flower. Colour, rose-pink with white centre.

ROSE TENDRE.—This is a welcome addition to the decorative sorts that are about 5 inches in diameter. The florets are medium to broad and build up a flower of good form. Colour, a beautiful bright pink.

CLOWN.—The flowers of this variety may be described as an attractive reddish-scarlet and white bicolor decorative. The flowers are about 5 inches across and the florets medium to broad.

FREEDOM.—This new large decorative somewhat resembles the well-known variety Salmonea in colour, and as such is most attractive. The flowers are each about 5½ inches in diameter and have broad, pointed florets. Colour, light salmon terra-cotta.

WEALTHY.—Another decorative of medium size, having broad florets, the flowers borne on erect stems. Colour, bright crimson-cerise.

CITRON.—A welcome addition to the small-flowered Pæony section, although the flowers are rather more than 4 inches across. Broad florets. Colour, citron-yellow.

FALCON.—Another promising small-flowered Pæony. Florets broad. Colour, bright scarlet, shaded orange.

RUTH.—A charming small-flowered Pæony about 4 inches in diameter. Florets broad. Colour, rose-pink, maroon at base of florets.

VEDAS.—A still further addition to the small-flowered section, about 4 inches to 5 inches across. Florets, broad. Colour, bright sulphur-yellow.

ZILLAH.—A small-flowered Pæony, about 4½ inches in diameter. Florets of medium width and twisted. Colour, cerise-crimson.

LOCARNO.—A large decorative of a rosy terra-cotta colour.

MRS. CROWLEY.—A decorative variety about 6 inches across, having broad florets. Colour, old rose with yellow centre.

EARLE WILLIAMS.—A pretty decorative bicolor some 5 inches to 6 inches across. Florets, medium to broad, pointed, and slightly twisted, bearing its flowers on erect stems. Colour, alternate white and crimson.

BETSY MAJOOR.—A medium decorative, the blooms measuring about 6 inches across. Florets broad, pointed and slightly twisted. Colour, light purple. Erect flower-stems.

POURPREKONING. — The British name Purple King is more likely to be used when mentioning this variety. The florets are broad and pointed and build up a deep purple plum-coloured flower that impressed many. It belongs to the very large decorative section.

Silene Schafta

This is one of the brightest, as well as the most charming, of our late summer flowers. It grows 6 inches to 8 inches high and bears an abundance of pinky flowers, which last a considerable time in beauty and will withstand full exposure to the sun, although partial shade will prolong its display. It is beautiful on the tops of dry walls, and for the rock garden one could not desire a prettier or more easily-grown plant. The plant is by no means fastidious as to soil or situation, but will be found to thrive best in open, sandy soil. It is well suited for wide fissures on the exposed faces of rock or for level parts, where it will not be over-run by stronger plants. The plant is of slightly spreading habit, therefore it is advisable to give it room to branch out, otherwise much beauty is lost. A top-dressing of gritty loam should be given once a year and worked well in among the growth. S. C.

Kew and the introduction of P Rubber to the East

The Government grant of £8,000 to Henry Wickham, one of the pioneers of Malay rubber industry, has naturally bee good deal commented on in the daily Pr and the Editor has asked me to write ur the above heading, but I do not feel assu of space to deal with the whole s adequately, nor have I data at hand to ens that entire accuracy which is certainly lacking in the current articles I have re Kew Gardens played a big part in the mat indeed, it is the biggest of the many succe in plant introduction which Kew can clain

"Later," I read, "the plants were sa introduced to Ceylon, Burma, and the Ma States, and an industry was founded that the present time represents a capital of c £100,000,000."

That reminds me very much of the old t of story, which ended with "and they w married and lived happily ever after," some brief statement to that effect. I passing over the South American end of story and saying something about what h pened to the plants of Hevea brasilien raised at Kew from seeds collected by Henry Wickham and others in the Ama region. They were sent in Wardian cases every likely public garden over a great p of the Far East. That is now nearly years ago. Many years later the gigar success of the Eastern rubber indus aroused interest in the matter, and it was duty to exhaustively search records at Ke Apparently in most cases either the pla arrived dead, or at any rate it cannot be s that anything important resulted. Not single one survived in India or Burma so as I remember. The two outstanding stances to the contrary were the Ro Botanic Gardens, Peradenyia, Ceylon, a the gardens at Penang, where a few pla were successfully established, throve, a eventually became large trees. One of pioneers of the Eastern rubber industry w Mr. Curtis, a Devonshire man and Kewite, Superintendent of the Penang G dens. He was a far-seeing man. For ma years he strove to induce planters to take rubber, but his was a voice crying in t wilderness. When eventually his advice w timidly followed the results were like a sno ball rolling downhill. Soon afterwards M Curtis retired broken in health on what w probably rather a modest pension. He now dead, and I fear that he never reap much of the financial benefit that was u doubtedly his due. It is often the case th those with "knowledge" fail to utilise Even I, for example, ought to have seen th the rubber industry was a sure gold spinne but I never made a shilling out of rubb shares, and I doubt if one member of t Kew staff did well out of them. If so, least he succeeded in keeping it a secre But, on the other hand, I had a cousi already a wealthy man. He had no insi knowledge, but he had financial acumen. H looked into rubber prospects in the very ear days, was attracted by what he saw, and i vested in the earliest companies.

Yes, Kew did a lot for rubber, but wh has rubber done for Kew? Not even ve much in the way of employing Kew me whereas at one time rubber-planting ha rather a reputation for absorbing men wh to express it politely, were more renowne for their pace than their discretion in th country, and on whose blood it was hard t believe that the Malayan sun would produc a cooling effect. JASON.

RUIT GARDEN

Seasonable hints

time is at hand when the renovation 'each and Vine borders may be under-en. The best time to do this is as the foliage becomes matured, or just : changes colour, as it then still re-ficient vitality to encourage the roots ey have been laid out afresh in the npost, after having been lifted, to emit new fibres. This, it is hardly y to add, is very advantageous, as it the root system to recover more from the ordeal of lifting, but as a sequence it becomes the more quickly ished.

me instances this undertaking will at a considerable amount of fresh soil nape of the best turfy or fibrous loam ed; also the necessary ingredients for with it to make a suitable compost r Peaches or Vines. Of these the e wood-ashes, lime rubbish, burnt e manures, and some soot. Needless ll of the foregoing, if not already at ould at once be procured, so that the quantity of compost can be duly pre-nd afterwards placed under cover or with tarpaulins until such time as it ed. When possible it is always an ge to allow the compost to remain in n this way for a week or 10 days, as amount of mild fermentation is en-l and the temperature of the mass ably raised. The roots, when laid covered with compost in this con-re naturally induced to become more an would otherwise be the case.

er matter which must not be over-s that of draining material for the Fresh must be provided if it is sus-at that which is already beneath the s choked and in a dirty condition, or nage is non-existent. Again, in low-amp positions where unsatisfactory ave given rise to a suspicion that s of the trees or Vines have gone to the cold, sour, and moisture-hold-oil, it would be policy to prevent a of the evil by laying a bed of con-the base of the border before putting age material. Provision for this herefore be made and everything in for carrying it into effect. Lifting ots—for they must be liberated from and worn-out soil before reconstruc-take place—must be done ex-ly, as the less they are exposed to the the better. When, however, this e averted always take care to cover th something which has been pre-noistened. Until the new border, or f it, has been made ready for their keep them carefully covered with ss or hay, and the whole enclosed in ats. In bright weather shade the the houses and syringe the trees or the case may be two or three times ctual lifting is best done with the aid -tined steel digging fork. With it an be gradually loosened and combed to speak, from between the roots. ying the roots out in the new com-that they are placed in a nearly l position and at various levels, the st layer to be within 6 inches or of the surface. W. W.

Espalier Apple trees

ers form one of the most useful growing dwarf Apple trees, and are ted for amateurs with limited space, e trees are worked on the Paradise y may be kept in very close compass, y varieties may be grown in a limited area. As a rule they are bought in from the nurseries with three or four tiers of branches already started, and if bought in and planted as maiden trees the leader is cut down to within about 1 foot from the ground, and only three shoots are permitted to grow—one to be the leader, and one on each side to form the lower tier of branches. These should not be tied down in a horizontal position at first, but should be brought to it by degrees. The following season the leader must be cut back to three or four buds above where the next tier of branches is to be, for if trained to a wire trellis the horizontal shoots would spring a little below that level. The wires are usually 9 inches or 1 foot apart; therefore, if the leader is cut down to the next wire each year, the trees will soon cover a trellis, for about five or six tiers in height is ample for any purpose. After the tree is formed its future management will consist principally in summer pinching, for in this way its strength may be more readily equalised. Commence by pinching the uppermost part of the tree first, so that by leaving a larger amount of foliage on the lowest tiers of branches they will recover the balance of growth, which from being unfavourably placed they may have lost. A decided improvement on the old horizontal espalier is that of planting at closer intervals on dwarfing stocks, and after the third year of training in horizontal form, turning the points up at equal distances apart and training erect, leaving five or seven shoots to each tree. The trellis is thus quickly covered. The shoots are more equalised as regards strength, and on the Paradise stock they require very little pruning if carefully pinched in summer.

Manuring Strawberry beds

Including the second year after planting and until the beds become exhausted and are broken up the plants should receive an annual dressing of manure to ensure fertility being maintained. In these days when animal manure is so difficult to obtain there is always the possibility in many instances of this matter being neglected, but in such cases recourse can be had to the use of artificial manure which, if not quite so suitable, is far better than allowing the plants to become starved from want of plant food. Strawberries not only need to be planted on soil previously enriched with manure, but if fertility is to be maintained they must receive a stimulant in some shape or form afterwards. Well-rotted farmyard manure is suitable for most soils, but on those of a heavy texture what is termed old hotbed manure, that is, a mixture of stable dung and tree leaves in an advanced stage of decomposition, is of great value, and the plants always appreciate and thrive well when mulched with such material. In any case the best kind of manure that happens to be on hand should be used, and the present is a suitable opportunity for getting it wheeled on and spread between the rows after the ground has been freed of weeds and late-formed runners cut away. The manure should be worked round the stools to encourage root action. Winter rains will then wash the manurial properties of the mulch down to the roots and supply the stimulus needed to enable the plants to meet the demands which will be made on their energies next season. Some favour the pointing in of the manure. After a long experience I have come to the conclusion that leaving the manure on the surface as advised above is the best method to pursue in regard to garden crops. W.

Mice barking Apple trees

(Devon).—The obvious thing to do is to get rid of the mice, either by systematic trapping or by poisoned bait, for if you allow this to continue and the tree becomes barked all round the stem it will certainly die. Paint the lower parts of the trees either with Fox Oil or Renardine—the former is sometimes known as Dippell's Oil—and either will render the trees offensive to mice. There is little you can do now to help next year's crop except to see that the trees are pruned and cleaned.

VEGETABLES

Improving vegetable soil

IN summer anything done to the soil in the kitchen garden is mostly on the surface; it is in winter that any real improvement of it should be taken in hand. Trenching and digging are two of the principal operations in winter, and these can be done in various ways so as to improve the soil. No land with a wet, retentive subsoil will ever be satisfactory unless it is well drained, and this must be done in the best manner possible; but soil resting on a gravelly bottom or on other natural drainage will need no artificial help in this way. Drains may be put in here and there when the situation of the ground is suitable, but in low, flat places, where drains have little or no fall, I have often drained the soil tolerably well by trenching the whole from 2 feet to 3 feet deep, and laying a good quantity of rough ashes and other lasting material in the bottom of the trench; the latter should be taken out pretty wide, and a continuous bed of this placed over the whole bottom, when the surface will soon prove satisfactory. Light land hardly ever needs draining, but heavy soil generally does, and an addition of anything that will lighten it at the same time is always beneficial. Several years ago about an acre in the lowest end of my vegetable garden was very wet and sticky in winter, and like a brick in summer when the weather was dry for any length of time. Many kinds of crops could not be grown in this part, and others, which I was obliged to put in sometimes, did not do well. Of late years I have altered this, and the piece in question is now free and open at all times, and well suited for any kind of crop. Trenching was done as has been stated, ashes being put in the bottom, and ashes from old refuse heaps, road scrapings, half-decayed leaves, and a general assortment of all such stuff were worked into the soil not far from the surface. The following winter after this a good coating of lime was worked in, and this finished the converting of a bad piece of soil into fertile ground. Had I other pieces to improve they would all be done on the same plan. Deep cultivation, even of the best soil, is always advisable. Soil annually manured on the surface soon becomes inactive, and when that happens a season's manuring should be missed altogether, using lime instead. Where the subsoil is fairly good this should also be trenched up to the surface and the top put down, but where the soil is only good for about the depth of a spade, and not good enough to grow anything in afterwards, this should not be brought to the surface until it has been improved. Trenching is what should be done for this, but after the top spit has been thrown out of the first trench the bottom should be turned over and left in the position it was in before. Then the top of the next trench will be thrown on to this, and so on all through, and long straw manure, old vegetable refuse, and such like should be turned in as the bottom is dug over. Ground treated in this way now will produce fine crops next season, and if trenched over again two or three years afterwards the bottom stratum may then safely be brought to the surface. T.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House Fleet Street, London, E. C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

Lime for gardens

We are always told to use quicklime for our gardens, but the quicklime is to be stood in heaps till it slacks before spreading it. Why, then, not get slacked lime in the first instance? Is there any advantage, or disadvantage, in spreading it as quicklime? I imagine that there is no particular advantage since our instructor often tells us that if lime is not available we may use chalk, but, of course, in greater quantity, so as to get the same lime equivalent out of it. Must one use a greater quantity of slacked lime per given area than quicklime? There are certain "lime substitutes" advertised by the trade which can be used in much smaller quantities than quicklime. Does one get the same "lime value" out of these compounds?

A. H. WOLLEY-DOD.

[There are several factors to take into consideration before a cultivator decides which is the best form of "lime" to apply to a garden. It would be best first of all to set down the various forms of lime which can be obtained for garden purposes. In the main garden forms of lime are split up into distinct classes. (1) Caustic or hot limes; (2) cold limes. Under these two heads we can group the various forms of lime in general use.

1) Caustic Forms of Lime	(2) Cold Forms of Lime.
(a) Quicklime.	(a) Ground limestone.
(b) Slaked lime.	(b) Chalk.
(c) Ground quicklime.	(c) Ground chalk.
	(d) Various waste limes.

(1) *Caustic limes.*

(a) Quicklime is burnt chalk or limestone. During the burning process the whole of the carbonate is driven off and there remains behind in the kiln calcium oxide, or free lime. The commercial quicklime is nearly always in lump form, accompanied, of course, by a certain amount of small lumps and dust material. Sometimes quicklime is sorted out into two grades, and in this case the large lumps form one grade and the rest forms the second grade. This second grade material can often be obtained at a much cheaper rate than the first grade. Provided the second grade material does not contain too great a quantity of cinder and waste material it is a cheap way of obtaining lime for farm and garden.

(b) Slaked lime is supplied under various trade names. It is, of course, quicklime to which just enough water has been added to cause the quicklime to fall down into a very fine powder. The slaking of lime is a definite chemical process, and when it is correctly done the lime is in a finer state of division than can be obtained by any method of grinding. Cultivators have to decide for themselves whether they will buy quicklime and slake it for themselves or pay the higher price which is generally asked for the commercially-slaked lime.

(c) Ground quicklime is again quicklime, but instead of being slaked with water to a fine powder, is crushed and ground to a powder. This form of lime is almost a necessity when farmers desire to apply small quantities of lime to the acre. To get an even distribution of a small quantity of lime to the acre is not an easy matter. About 2 tons to the acre can be applied by hand, but for quantities below that a manure distributor is usually employed. Slaked lime does not run well through a distributor. Ground lime being coarser in character does, hence the need for this form of lime. When applied to the land it takes up water and becomes slaked, and is then in just as fine a state of division as commercially-slaked lime.

(2) *Cold limes.*

(a) Ground limestone is unburned limestone ground to a fine powder. All experiments go to show that when the limestone is well ground and used in approximately double the quantity to either of the caustic forms equal results are obtained. Ground limestone keeps well and does not destroy the bags in which it is stored. It should, however, be kept as dry as possible before application.

(b) Chalk.—This material is a soft limestone which is quarried and then spread on the top of the soil and left to weather. In order that the weathering should be as complete as possible the chalk should be spread in autumn. When the chalk has weathered down it should be distributed by means of a rake.

(c) Ground chalk.—Many firms are now grinding chalk, and various kinds can be bought. Thus it is possible to give light dressings of chalk instead of the heavy dressing which must be given when the lump form is spread and allowed to weather down.

(d) Various waste limes.—Lime is used in many manufacturing processes. When the material is finished with at the works it is usually finely-divided chalk, but in a very wet condition. If such material can be obtained partially dried it is often a very cheap form of lime to apply for garden purposes.

The factors which have to be considered before deciding which is the best form of lime to use are many. The chief points to be considered are:—A. The price at which the various forms can be obtained. Roughly speaking, 3 lbs. of quicklime, 4 lbs. of slaked lime, 3 lbs. of ground quicklime, 6 lbs. of ground limestone, 6 lbs. of chalk, and 6 lbs. of ground chalk are all equivalent. Other things being equal one should be able to purchase all the cold forms of lime at half the cost of the caustic. This is rarely possible because the cost of carriage has to be added by either the vendor or purchaser, and the charges on 1 cwt. of the caustic forms are bound to be doubled on 2 cwts. of the cold forms. B. The type of soil should be taken into consideration. The caustic forms of lime, if used on light sandy soil, cause rapid oxidation of the organic matter present. Oxidation of organic matter is always fairly rapid in light soils, and anything added to such soils which increases the rate of oxidation is to be guarded against. Heavy soils, on the other hand, are slow to oxidize or matter, and the addition of caustic forr lime speeds up the process. C. Time c plication has also to be taken into consi tion. If the caustic forms are applied d the dormant season no harm is done, l they are applied to a seed-bed or to grc crops harm is done to certain crops. cold forms of lime can be applied to a all crops and at any time of the year. overdose of the caustic lime is often foll by a decrease of crop. An overdose o cold forms is not so reflected. D. Fi consideration must be given to the pu for which the lime is being applied, e. the lime is being applied in the cour ordinary garden routine for the purpo keeping the lime content of the soil i right position it does not matter which cl lime is used, but if a serious outbreak of root has appeared it shows that the s already acid, and one of the finely-di forms should be chosen, because the evenly the lime is distributed and the the particles the more quickly does it g work.

To sum up the answers to the queri our correspondent. If we are *always* to use quicklime for garden purposes w not always correctly informed, because i tain instances a cold form of lime wou better. To stand lump lime in heaps co with soil is an easy way of slaking material, so that it can be easily and e spread. Care must be taken that the l do not stand too long, because there danger of the heaps getting too wet an coming pasty. When the material gets this condition it is impossible to breal lumps up, and so an even distribution ca be obtained. If slaked lime is obtain the first instance one must be prepared t more for the material, and also one must chase 4 lbs. of slaked lime to do the amount of work as 3 lbs. of the quick because out of every 4 lbs. of slaked 1 lb. is water only. Quicklime canno spread evenly unless it be either slake ground to a powder first. Lime substi would have to be used in larger quan than quicklime, because quicklime is p cally pure calcium oxide, which is the concentrated form of lime.]

TREES AND SHRUBS

Hybrids from Rhododendron ponti and the Indian species

(M. G.).—The variety named Mangles is a cross between R. Auckland R. ponticum. It is a lovely variety an serving of wider cultivation. R. altacla is a cross between R. arboreum and a ling, R. catawbiense, which had fertilised by the pollen of R. ponticum. a very beautiful and early-flowering var flowers bright scarlet with numerous l spots. R. altaclarense and R. catawb produced R. Blandyanum, a handsome va with rose-pink flowers borne in large tru R. altaclarense has been employed e sively and with considerable benefit in hy ising with many species. From a bota point of view the subject is a wide and interesting one. Broadly speaking, progeny of the Indian Rhododendron is hardy in this country unless in favo localities in the south of England, but the protection of cool conservatories will come through our winters unsca They have played a very important pa adding beauty to our conservatories in spring, and have also been used in cro with the hardy species—namely, R. pont and R. catawbiense. The progeny these well-known species is varied bot habit of growth, freedom of flowe

and colour of the flowers. Of the ;an species which have been used .cellent results are:—R. Aucklandi, ɔreum, R. Dalhousianum, and R. i. The progeny raised from these ;n crossed with other species and ;, conspicuous either for their vigor- ;titution or freedom of flowering.

ıent for Hydrangea paniculata

P.).—

HEN grown in the open in rich soil he panicles of bloom may be any- hing up to 18 inches long and 9 inches eter. It is grown largely for forcing. e type and variety may be cut well within a few buds of the old wood in y. A good dressing of manure in es good, while, if the young shoots ıned out when 6 inches long, finer eads result. Hydrangea paniculata r known in gardens by the variety ɔra than by the type. It is of e origin, and forms a bush up to ɔr 8 feet in height. The leaves are ıe growth strong, and the flowers in terminal panicles, each 6 inches to s long and 6 inches through. The s are white, and borne from early until October. A considerable num- ɔoth sterile and fertile blossoms com- ıch inflorescence. A good idea of its ve value may be gleaned from the ınying illustration. The variety H. diflora is distinguished from the type ɔn of the inflorescences being made up e flowers only.

ıg a screen

e a piece of ground which I am de- ɔf screening from the railway which ong the back of my property, and en advised that the best thing for me in would be Spruce and Larch. you, please, be good enough to advise o whether, if I put this in now, it is o reach a height of from 6 feet to ɔy the late spring, and if you do not end this can you tell me what would ɔest thing to plant to be in leaf during gest possible period in the summer ve me the necessary screen? Could o tell me whether Polygonum cam- um is a hardy annual, and if left in ɔund whether it will come up each ', or alternatively whether it is possi- one to take cuttings and keep them ld frame for the purpose of planting r? K. B.

advice to plant Spruce and Larch is the least costly form of planting is ; the Larch to be removed as the grows to fill the space. A more ntal way would be to have good gs of Birch, with Holly and Lawson's ;, but none of these, if trees of the planting heights are used, would the requirement of a screen 7 feet the spring. Deciduous trees, Beech, and Chestnut, and other trees can be any good tree and shrub nursery 7 feet e high at once, but at special prices. ıum campanulatum is a perennial. It ; rather special placing as it cannot ɔught or even much direct sunshine, s apt to suffer from late spring frosts. ɔer place is in shade or half-shade in even moist ground.]

ıg a Wistaria

ı).—If your Wistaria is well furnished ɔwering spurs formed at the base of ır's growth the young shoots may be k now to within two eyes of the flower Soon after midsummer all the shoots on the main stems should be back to within a foot of the main stems. These shoots will again break into growth from the buds just behind where they were stopped, and after growing a few inches they should again be stopped. This will cause the formation of flower-buds at the base of the shoots first stopped. The following spring these shoots may be cut back to within five or six eyes of the main stem, and the young shoots treated as above described. If there is any space on the wall which you would like filled you can nail up one of the young growths, cutting it half down in order to cause it to form flower-buds at the base.

FLOWER GARDEN

Treatment of large Lavender bush and transplanting Violets

(Ajax).—You must not cut your Lavender bush now, but you may do so about the second week in April next year with safety. Reduce the bush to half its original size, and at the same time cut out all dead wood and apply a dressing of well-decayed leaf-soil or manure with a slight addition of fresh soil. This will greatly assist the new growth which will appear with the advent of warmer days. You may transplant your Violets at any time; the sooner the better. Lift each plant with a good ball of soil, and whether you intend to plant them in the open again or in a frame plant firmly and give them a good watering. If planted in a frame you will accelerate root-action by keeping the sashes on and the frame rather close for a few days.

Increasing Gladioli

(W. H. C.).—When lifting the corms all the small ones should be separated from the large-flowering ones, *i.e.*, "fully-developed corms," and stored in a cool frost-proof shed until March, when they should be planted out on a sunny, sheltered border in lines of about a foot apart and the bulblets at 6 inches apart in the rows. These require a well-drained and rather light soil, and should not be disturbed for two years, the only protection necessary being a light covering of straw or other material during severe frosts. Gladioli are easily increased in this way, and some of the largest will bloom the second year. If there is much difference in the size of the corms, or bulblets, it is preferable to plant the larger in separate rows. Drills drawn out 1½ inches deep will suit them.

Blue Poppies or Meconopsis

(E. H. H.).—Meconopsis Wallichii is very distinct from M. Baileyii. Both are extremely beautiful Blue Poppies. You should succeed in cultivating Meconopsis Wallichii from seed. It requires a fairly moist and shady position in deep leafy soil. We doubt if you will be able to obtain seed of M. Baileyii.

Violet plants for examination

(Mrs. S. O.).—We have examined the Violet plants and they are being destroyed by mildew. After transplanting to the frame the plants were probably watered over the tops, and this is enough to produce mildew if conditions are favourable. In any case this is one of the worst years on record for mildew and other fungoid troubles. You should get a copy of the new book, "Violet Culture," by F. E. Dillistone, price 2s., from this office. It gives advice relative to these troubles.

Phœnix Palm flowering

(E. Coad, Truro).—It is not very unusual for such Palms to bloom in the warmer countries, and it is not always well for them to do so, as they occasionally die after blooming. Your specimen, if it is well furnished with leaves to the ground and could be transplanted, would be worth about a guinea.

Hydrangea paniculata is one of the best shrubs for the garden, as it flowers from August until October

GREENHOUSE

Cineraria leaf rust

I enclose two Cineraria leaves spotted with orange, and would be glad if you could tell me what the disease is and how to treat it.

M. I. W. GAYMER.

—— I should be very grateful if you could enlighten me as to the fungus that has attacked these Cineraria leaves. I have been all over them once with strong Abol and a little brush, but I find it is still there. I have two strains. G. E. R.

[The foliage of your Cinerarias is attacked by the above disease, which is caused by the fungus Coleasporium senecionis, Fr. It is one of the "Rust Diseases," which, during their life-histories, attack more than one kind of plant. One stage of the disease occurs on the needles of the Scots Fir and other conifers. This stage of the disease takes place in spring. Spores produced by the disease when on the conifers can in turn

attack Groundsel, Coltsfoot, and other wild Senecios. It is sometimes a troublesome disease on cultivated species of Senecio. The Cineraria is, of course, a cultivated Senecio. We are not surprised that the spray fluid mentioned in your letter has failed to arrest the disease, because it is an insecticide and has little or no effect upon a fungoid disease. To obtain control of the disease you should isolate all the affected plants from the healthy ones. The affected plants should be sprayed with a very weak solution of liver of sulphur, say 1 oz. of liver of sulphur to 5 gallons of water. Dissolve the chemical in a little boiling water and then make up to 5 gallons with cold rain-water. If you find that the foliage of your Cinerarias will stand a stronger solution decrease the water for the next spraying. We do not think that painting the affected patches with the fungicide would be of much use; it would certainly destroy a large number of the spores, but some spores would have floated away from the parent mass and will, in a few days, start the disease in a new spot. Dipping the plants might make a better job. Watch carefully the clean plants for an outbreak, because the disease is very infectious. Several sprayings will be necessary to obtain control of the disease.]

Aspidistra starved

(F. M. Stokes).—It would be well to supply the roots of the plant in question with fresh soil, as they are now evidently in exhausted material. You ought also to examine the soil in the pot, as the condition of the plant shows that it has become waterlogged and the soil is sour. About the middle of April would be a good time to do so. In the meantime, you might give it some weak liquid-manure until the time for repotting comes round. Turn the plant out of its pot and remove as much as possible of the old soil from amongst the roots, and repot it into a good compost of turfy loam, peat, and sand, using a clean and well-drained pot of a sufficiently large size. Be very careful with the watering until the roots have begun to run freely into the fresh compost. When the new soil is well filled with roots a little weak liquid-manure water occasionally will be of great benefit to it.

ROSES

A hedge of Rosa rugosa

(G. G.).—There is always a greater tendency on the part of this Rose to spread than to grow upwards, but 4 feet should easily be attained. Thin out a portion of the weakest shoots and encourage the strongest by applying a good mulching of manure; you might also tie up a few of the strongest shoots as you suggest, and once the height is attained the hedge will soon thicken by oncoming shoots. Generally speaking, this Rose requires very little pruning, and the harder it is grown the better it flowers and fruits. The fruits have been remarkably handsome and plentiful this year.

FRUIT

Grafting a Cherry

I have a very old Cherry tree (Archduke) which appears to be dying back, and as the fruit is so delightful I should like to save it, or take a shoot from it and graft it. Would you kindly tell me what stock I should have to graft it on and if I could get a stock from some nurseryman? BOGNOR READER.

[You can propagate your Archduke Cherry either by grafting in March next or early April, or by budding in August. The best stock for what is termed the Duke race of Cherries is Cerasus Mahaleb, but it will also succeed on the common or wild Cherry. Any nurseryman who specialises would no doubt supply with one or more of either. If planted during next month or the end of the year grafting or budding may be done next year. Seeing that fruit trees can be purchased at such a cheap rate it is questionable whether it will pay you to go to this trouble and then have to wait a considerable period before you receive compensation in the shape of a crop of fruit. We think it would be far more satisfactory to purchase and plant a tree which would begin yielding fruit in the course of a season or two than to do as you suggest.]

Spraying bush fruit trees

(F. W. M.).—No matter how carefully the winter washing is done it is seldom that an occasion for spraying either in the spring or summer, or both periods, does not arise. We therefore think you had better be prepared with a spraying fluid combining properties of an insecticidal and fungicidal nature for use either in spring or summer. We observe that you favour Mortegg, and are confident that the results obtained will prove satisfactory. If you have scab on Apples, then the use of lime sulphur during February would prove of benefit, and arsenate of lead if Codlin Moth is prevalent. Where Mortegg is used it can be practically taken for granted that aphis will not attack either Plums or Apples, as there are instances on record where large growers who, prior to the use of Mortegg, had to give four or five sprayings, have now reduced this to one, *i.e.*, Mortegg, during the winter season.

MISCELLANEOUS

Dandelions in path

(G. G.).—The Dandelions may be destroyed by placing a tablespoonful of lawn sand on the crown of each plant during fairly settled weather or by applying a little weed-killer to each plant. In the latter case we would advise you to repeat the application after an interval of a few minutes, to enable the liquid to get down to the roots of the plants. Salt is not very satisfactory, although repeated applications will destroy some weeds. If you fill in the spaces with cement the frost will lift it out during a prolonged spell. Messrs. Bentley and Sons, Barrow-on-Humber, Hull, or Messrs. Corry and Co., Shad Thames, London, S.E. 1, would supply you with either. For prices see their advertisements in GARDENING ILLUSTRATED pages.

NAMES OF PLANTS

"Violet," Bury.—1, Veronica pinguifolia; 2, Euphorbia chamæcyparis; 3, Sedum rupestre; 4, Saxifraga Geum var. minor.

T. G. R.—2, Asperula capitata; 3, Polygonum affine; 4, Linaria Cymbalaria rosea.

Pakeha, Washington Blair.—1, Fuchsia Drama; 2, Fuchsia macrostemma. These Fuchsias are hardy, but get cut down more or less in winter.

NAMES OF FRUITS

Mrs. Trafford Rawson.—Apples: 1, Blenheim Orange; 2, Scarlet Pearmain; 3, Ben's Red.

Reading District Gardeners' Association

In addition to the lecture, flowers and fruits were again a feature at the fortnightly meeting held on Monday evening, the 11th inst., in the Recreation Club Room, Abbey Hall, when there was a large attendance. The lecture for the evening was "Strawberries and Raspberries," and the lecturer, Mr. C. Dalby, The Gardens, Greenham Lodge, Newbury, mentioned in his opening remarks that one wondered what could be said to a body of practical gardeners about these fruits, yet Mr. Dalby, by his originality of thought, was able to claim the close tention of his audience for 1¼ hours wh described his methods of preparing th the securing of runners, planting, man etc. The varieties of Strawberries r mended were Royal Sovereign and The and Superlative and Lloyd George berries. Time did not permit of a le discussion, but it proved very interestin the competition for three vases of flowering Chrysanthemums, three d varieties, there were five entries. M Haines, Priory Road, Caversham, was first, Mr. W. Broomfield, The Ga Cliffe House, Mapledurham, second, an W. J. Knight, Beecham Road, Re third. In a class for three vases of Mi mas Daisies, three distinct kinds, there five entries. Mr. H. G. Cox, Ha Road, Reading, was first, Mr. H. The Gardens, Luern's House, Goring second, and Mr. G. Burchell, Church Earley, third. In the non-competitiv tion a First-class Certificate and the gratulations of the Association were to Mr. M. Goddard, The Gardens, Wood, for three dishes of most ex fruit, consisting of Lady Palmerston Pe Coe's Golden Drop Plums, and Russet Apples. An Award of Merit granted to Mr. E. Iles, Brighton Reading, for several vases of early-flov Chrysanthemums grown on an allot Mr. A. H. Fulkes, The Gardens, Elm Reading, showed several pretty variet Pompon Dahlias, Mr. E. A. Beaumont Lodge, Earley, sent several splendid b of Chrysanthemums, and Mr. W. H sprays of a Rambler Rose from a tree as a "standard" and which had be bloom all the summer.

Benn Brothers' Other Journ

The Cabinet Maker.—Special Wy Issue; Display in Window and Show Special Timber Section; Woodwo Machinery and Practice.

The Chemical Age.—Protective Me in Chemical Works Issue; Fires in Che Works; Dust Hazards; Nitric and Sul Corrosion of Iron and Steel; The Che Combine.

The Electrician.—The Canadian Bean vice; Dr. Eccles' Presidential Address I.E.E.; "Electrical Propulsion of Ships W. A. Vivian; Poles for Overhead T mission.

The Fruit Grower.—Imperial Fruit Issue: Illustrated Guide to the Trad Competition Exhibits; Special Message Secretary of State for the Dominions; C Garden and Spitalfields Markets.

The Gas World.—Annual Meeting British Commercial Gas Association; Ralph Halkett on the Training and O tunities of the Men in the Industry; Years as a Storekeeper.

The Hardware Trade Journal.—Lo Forward; Buying for Christmas; New Lines; More About Reamers; Hardwa the Egyptian Market.

The Timber Trades Journal.—Oak a Future Supply; Forest Resources of La California Redwood.

CATALOGUES RECEIVED

A. J. and C. Allen, Norwich.—Select Roses, 1926-1927.

Wheatcroft Bros., Gedling, Nottin —The best Roses to grow.

Laxton, Bros., Bedford.—List of fruits.

John E. Knight and Son, Wolverham —Roses, fruits, and plants.

S. McGredy and Son, Portadown, No Ireland.—Roses, bulbs, trees, shrubs, hardy plants.

GARDENING ILLUSTRATED

2487—Vol. XLVIII. NOVEMBER 6, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

erias 672
op. the 666
Gravenstein,
ts" from ... 677
asgood's Non-
... ... 666
m's Crab ... 666
... ... 676
simplicifolia
... ... 674
erry (Arctos-
os Uva-ursi),
... ... 674
herbaceous,
ng 665
ury Bells ... 672
Cauliflowers 677
Cheiranthus Lemon Queen 674
Chrysanthemums, rust on 678
COMMELINA CŒLESTIS 672
Coronilla glauca ... 665
Dahlias in winter ... 666
DAISY, MICHAELMAS, QUEEN MARY, THE NEW 665
Delphiniums, the cultivation of 668
Fig trees, care of outdoor 678
Fatsia japonica... ... 673
Fruit trees, heading down old 676
Geranium Argenteum album 666
Grapes, diseased ... 678
Grapes shanking ... 676
Helenium autumnale 672
Hippeastrum (Amaryllis)... 666
Irises, dividing and planting 673
Kew and the introduction of Para rubber to the East .. 667
Lavatera Olbia rosea 668
LUPINS, NEW 673
MORNING GLORY ON AN EAST WALL 667
Orchids, cool house ... 674
Oxalis lobata 670
Pæonies 668
PÆONY LIMOSEL ... 668
Pear, the... 677
Petrocaulis pyrenaica and other alpines 667
Phloxes and Violas ... 672
Phloxes, herbaceous... 669
Planting, points on 677
Plants, tastes in ... 667
PYRETHRUM ULIGINOSUM WITH MICHAELMAS DAISIES 671
Raspberries, autumn-fruiting 678
Red Hot Pokers, planting 669
Renovating and revising 668
Rose planting 674
Roses, improving soil for 674
Salvia Pride of Zurich... 678
Scarlet Runner Prize-winner 678
Sphaeralcea munroana 672
"Then there came a frost" 666
THISTLES, GLOBE, OR ECHINOPS, HANDSOME 670
Tradescantia virginica 672
Tulips, May-flowering 673
Turnips 666
Wallflowers, protecting 666
Witloof 677

Planting Herbaceous Borders

E time has arrived when attention st be given to the herbaceous borders h a view to overhauling and replant-d also if necessary making fresh ones. managed herbaceous border is one of ost attractive features of a garden, as it does a succession of flowers n spring, summer, and autumn. In f the finest borders of the day there be found, besides perennials and s, shrubs in addition.

g-growing herbaceous plants, such nflowers, Rudbeckias, Michaelmas , and plants of a similar er increase at such a rate s necessary to divide and the stools every third Neglect to do this, and wer-stems come up so that they injure and each other. In replant-herbaceous border the ng is to lift all the plants el them in on a vacant ground. This is also e to introduce any fresh The border having been of plants the ground e thoroughly prepared, rbaceous border is a per-investment which is to a display in the garden ne years, and that shall at and trim with plenty n from early May until of October. The whole soil should be trenched oits deep, working in a s amount of manure. is nothing like rotted nanure for the two lower it for the top should also d bone-meal, basic slag, and ashes e garden bonfires. Keep the three their order, and do not bring the sub-he surface. If there is any sourness ower soil it should be liberally limed. uring, the kind of soil, of course, ot be overlooked. Horse manure is for heavy soil, while cow and pig are best for light soils. Both will enefit from the application of rotted e matter, and in many places in ys this may be all one can get. Hop is also excellent. After the trench-been completed leave the whole for month to settle before planting to r shrinkage.

TO PLANT.—All early-flowering xcept Pyrethrums I consider are far lanted in autumn, as are all other plants, unless the soil is of a very heavy nature, in which case I should undoubtedly plant in spring, even though the display be less the first year. On all ordinary light soils the only time between October and April when perennials should not be planted is during frost, or when the ground is sticky after rain.

In replanting the border take out large holes to hold the roots nicely. Divide the latter to the right size, and it will be better to arrange them on the ground in the position they are to occupy. In this way any alteration is easily effected with little trouble.

The new Michaelmas Daisy Queen Mary in the Hardy Plant Nurseries, Merstham

The plants should not be used in a niggling way. A clump should contain not less than three plants, and the whole should be planned on broad and generous lines. Do not be over careful as to the height of each plant, for a too formal arrangement is not at all desirable. Dwarf plants in the main should be kept towards the front, gradually increasing in stature towards the back unless the border is in the open. Then the tallest plants should be down the centre, sloping down each side to the edge. A sprinkling of biennials among the front-row plants will prove very attractive, and may consist of Canterbury Bells, Wallflowers, Antirrhinums, and Sweet Williams, whilst right in front patches of Pansies, Arabis, Polyanthuses, Pinks, and other plants of a like dwarf nature can be planted; also Hyacinths, Tulips, Narcissi, Crocuses, and Snowdrops to give a spring display. After planting is finished rake the soil neatly between the plants and renew all labels if required. With the spring weeds will put in an appearance and must be kept down by the free use of the hoe. For the plants to make satisfactory progress watering must be seen to in dry weather. All plants requiring staking should be attended to early or great damage may be done in a very short time to tall-growing subjects by high winds and heavy rains. All flowers should be picked off as they fade, as the beauty of the border will be longer maintained. Those plants that give a second crop of flowers later in the season should be duly attended to in good time with regard to cutting down.

F. H.

Notes of the Week

The new Michaelmas Daisy Queen Mary

THIS variety, which attains a height of 5 feet, is, in the opinion of experts, the finest perennial Aster of the Novi-Belgii section yet raised. The colour glints in the sunshine with subtle and indescribable beauty, and no words can portray the merging of glorious tones of rich mauve and blue. Individual flowers measure quite 2½ inches across and are borne in large loosely conical or pyramidal trusses. Substance of petal is another characteristic rendering Queen Mary valuable as a cut flower for house decoration and equally desirable for weather-resisting qualities in the garden. It has been admirably shown this year by Messrs. W. Wells, Junr., Merstham, and last year received an Award of Merit from the Royal Horticultural Society.

Coronilla glauca

This plant is often seen in the greenhouse, where it will be in flower more or less throughout the winter. It should, however, be borne in mind that it is perfectly hardy in the south-west of England; also over a large area in the south, more especially near the sea. Around Chepstow it has been growing outside for many years, and if the weather

keeps open it is nearly always in bloom. It forms a neat evergreen shrub from 2 feet to 4 feet in height, and belongs to the Leguminosæ. The beautiful yellow flowers are produced in umbels of seven or eight, and the glaucous foliage forms a pleasing contrast to the bright display of yellow. C. glauca is common in Devon and Cornwall, and it can be seen in many cottage gardens. In some parts where the winters are more severe it will be advisable to plant it against a low wall. All the Coronillas are deep rooting, and they will thrive in an ordinary border. C. glauca pygmea is a small counterpart of the type, and may be useful for the rock garden as an isolated specimen, otherwise it is not worthy of consideration. Both can be increased by means of cuttings. B.

Hippeastrum (Amaryllis)

A batch of the most promising bulbs may now be placed in the forcing house. Remove an inch or two of the old surface soil and apply a top-dressing of rich compost, such as a mixture of fibrous loam, leaf-mould, crushed bones, and silver sand. Examine the drainage and see that it is perfect, as it is essential that surplus water should pass freely away.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

"Then there came a frost"

THIS, the Upper Ward of Lanarkshire, is not an early district, and as it is often about mid-June before it is quite safe to get out the more tender bedding plants it naturally follows that it is August and September before they are at their best. This season was no exception, and in the week ending September 25th, on looking around, one was tempted to say, with Kipling, that "the glory of the garden shall never fade away." But then there came a frost, and on the morning of Sunday, the 26th, the thermometer registered 6½ degs. Dahlias, Lobelia, Nasturtium, Sweet Peas, and early Chrysanthemums were all more or less rendered useless, and amongst vegetables, Marrows and French Beans were fit only for the rubbish-heap, whilst late Peas and Cauliflowers were badly damaged. In a few short hours the glory had departed. We were standing on the threshold of another winter. G. WATT.

Protecting Wallflowers

"P. W. E.," issue October 30th, page 656, on "Protecting Wallflowers," says that frequently these plants are allowed to stand very thickly together throughout the summer. Later he recommends pricking out the seedlings 5 inches to 6 inches apart in beds 4 feet to 5 feet wide. To my idea 6 inches apart is not enough room to allow for the formation of well-grown plants and to allow for using the hoe. I take it that "P. W. E." has only a few plants to grow for his beds. Where one has to grow close on 2,000 plants it would make a lot of unnecessary work, and how many employers tolerate empty beds during the winter days? From my experience I find sowing the seed not later than the first week in May is suitable. Prick out when large enough to 9 inches apart on some good ground that has had plenty of rotten leaves dug in, so that when they are lifted in the early autumn one can make sure of getting a good ball of soil to each plant. Get the plants out as early in the autumn as possible, water them if necessary so that the least possible check is given them, and get the plants growing and well established in the beds before the heavy rains and hard frosts set in, and I think, with our average winters, the plants should stand and provide us with a good return in the following spring.

Hursley. F. J. J.

Dahlias in winter

Some time ago there was a discussion in GARDENING ILLUSTRATED as to the advisability or otherwise of lifting and storing Dahlia tubers over the winter. I have myself tried both methods and found that better results were obtained from tubers left in the ground than from those lifted and stored away. I have just (October 28th) been discussing this vexed question with a keen and experienced gardener friend here in Sussex, who recommends the following plan:—In about a fortnight's time, before frost sets in and destroys the foliage, cut down all top growth level with the ground. Lift the tubers carefully and replant on a dry day in holes filled with a mixture of sifted ashes and soot as a foundation, with burnt soil above. The tubers should be buried to a depth of from 5 inches to 6 inches, or even deeper in the case of really strong tubers. The tops of the holes should then be well mulched with coarser ash as a protection against frost, insects, and hibernating slugs penetrating from above. Slugs are liable to work their way down to the base of the tubers if the holes are not so protected both above and below. E. A. S.

Turnips

Mr. E. Burrell is not the only one who has had the experience of Turnips not being at all satisfactory this season. (See note in GARDENING ILLUSTRATED dated October 23rd.) In these gardens there have been serious complaints from the kitchen of such sterling varieties as Early Snowball and Matchless, one of the best Turnips I have grown. It is Pear-shaped, remains long in the ground without any tendency to bolt, while the flesh is solid, pure white, and, as a rule, of excellent flavour. My complaint has been somewhat different from that of Mr. Burrell, who states his roots were woolly and pithy. Mine were solid enough but turned out black when cooked, and retained too much water. My soil is of a good loamy nature overlying limestone, and all that could be desired for this crop. It may also be noted that most kinds of Broccoli and other Brassicas have made luxuriant growth, which is of a soft and sappy nature, and seems unable in some cases to stand severe frost. Autumn Cauliflowers have turned in miserably, the curds being small and open.

W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

The Apple crop

Here in Wimbledon the Apple crop has been as bad as anywhere. There are some thousands of Apple trees in Wimbledon, and it was quite disheartening when walking around different parts this summer to see what the crop looked like. Some of the trees had nothing, while not one was observed with anything like the crop it had in previous years. According to some of the oldest gardeners in Wimbledon it is the worst ever been known. Currants, Red, White, and Black, have been very poor; Raspberries have been poor; Pears and Plums have done fairly well; Cherries have done fairly well; Gooseberries have cropped enormously. I certainly never seen them crop like it before. L berries and Newberries have also cr wonderfully well, even the new g flowered and fruited until the end of tember. Yet when one's mind carried back a few months, when we saw s lovely show of Apple blossom on the last spring, one would naturally have th we were in for a bumper crop. Let us that the weather will be kinder to us a year. F. R. H

Wimbledon.

Apple Sam's Crab

Can any of your readers put me in way of obtaining either a bush or stand a very old and excellent dessert Apple Sam's Crab? It is now at its best, an most excellent flavour, and seems worthy of more extensive cultivation t seems to get nowadays, as I cannot in any fruit catalogues; but perhaps grower has it, and I should be most gr if anyone could supply me with a young as I have only a very old one in the or —S. BRIGHT, gardener, Elsich M Ludlow.

[This, known also as Longville's K is a middle-sized fruit somewhat conic angular. The skin is greenish- streaked and spotted with bright red. flavour is rich and sweet, and pleasantl acid. It is in use from the middle of to the middle of September. It is s have originated in Hereford, where present time it is but little known. It handsome, and, in our opinion, of co able merit. Could you not procure from your old tree and graft these young healthy stocks?—ED.]

Apple Peasgood's Nonsuch

Those who admire an Apple which large and handsome fruits will find Peasgood's Nonsuch. Unfortunatel variety has the reputation of being bearer, and this alleged drawback ha dered many from giving it a place i collection. I am decidedly of opinio errors in pruning have everything to d shy bearing in the case of this Apple. well known, there are varieties whic most freely on the tips of young woo Peasgood's is one of them. When t trees are annually pruned closely in m the fruit-buds are cut away; and if th be used more sparingly the results y year will be more satisfactory. Of cou the case of young trees, pruning m done rather severely in order that a w nished and well-balanced tree m obtained. Some varieties are more formed than others, but this Apple r much care in its earlier stages. Whe formed, however, it may have a little l and the fruits will be not only plentif of excellent form and colour but re produced. As regards form, the bush the amateur, best, and for quick retur stock should be the broad-leaved Pa In point of size, with a full crop, gathered many individual specimens turned the scale at ¾ lb. The average of the entire crop would probably be ½ fruit. That is large enough for ev purposes. Amateurs especially ou make a note of this Apple and plant or two during the forthcoming plantin son. W. I

Geranium argenteum album

I was much interested in Mr. C Elliott's notes on this plant. It is sur that he should never have come acr albino form. We had a specimen or tw in a former firm I was connected wi

g some few hundred plants of it from his year one of the few to flower in the season was pure white, but as it was arked out in time we are holding on to ole batch in the hope of finding it again pring.

Elliott's account of the transmutation ranium argenteum variety purpureum impossible, and I would suggest that really happened was that two seedlings anium argenteum and cinereum had acally grown into one tuft, possibly in the y from which Mr. Elliott obtained his of the dark purple crimson form, and after remaining unnoticed, the darked form of Geranium cinereum took per hand, swamped the slightly weakerng silvery-leaved species, and usurped ce.

the best of my knowledge Geranium um never occurs outside the Pyrenees, I have never heard of Geranium eum straying from its well-known station on Monte Baldo westward to the Pyrenees, although I can vouch, personal experience, for its occurrence further East. My friend, Dr. H. -Smith, and I certainly brought home of it last June from the very top of Prst, where it grew in quantity in the urf sloping gently to the South quite to the Italian frontier line and looking upon the Adriatic. It was too early for lants to flower in June, the snow was ust off that cold and windy ridge, but he first silvery tufts of it were instantly isable to us. I rather believe that the purple-crimson and the albino forms away from the more classical station s plant on Monte Baldo. My experipoints to the fact that colour variations l-known plants seem to occur most fre-y away from the more central strong-of such localised, rare species as the in question.

ther, I do not think that a single ist would admit Geranium argenteum Geranium cinereum to be more geoical forms of one another, in which case ould not be surprised if, under garden ation, and especially under lowland cons, these plants would so closely ap-n one another in appearance as to finally into the same thing. Both species been cultivated for ages in our gardens, we should surely have had abundant of such reversion to a common type, oth of them remain distinct, and even colour forms which are known of both s have not hitherto shown any signs of ng into one another.

Morning Glories in a reader's garden

If any more albino forms appear next spring among our fine lot of young plants I shall be happy to spare Mr. Elliott a specimen. WALTER INGWERSEN.

Kew and the introduction of Para Rubber to the East

Referring to the article by "Jason" on "Kew and the Introduction of Para Rubber to the East," issue October 30th, page 660, your correspondent does not appear to know that Sir Hugh Low, the Resident of Perak, was instrumental in planting rubber trees at Kuala Kangson and Taipeng long before Mr. Curtis, of Penang, thought of it, I believe.

Mr. Leonard Wray, the Curator of the Taigeng Museum, was associated with Sir Hugh Low in the introduction. I was not associated with rubber-planting till 1898, and most of the seed obtained then came from Taipeng trees and Kuala Kangson.

E. T. C. GARLAND.

Athallan, Frimley, Surrey.

Morning Glory on an east wall

I WONDER if the two enclosed snapshots of the Ipomœa rubro cœrulea, which we grew very successfully last year, would be of any interest to your readers. The seeds were sown in gentle heat in March and brought on gradually, and planted (in the pots in which they were sown) the beginning of June on a wall of the house facing due east, and there they ramped up the wires to a height of 10 feet to 15 feet or 16 feet, producing the first glorious flower on July 24th, and continuing all the season to bloom. The record number out on one day was 245, and in the whole season there were rather over 5,000 wonderful blooms from the six plants.

I tried them again this year, but the cold, dull June and July were not conducive to profuse blooming, and instead of the grand number of last year 12 plants have not produced more than 50 blooms in the whole season.

Lindfield, Sussex. B. C.

Petrocaulis pyrenaica and other Alpines

Reading on page 601 (of the issue of October 2nd) that Petrocaulis pyrenaica "thrives on level, warm spots on the rock garden" brought up visions of a day this year when I saw it in very different surroundings. It was on one of the Italian military roads above the Mont Cenis lake, where the unused sides of the road gave the more or less level surface, and the sun-warmed stones, on which it nestled, the heat that it loves. Here it grew in great wads and patches, and its pale lilac flowers filled the air with their delicious fragrance. The colour of its petals was very uniform in shade, never varying to the real purple that one hopes some day to see, but an occasional white sport was observed.

On this particular day, although the sun was warm, the air felt as bitterly cold as on any March day at home, and a fresh covering of snow on the higher mountain slopes and icicles hanging from the rocks made it difficult for one to realise that it was nearly midsummer and an Italian sun overhead.

Other treasures, too, were seen that day. Primula pedemontana in countless thousands on the lower peaty slopes, with P. viscosa in the more rocky situations, and where the two intermixed an occasional hybrid, the P. Bowlesii of Farrer. This hybrid in its better forms was a really beautiful thing, with the wide-open flowers of pedemontana, but more of them to the cluster and of an attractive mauve that was seen in neither parent. One distinction that marked it out as a hybrid was its woody stock, like that of P. viscosa.

After leaving the road where the Petrocaulis grew, a steep ascent was made with the hope of seeing Eritrichium nanum, where, two years ago, it had grown in great profusion, but an unbroken waste of snow showed that it still lay deeply buried. Even Lychnis alpina at lower elevations showed none of its crimson flowers, nor Lloydia, among the rocks, its dainty white-striped bells. Dryas octopetala was only just awakening where the snow had left it, so there was no chance of seeing the pale pink form that previously had been found here, and from which a small piece had been taken that had failed to grow. How alluring a pink-flowered Dryas sounds! Perhaps a collector some day may find it, and there will appear in a well-known catalogue "Dryas octopetala rosea, which I collected on the Mont Cenis, 21s. each," or perhaps if it were moved to our lowland gardens the rosy flush would vanish. R. B. C.

Ipomœa rubro-cœrulea in September, 1925
5,000 blooms on six plants!

Tastes in plants

I hesitate to say too much on a subject which is purely a matter of opinion, and know that *quot homines tot sententiæ* must not be lost sight of, but seeing that you are welcoming many new readers on p. 649, I thought that possibly some of these might be beginners in gardening and glad of a hint. I refer to the very frequent notes both in which this or that plant is praised far beyond its merits. I will not mention any names so as to avoid any acrimonious disputes, but would suggest that your readers see the plants in question, not merely at a show, but in a garden, before they decide whether they like them or not. I have had many a disappointment through not observing this rule. Some recommended plants no doubt may be excellent subjects in suitable soils and situations or in more skilled hands than mine, but others I know are of quite easy growth, and, to my mind, have nothing whatever to recommend them in colour, form, or habit. That a dealer should write glowing and fulsome accounts of his plants is only to be expected, since he wishes to sell them, but I honestly confess that the views of many amateurs as to what is pretty and desirable often surprise me. A. H. WOLLEY-DOD.

NEXT YEAR'S HERBACEOUS BORDER

Pæony Limosel

THIS is one of the many good herbaceous varieties sent out by Messrs. Kelway and Son. The flowers are very large and very bright, of a clear lilac-rose colour. As may be seen from the accompanying illustration, the flowers are full double with a broad guard petal and narrow petals in the centre. This variety, which is very sweetly scented, has been awarded the Certificate of Merit by the Royal Botanic Society.

Every flower has its day, and the Pæony is said to be the coming flower. It should certainly be more extensively grown than it is. It is a wonderful flower and does extraordinarily well in this country. November is a good month for planting—the earlier the better. Pæonies are not fastidious about soil, but they like a good rich loam and a well-drained situation. H. C.

Pæony Limosel

Planting Pæonies

The pageant of Pæonies in June is a glorious one, though of comparatively short duration. What a bewildering array in colours and varieties, and with what freedom they bloom! Could the old florists, with their limited sorts, of which the well-known Cottage Red was always in evidence, have imagined that from what they grew there would be built up varieties so beautiful in colour and form? One of the things about the planting of Pæonies is worth recalling. It is in choosing a place for each clump. It should be one not likely to be injured by other plants, and neither should it be forgotten that the less they are disturbed, once planting is done, the better.

One may take a leaf out of the cottager's book. Pæonies may often be seen on a border near his door, and by their size you rightly come to the conclusion they have not been shifted about. Further than this, if by chance you go by the garden when the plants are in bloom you will find, if you count the flowers, that their quarters evidently suit them, and so they are left alone and flower more abundantly year by year.

MIDLANDER.

The cultivation of Delphiniums

To be seen at their best, Delphiniums must be liberally cultivated. They flourish in a rich, deep, mellow loam, and when left alone for a few years very strong shoots are made, and they, if helped by mulchings of good manure in autumn and spring, bloom with great freedom. The Delphinium is frequently grown for exhibition, and it is the practice with some to lift the plants every two or three years, manuring the ground and replanting. This produces a strong growth and large handsome spikes of fine colour, though some of the most handsome bunches of Delphiniums set up for show purposes have been composed of lateral spikes when at their best. In a time of drought, mulching and watering are highly beneficial. It is the custom to increase fine varieties by division of the roots, and in order to get the material out of which to make cuttings, the fl spike should be cut away, this prom growths from the ground. By removing with care, each having an appropriate and placing them singly in pots of fine keeping them close for a time in a cold fr and occasionally sprinkling overhead, th tings soon make roots. When rooted, can be planted out in a prepared bed, extra strong plants are required, they c shifted on into larger pots, and so grow into size. Seedlings can also be raise taking seeds from a few of the best var and sowing them as soon as ripe in filled with a sandy compost. Perhap length of time required for the seeds to minate deters many from attempting to seedlings, as the seeds will sometimes re in the soil a whole year before they star growth. The pans or boxes in whic seeds are sown should be placed in a frame, and the surface of the soil kept as required, and when the plants have g large enough to bear it they should be t ferred to a bed in the open to grow or blooming size.

—— Plant in November, after all growth has died down, the tube roots being buried to a depth of 6 inches to 7 inches in a compost of soot, and sifted ashes, blended with an part of good burnt soil. In early spring fore the young shoots appear above gr the plants should be covered to a dep about 1 inch with sifted ashes as a prot against possible attacks by slugs, whic very partial to the young and tender gr as they appear. As in the case of Da slugs are sometimes liable to creep dow the base of the Delphinium roots, and work their way upwards, whilst slowly ing upon and thereby destroying the j Where lime and soot are incorporated i soil, as above indicated, slugs will n penetrate. E. A.

Renovating and revising

While many put off the renovation of h flower borders until spring, the better is to get on with the work in late au as time and opportunity admit. The diffi which presents itself in spring, more pa larly when borders have not received p attention in this matter, is in regard to baceous plants not labelled, when it s times becomes difficult to locate all t clumps. Shortening days have, of co to be taken into account, but even with handicap one can make a start, doing a tion at a time. Hardy plants that need sion badly should receive attention fi possible, the ground being well dug and thing in the way of food given, whether rotted manure, vegetable refuse, or whan We are all acquainted with the vigo growth of Starworts, Phloxes, Helenia Helianthuses, Achilleas, and it is obvious they cannot be allowed to occupy the spot indefinitely, or go for many years i out being split up. Autumn gives one o tunity of revising such borders—in chari plants from one position to another, v adds fresh interest to a garden. The should be tackled in earnest before interferes. TOWNSM

Lavatera Olbia rosea

When flowering in September, Lave Olbia rosea was appreciated, although i been in bloom since early June. It is a o border plant, attaining a height of 4 feet, but flowering well when much sm It gives a long supply of deep rose flo

Pæony borders in Mrs. Graham Wood's beautiful garden near Guildford, Surrey

being considerably finer in colour than of L. Olbia, the type. It well deserves ward of Merit given by the Floral Com- e of the Royal Horticultural Society.

S. Arnott.

Planting Red Hot Pokers

w is the time to plant Torch Lilies, be- frost sets in. If hard frost should set fter planting the ground should be ed for some distance round with a thick ng of dried Fern or Bracken. This I or protection from frost better than any- ; moreover, the colour does not offend eye. Every winter the ground round them is so protected, and the tops, too, tect with the same material, for these s I only look upon as half-hardy ones, their great beauty entitles them to be taken care of. It is said by some that ear orange-coloured flowers, but this r is mostly confined to the inside of the rs and to the exserted stamens, the out- of the tube of most of the species being et of some shade. These plants are n by the old name, Kniphofia, but I r the name Tritoma for them. The fol- ng are six good species which will form did objects in the front of a border on n, or in the borders or as isolated speci- s on the lawn :—

Uvaria, known also by the name of es, is at once the most common species the best known, and it bears the popular e of the Red-hot-poker plant. As I have this with upwards of 50 of its spikes loom it is a charming plant. Its tubes scarlet, tipped with yellow. K. caules- grows upon a stem, and its leaves are glaucous. The pendant tubes when ng are deep red, becoming yellow with very handsome, but it does not equal first-named plant; indeed, I am not re if it is so hardy. It was found in the Storm Bergen Mountains, which border on British Caffraria. K. Macowani is a very dwarf species, and it will require great care during the winter months. Last season it succumbed to the severe weather, and it therefore is best treated as a pot plant. The individual flowers are large and bright orange-red; its home is in the Boschberg Mountains. K. Rooperi is another species with a very dense spike of bloom, the flowers of which are orange-yellow, tinged with red. K. media, which may be easily distinguished from Uvaria by its glaucous leaves and its less dense spike of bloom; the flowers are orange-yellow and red, with stamens much exserted. K. pumila may be easily distinguished by its cup-shaped tube and its smaller size. It is an old plant not much seen now, but its spikes of orange-red are very pleasing in the month of September. Of the above-named species none are equal to K. Uvaria for showy, stately lines, and none, I think, are so hardy.

P. R.

Herbaceous Phloxes

A dry season is distinctly opposed to the well being of this showy group of plants, causing them in many districts to droop. The result of this is blindness in the case of many of the finest trusses, especially where the plants are crowded and in need of division. Apart from excessive heat there are other items, chiefly cultural, that are responsible for the half-hearted way in which these plants are grown, for, if we would have their massive panicles of bloom in our gardens in perfection, they must be treated with the greatest liberality from the first. Unfortunately, these plants lend themselves too abundantly to division of the stools. I say unfortunately because I believe that much unsuitable rubbish is in consequence distributed, and from which it is hopeless to expect any really good results. Stools that have stood for several years in one spot till they are a solid mass of weakly, puny stems and centres can never produce fine heads of bloom even when transplanted into good soil. In those instances where the plants are more than three or four years old the best results are obtained from cuttings, but up to the age named these plants may be divided and replanted with very good results. Care, however, should be taken to employ only the younger parts of the plants—viz., the outer growths of the stools. The central growths are generally puny and weak and often refuse to grow in a satisfactory way. When employing the outer growths of the plant these should always be planted singly. This is most important in the production of large, handsome heads of bloom. Such pieces as these, more especially if taken from ground plants, will a year hence produce from four to six heads of bloom according to their strength.

Early October is an excellent time to do this work, while there is foliage remaining of the present year; indeed, there is no better season in the whole year for planting these herbaceous Phloxes than early autumn. They have then plenty of time before winter arrives to take good hold of the soil. In the first place it is most important that the soil be very rich and worked quite 2 feet deep. In this there should be no stint. Dig a hole 2 feet square in the ordinary garden soil, and work in about one-fourth of well-rotted manure. Mix the latter well with the soil, but not too deeply, for these Phloxes are also great surface rooters. Now return the soil, and finally put your plant quite firmly in the centre of the hole, and in a slight depression. This last will admit of thorough watering in dry weather. A mulch of manure may be added for the winter, but it is not essential. If a bed is required a similar mode of preparation will be needed, but it will be to the advantage of the Phlox that the usual rounded surface should be dispensed with. In summer time

all that is needed to make these Phloxes a success is plenty of moisture at the root. Given a thorough soaking twice weekly, one of these being of liquid manure from the stable or cow-house, well diluted, this will prove of great help at flowering time.

Endeavour always to obtain fresh young plants from the ground. Failing these, all pot plants should be shaken clean out of the soil, never planting in the solid ball as received. These plants are easily increased from cuttings in autumn or spring, preferably the latter, employing a hot-bed and the fresh young shoots of the year. Under such conditions rooting takes place in a month, and when hardened off the plants should be put at once into rich ground. Many of these will flower the same year. Thus grown these Phloxes are a source of pleasure and a great attraction in any garden. T.

—— I grow some hundreds of Phloxes in the flower garden, pleasure grounds, and in the kitchen garden borders, and I have no flowers which are more admired from July until October. They are so hardy that no excess of drought or frost will injure or kill them, and their freely-produced and noble spikes of varied and richly-coloured blooms are very attractive. Phloxes are admirably suited either for small or large gardens They are also specially well adapted for all gardens in or near towns, as they are not liable to suffer from exposure to dust, smoke, or a murky atmosphere, so injurious to many flowers. Early in the spring (beginning of April) is an important time in their culture, as propagation, planting, and transplanting should then receive attention. It is not a satisfactory way to raise plants from seed, as only inferior forms may result. The best named varieties may be bought very cheaply, and after they have been grown a season or so they may be freely divided. Phloxes are frequently propagated from cuttings, and the young growths root freely under a hand-light or frame early in the season. But of all the

WAYS OF INCREASING THEM which I have tried, I prefer dividing the plants. Plants of one or two years' growth may be taken up and cut into from six to ten plants, each with a good root attached, and if replanted at once they never seem to feel the change, but grow on and flower freely throughout the season. I have treated hundreds of them in this way about the first week of April, and 99 per cent. of them have succeeded as well as I could desire. In dividing them the roots should be preserved as carefully as pos and they should not be allowed to dry u fore being replaced in the soil. To Phloxes to perfection they must have a rich soil. They will live and bloom, to light, poor material; but they will never develop their gorgeous flower-spikes such circumstances. When a whole b border cannot be deeply dug and he manured for them, the position t occupied by each plant should be treat this way. In hot, dry weather a thor soaking of manure-water, if availabl highly beneficial, and in all cases, whe possible, mulch over the surface of the with some half-decayed stable manure. P.

Echinops nivalis, when rightly placed, adds to the importance of a garden

Handsome Globe Thistles or Echinops

THE possibilities of these highly de tive plants might well be considere those who are now engaged in pla perennials. In large gardens they ma advantageously employed in various and when rightly placed they add mu the importance of a garden. In big baceous borders they have an inestir value in the formation of imposing gr and they associate well with many of occupants. Some very telling effects, may be produced by their introduction the shrubbery border, where their showy or white flower-heads and prettily-cut fo harmonise well with the surrou greenery during the late summer. In rougher parts of the garden, or in wh generally spoken of as the wild garden, plants are especially welcome, while st groups might be placed at intervals on greens. The Thistle-like, spiny foliag particularly handsome, while the glo heads of bloom complete the beauty of highly attractive plants.

Globe Thistles are not fastidious in soil requirements, but, like most ram growers, they do best in a deeply-dug, manured soil in a fairly open situatio saw some very flourishing groups last mer in a large border, where many o occupants were languishing from war water, and this would seem to indicate they are good plants for dry situations. plants are readily propagated by divisio the roots, while slips of the roots will re strike if taken during the spring and ins in sandy beds under hand-lights. P may also be raised from seeds, which either be sown in the open ground in s or in the cold frame in late summer.

Although there are several species, more than a few are generally met wi English gardens, and these do not va great deal. They all have beautifully somewhat spiny foliage, and globular h of silvery white flowers. The average he of the plants is from 3 feet to 5 feet. species most commonly grown are Echi Ritro, ruthenica, sphærocephala, and niv Bees show a special liking for these pl and where any hives are kept, it is worth while having a few bold clump Globe Thistles. G.

Oxalis lobata

A very choice dwarf Wood Sorrel is which will appeal strongly to those who to form their rock gardens in a limited and have a love for rarities. Its little f green Clover-like leaves are lovely in th selves when forming low mats an inch o high. These go to rest during early s mer, to appear again in October with n bers of the most exquisite deep golden-yel flowers. E. M

yrethrum uliginosum with Michaelmas Daisies

ERE are already some good perennial sters of white colouring, but for bold fects in the borders we still use rather the fine old white Daisy Pyrethrum sum. In these days of autumn, when eater part of the summer foliage is ng to the warmer tints that the leaves e when they have done their year's and are beginning to fall, there is a special pleasure in coming on a region where the colour is exactly complementary to this—clear bright purple, tender pink, and pure white. The white is so generously supplied by the Pyrethrum that we plant it in many groups among the Asters, and always with happy effect. Just beyond the northern end of the October Aster borders there is an opening among the trees giving a distant view of a line of hilly ridge three miles away. The Asters at this end are R. Parker at the back, and, more forward, the pretty white Comeliness, a precious gift from Aldenham. A good purple Amellus is quite to the front, and in the foreground of the picture a large group of the light, warm-tinted Hon. Edith Gibbs. A bold group of the Pyrethrum is at the back. The line of the grey-blue hill in the distance tones delightfully with the fresh colouring of the near flowers, while the dark Holly to the left and the Oaks on the right combine to form a good pictorial composition and an admirable background of rich dark colouring to the clear, bright flower picture in front. The big Daisy goes equally well with the Asters of purple and pink colouring. About the middle of the border there is the pretty pink Namur, another precious Aldenham flower, of moderate height with a strong backing of the great Daisy. Opposite this is Aster Cloudy Blue, with the same accompaniment. It would be instructive to know whether other growers of Cloudy Blue have had the same trouble with this pretty plant as has befallen the writer of these notes. It is charming when it does well and shows its full double grey-purple bloom, but in some seasons, in my light soil, it fails entirely; the plants are healthy, but the bloom quite single, of no beauty whatever, and it is evidently only fit for the burn-heap. Then, again, a few double blooms induce me to give it a reprieve. This season, after three years of failure, it is making a fair show. G. J.

1. Aster Cloudy Blue and Pyrethrum uliginosum

2. Aster Namur and Pyrethrum uliginosum

3. The north end of the Aster border

Tradescantia virginica

The Tradescantia is well worth growing, if only to keep in mind "that painful industrial searcher" John Tradescant, as Parkinson describes him, who introduced the plant named after him into our English gardens in 1629. It is quite hardy and not particular as to soil or situation, and grows to the height of about 2 feet. The type bears flowers of the richest and purest purple, but there is a more rosy-flowered variety and also a white one. The flower-buds are borne in clusters, and although each individual blossom lasts but a single day, they appear, day after day, for two or three months in succession. The flowers put in a good 12 hours day, and on a July morning open about 5 o'clock and remain open till about this hour in the afternoon. They possess three petals and three small sepals which are green and insignificant, not being ornamental like those of the Calochortus or

Commelina cœlestis

In form, the clear blue flowers resemble those of Tradescantia, to which it is closely related

petaloid like those of the Narcissus. They thus form an interesting connecting link in the evolution of the plant world. The flowers possess no scent perceptible to human beings, we believe, but they are visited by flies which get dusted with pollen from the stamens which ripen a day before the stigma. On the following day these stamens are all rolled up in a spiral and are covered by the withered petals, which have become pulpy and viscid, and are now very attractive to flies, which dust the ripe stigma with pollen gathered from other blossoms. They are thus always cross-fertilised.

Under a high-power microscope small currents of protoplasm can be seen flowing through the large clear cells of the stamen hairs. It was in the Tradescantia virginica that botanists best observed that the pollen grains each possessed two nuclei, and it is in the stamen hairs that the changes which take place after the nucleus divides can be most easily seen.

There are few plants to be grown in the herbaceous border so full of varied interest as the Tradescantia, whether historical, botanical, or in relation to insect life.

It may be of interest to some readers to know that the tombstone of the Tradescant family, with its quaint epitaph, is still to be seen in Lambeth Churchyard, erected in 1662 by the widow of the third John. The lines begin thus:

"Know stranger ere thou pass, beneath this stone
Lye John Tradescant, grandsire, father, son.
The last died in his spring—the other two
Liv'd till they had travell'd Art and Nature through.
Transplanted now themselves, sleep here, and when
Angels shall with their trumpets waken men,
And fire shall purge the world, these hence shall rise,
And change this garden for a Paradise."

H. H. W.

Commelina cœlestis

THE plant here figured is a suitable subject for a warm, sunny border, producing blue "flowers of a day" throughout the summer. It is a native of Mexico and is sometimes grown annually from seed, though it is possible to keep the tubers through winter with protection as with Dahlias. The usual practice is to lift the tubers in autumn and to place them in boxes in a frame.

H. C.

Helenium autumnale

Beautiful as are the newer varieties of the useful Helenium autumnale, the old one, known as the species, should not be forgotten. This year it flowered after many of the other yellow composites. In borders it is very fine with its stately growth and many flowers. Some say it is 4 feet high, but it frequently reaches considerably more, and this autumn I have had it about 6 feet in height in anything but good soil. I believe the form here is that called superbum. I do not in the least desire to belittle the fine, deep-coloured varieties, but the clear, deep yellow flowers of H. autumnale, and its variety superbum, come in well for interior decoration in places where the coppery varieties do not go well with the decorations of the interior.

S. A.

Canterbury Bells

These are fine subjects, particularly the cup-and-saucer varieties, with which to make a display in the flower garden in the late spring. To obtain the best results from a floral point of view it is best to grow them either in good sized clumps in the mixed border or to fill beds entirely with them. If only care is taken to arrange the planting so that the colours harmonize a very telling effect is produced. Both the double and single varieties are also valuable for garden decoration. A very charming effect can also be obtained by planting the single varieties in the grass in the wild garden. Now is the time to transfer the plants from where they have been grown during the summer to where they are to bloom. If of the size they should be, lifting will need to be done with a spade, and the same implement is required for opening the holes in which to plant them. On the completion of planting afford a good soaking of water. To ensure fine plants, and which can always be relied on to bloom the following spring, seed should be sown in gentle warmth not later than the beginning or middle of March, pricking out the seedlings in the open ground as soon as they have been hardened and are large enough to handle.

Alströmerias

The average gardener to-day knows of Alströmerias, and even when the of Peruvian Lily is mentioned is not wiser. In all my years of gardening never been able to understand why a when once understood, is so easy to These hardy-flowering plants fill a gap borders midway between summer autumn-blooming subjects, and giv blossoms, not unlike an Amaryllis, in of crimson and yellow.

The best position in a garden for merias is a south border, where th should be deep and light. They love a position and deep rooting is essenti them, hence the impossibility of gr them with anything like success in Freedom at the roots is a necessity, a tuberous-like roots should be plant autumn 9 inches below the surface. and leaf-mould suit them, and into th rotted manure should be worked. merias are amongst plants that reser turbance too frequently, and in makin vision for the roots the importance o digging should not be overlooked. may be raised from seed sown in gentl in spring, but this is a longer process many would care for when only two or clumps may be wanted.

MIDLAN

Sphaeralcea munroana

Many are the plants the seeker after ledge of hardy flowers attempts to and very frequently he has to admit w gret that he cannot induce some of th remain in his garden unless occasionall pagated, and a small reserve stock k a frame or cold house to replace the able losses in the open. Of the doul Sphæralcea munroana is one whi written down in the memories of the as among the "loved and lost," but wi resolve that it is not worth trying aga cept, it might be, in a warmer clime that in which his lot is cast. Even sunniest, warmest place at his com and with dry, fully drained soil, S. mur might live for a year or two until some severe winter descended upon us a stroyed this and other semi-hardy fl Semi-hardy it truly is, and even catal of nurseries where it is stocked are enough to give a word of warning resp it. Yet it has points of beauty which commend it to the rock gardener wh is cast in pleasant places with a climate, or who can accommodate young plants under glass at the fatal s It is quite an attractive little plant, p ing free, trailing stems clad with leaves and spangled over with pretty red flowers of the characteristic form Mallow family. It is not a common probably for the reason stated. Incre effected by rooted runners.

S. ARN

Phloxes and Violas

Beds of late-flowering Phloxes in d colours, planted thinly and carpeted Violas, have been very good, the rathe time and occasional showers helping t Two things besides good preparatio essential to success so that the foliage Phloxes is retained right to the promptly removing all decaying bloom Violas so that the flowering season i sustained. Otherwise there will not bright display of the dwarf flowers wh Phloxes are at their best. I like to g colours as nearly alike as possible. Th a bolder and more natural effect than trasts which are not always quite h That fine dwarf white Tapisblanc on a

an Viola makes a glorious mass of as both flowers are very pure, and if is rather a dark background the effect iderably enhanced. There was another varf variety, Sheriff Ivory, white with emember rightly) a crimson eye, that owed to advantage on a white carpet. are no Violas that are suitable com- s for the Phloxes of pink shades, like and Elizabeth Campbell, except n Neil, unless the new Mrs. Robert lge prove a good bedder, but when we o the blue shades one can find plenty erial. Good Phloxes for this style of g are Iris and nana, both of fairly habit, and there is plenty of Violas rly similar shades to associate with When Phloxes are grown in the scribed above it is advisable to stake ut a bit so that the stems do not rise in dicular fashion from the carpet.

lwick. E. BURRELL.

New Lupins

R. G. R. DOWNER continues to raise ew Lupins of the Polyphyllus type in is old-world garden at Drayton Manor, ster. Of the new varieties Artist is a light blue, Bennyside a fine helio- Twilight a good mauve, Mecklin a g blue, Pilgrim lavender, Riverside , Scotland light salmon, and Seaside -pink. The varieties of the Downer have good long spikes, and the beauti- play created by them is one of the it recollections of the past summer.

H. C.

viding and planting Irises

the amateur, the Iris commends it- f for its ability to withstand heat and ought fatal to most other plants. Good ge is essential and its absence will in- it. If the drainage is poor the Irises be planted in ridges, and if possible nd south, so as to give the plants the t exposure to the sun. If the soil is mix in some pulverised old mortar or limestone.

ot plant too deep; the under part of zomes in the case of the Germanica ould be barely beneath the surface. If in ridges the top of the ridge should pointed, as rain would wash down the o make the ridges, do not take soil tween them, as it is not desirable that hould be allowed to stand in the fur- Get the ridge soil from another part garden.

Iris is not very particular as to Mine are growing well in heavy, , and light soil. Ordinary good gar- m suits it best. An exceedingly rich ikely to result in rank growth and few The Iris likes a little lime but not h. Ordinarily, if lime is absent in the alf a pint of powdered slack lime pints of pulverised mortar to a yard will be ample. Use it prior to or late in the season. If in the season use it by saturating the with lime water. Any excess of lime duce rot, so care should be taken.

best time to plant Irises is in August ptember, as then they are nearly dor- Root growth will quickly follow and ants will become fairly well estab- before the ground freezes. Spring usually means little bloom and in- bloom the first season, although they successfully transplanted then, or in- any time when the ground is not deep.

Japanese varieties, although water can be successfully cultivated in com- ly dry surroundings, provided con- ltivation is given them. It is well to em a better chance by planting them in the moist part of the garden. The care and attention required by the Iris, when once established, are less than those of almost any other desirable flowering plant. Nevertheless, it will well repay whatever care it may receive. Keep the plants free from weeds and grass. Cut off the fading blossoms and stir the ground occasionally to prevent a crust from forming. The Iris clump will be at its best the second and third year from planting, and every three to five years the clump should be divided, as the centre will gradually cease to bloom.

Then dig up the whole clump and discard any old, dried-up, or decayed parts and replant. As a winter covering I prefer dried tops of Irises and Gladioli to straw, as the last is liable to contain gases and weed seeds.

The chief disease of the Iris is rot, and when this appears dig out the diseased parts at once and burn them. As a preventive a 1 per cent. solution of formaldehyde, or a solution of potassium permanganate—a level teaspoonful of the crystals to a quart of water—is good.

I have selected from the last flowering season what I consider the best 18 of the cheaper varieties as follows: — Prosper Langier, Quaker Lady, Iris King, Her Majesty, Prince du Orange, Wyomissing, Mary Garden, Violet Queen, Princess Victoria Louise, Iroquois, Gagus, Mrs. Neubronner, Dorothea, Ciengalti the Moor, Candelabra, Rose Unique, Isoline, and pallida variegata. To these may be added: Ambassadeur, Lady Foster, Dominion, Magnifica, Ballerine, Mrs. Fryer, Asia, Perfection, Red Cloud, Justinian, Pfauenauge, Clarence Wedge, Dalila, Shrewsbury, and Zwanenburg, all of which are of moderate price.

Ontario. (Rev.) G. W. JEBBS.

Lupins in Mr. A. G. Week's garden at Limpsfield Common, near Oxted, Surrey

May-flowering Tulips

Old favourites and new

For very many years I have grown May-flowering Tulips, and during that time I have noticed the change in attitude which has come over those whose views about them were peculiar, to say the least. I well remember people coming to my garden and admiring groups of Darwin and Cottage Tulips going away with the remark: "They are very pretty, but you see they are in the way of other things"—the "other things" in most cases being Calceolarias and bedding plants. This, to my mind, was sheer prejudice, and it is a sign that these glorious Tulips are no longer under such a ban when one bears in mind that never before have growers been more numerous, and that many acres of land in the eastern counties of England are devoted to their culture.

There is no need for anyone to wish for better bulbs than those grown in our own country. I speak from an experience of home-grown bulbs. Every year finds someone who starts growing May-flowering Tulips for the first time, and they are prompted to this because of having seen them in bloom in other folks' gardens. Perhaps it is not generally appreciated by the beginner that these Tulips can be left in the soil for the first two years without the need for lifting, but after that it is advisable to do so.

Amongst old standard Darwins one thinks of such excellent varieties as Mr. Farncombe Sanders, Pride of Haarlem, Rev. Ewbank, The Sultan, William Copland, Clara Butt, Faust, King Harold, and Europe, whilst in the cottage section Inglescombe Yellow and Inglescombe Pink, Caledonia, La Merveille, and Picotee ought not to be lost sight of. As they become better known the self-coloured Breeder Tulips will be more appreciated. Some of them, though exceptionally beautiful, are at present too high in price to admit of their being planted liberally. In this connection one thinks of Louis XVI., with large deep bluish-purple flowers, Bronze King, Bacchus (dark violet-blue), and Sanspareil (violet and purple with yellow base).

LEAHURST.

Fatsia japonica

Better known as Aralia japonica, this is, in a young state, a very popular plant with the market grower. It is a familiar object on the costermongers' stalls, being often referred to as the Castor Oil Plant, which name, however, is quite erroneous. It is not, however, for its decorative value when grown in pots that I refer to it here, but rather to point out what a handsome evergreen it is for the open ground. Probably owing to it being so much grown indoors this Fatsia has the reputation of being tender, but it is really far hardier than some subjects whose power of resisting frost is never questioned. It does best in a fairly sheltered spot, especially if it

is shaded from the hottest of the sun's rays. The large, leathery, deep green, lobed leaves cause it to stand out from all its associates, and in autumn it claims recognition from a floral point of view. The whitish blossoms are borne in rounded heads, several of which go to make up a large branching panicle. In this state it is very striking. Even in the smoke and grime of London it was with me for some years the most successful evergreen except the Aucuba. This Fatsia can be struck from cuttings, while seeds are often imported in large quantities. Practically all the market plants are seedlings. F. R.

Cheiranthus Lemon Queen

This grows 6 inches to 12 inches high and in spring is covered with pale yellow flowers which are produced freely enough to make a good display. The best position for it is a crevice where it is tightly placed between two rocks, and where the roots can penetrate dry, sandy, or stony soil to a depth of 2 feet. When grown in this way it is extremely pretty, the dryness of the soil keeping the plants dwarf. It may also be grown on the face of a dry wall by first carefully packing a plant into a deep chink and fixing it firmly with soil and stones. The plant will grow luxuriantly on level spots, but to my mind never looks so well as when seen hanging from rugged rocks. In spite of the free-growing qualities of the plant it transplants badly owing to its roots striking deeply into the ground, therefore it is necessary to plant in a very small stage, unless grown in pots, which is perhaps the better method.

E. M. C.

The Bear Berry (Arctostaphylos Uva-ursi)

This is a charming plant for the large rock garden and is of spreading habit. Few things make a more pleasing feature during the dreary season than a broad patch of this evergreen, free-growing plant hanging over a huge rock or miniature precipice. The plant has no brilliant flowers to recommend it, but it produces large quantities of highly-coloured berries which nestle closely in the dense foliage. In congenial quarters it spreads into a broad mass, covering the face of large rocks with the richest verdure. Those who wish to grow this plant should give it a partly shaded position at the top of a huge rock, where the plant can be assured of perfect drainage and allowed to grow freely. It thrives better and takes on a more pleasing colour if planted in peaty soil. It is perfectly hardy in well-drained positions and may be pressed into service at the margins of shrubbery borders where it will not be overrun by stronger shrubs. S. C.

Astilbe simplicifolia rosea

The lovely little Astilbe simplicifolia has been a favourite with many growers of rock plants for many years, but is one of the plants which, beautiful indeed as they are, have a lack of hardiness in some places, and in consequence require some care to retain. A. simplicifolia often figures in exhibits of rock gardens and rock plants, where its pleasing sprays on such a dwarf plant are much appreciated. Within the last few years some hybrids have been raised of much the same habit, but rather more vigorous and hardier, as well as being of a different colour. Of these perhaps the prettiest is that called A. simplicifolia rosea. It is a lovely little plant with its charming glossy green leaves, and its bonny racemes of blush or rose flowers in July and August, on a plant 5 inches or 6 inches high. It is easily grown in ordinary soil and is a charming feature of the rock garden at a time when other flowers are growing scarce. S. A.

ROSES

Improving soil for Roses

THE note in the issue for October 16th on this subject afforded much interest, and the information given and advice tendered by the writer cannot fail to be of great service to all who are in need of assistance in regard to the various matters dealt with. It also served to remind the writer of these lines of an occasion when he had to deal with a series of Rose-beds, the occupants of which were out of health, the whole comprising a formally-designed garden, some years ago. The beds in question contained from 12 inches to 15 inches in depth of a mixture of good heavy loam, burnt soil, and manure on the surface, and below this the soil consisted largely of adhesive clay. It was decided to remove the latter and replace it with a more suitable compost. A large heap was accordingly made ready which consisted of about two-thirds calcareous loam, the remaining third being made up of burnt garden refuse, farmyard manure, and some lime rubbish, all of which was mixed intimately together and kept under cover in an open shed until wanted. The Roses, principally Teas and Hybrid Teas, were then lifted and laid in by the heels. Then the best of the soil was dug out and put on one side ready for mixing with the new compost as it was wheeled in. The clay was then removed to a depth sufficient to make the beds, when refilled, 2½ feet deep. The bottom was broken up, and as the refilling proceeded the compost was firmly trodden down and finally left standing above the surrounding level to allow for sinking. The Roses were replanted soon afterwards and mulched with half-decayed leaf-mould. This afforded a good winter protection, and the Roses took no harm. Part of the mulch was removed at pruning time and the rest pointed in. During the following season the Roses recovered and made excellent growth.

W.

Rose planting

The soil should at the least be dug two spits in depth and the staple enriched with well-rotted manure, adding lime-rubbish and burnt soil also when it is of a close, adhesive nature. If bordering on clay remove a portion of it and replace with fibrous loam. Light soils are the better for a liberal addition of the last-named material, as well as a plentiful supply of manure. For Teas and their hybrids the soil should be well drained. This matter should have particular attention in low-lying districts, otherwise the plants will always prove a source of annoyance by falling a prey to mildew. When not absolutely necessary to lay drains a good layer of brick-bats placed in the bottom of the beds, and raising the soil, when the beds are completed, well above the ordinary ground-level, render the soil warmer and more suited to the requirements of the class of Roses named. If prepared now, lifting and planting can then be carried out early this month. For the planting of Rambler and other Roses for the clothing of arches, tree stems, and dead stumps, a hole is always opened out large enough to hold a cartload of prepared compost. If the soil excavated is deemed sufficiently good the best of it is used to mix with the compost. If not the whole is rejected and removed elsewhere. Where the lifting and transplanting of bushes already occupying beds and borders have become necessary as a result of the roots having got out of bounds and from other causes, the work cannot, seeing that they are still making a considerable amount of growth, be undertaken until the middle of this month, but manure and other requisite materials should be to hand so that when planting does tak no delay will occur.

ORCHIDS

Cool house Orchids

THE most popular Orchids are grown in the cool house, and th fascinating of these, from the p view of an amateur, are Odontoglossu the Odontiodas.

The arching racemes of dainty star-flowers produced from the base of the p bulbs are always admired, and, wh hibited, are often the chief attract flower shows. When Orchids were fi ported into this country it was con necessary to grow all species in grea and it is not surprising that very few imported Odontoglossums became lished, for, although found in tropical tries, they are always found at high alt

Several growers have planted species in the open ground and subject plants to a few degrees of frost, and m the plants have emerged without los single leaf, but while not advocating drastic treatment it should be clearly stood that Odontoglossums cannot be satisfactorily in hot, close houses.

Anyone with a greenhouse that can tain a temperature of between 50 deg 60 degs. all the year round can grow delightful subjects.

The best known species of Odontoglo are undoubtedly O. crispum an Pescatorei, the sepals and petals of wh white, but other varieties may be ob either blotched or rose tinted. With to hybrids, the variations of colouring defy description. The Odontiodas are scarlet-red derived from the Cochlioda A charming example is to be found in tioda Grisell Lady Polwarth, the flow which are of a uniform reddish-crims contrast to this is O. Hon. Mrs. Sut pleasing flower of pale mauve with markings of the same colour.

Odontoglossum hybrids show more or purple, and are more often blotche of a self colour. Large quantities are grown for the cut-flower trade, and attract a ready sale. Hybrids are grown, as they have a stronger const and a larger range of colour.

Plants of O. crispum and O. Pescato be obtained from the growers at prices the reach of every amateur, and pleasing hybrids of either Odontoglossu Odontiodas are offered with only a sli crease of price.

CULTIVATION.—Repotting is never sary more than once a year, and many will stand up to two years. Plants req this necessary operation should be at to when the new growth is about 2 high. Some growers prefer to wait roots can be discerned emerging fro new growth.

Should the grower desire to increa stock the back bulbs are removed at time, and, if kept on the dry side, shou duce new growths.

The compost used by most growers co of three parts fibre to one part Spha Moss, with live Sphagnum showing top of the pot. The Sphagnum no keeps the compost sweet, but is the best to watering, for as soon as it shows si dryness the plant requires water. Th no secret in growing these plants. Try and they will respond to your efforts.

ARTHUR T. SUT

REMINDERS FOR THE WEEK

uthern and Midland

f Beans

re heated pits or forcing-houses are le, now is a good time to sow a few f Dwarf Beans. Pots 9 inches in diare a suitable size, and these will acdate six to eight plants. The pots be well drained and filled three parts good loam with the addition of a little cayed manure. The seeds, when should be covered to the depth of hes. Careful watering is necessary germination has taken place. A temre of not less than 60 degs. is necessary w these Beans successfully. They be kept near the glass, and as growth is place a few twigs around them and ss as required.

r Brassicas

plot should be examined frequently l leaves that become yellow should be d to admit all available light and air. plants. Any autumn and winter li should be cut as the curds turn in. he soil free from weeds and hoe on all able occasions.

radish

e is usually a large demand for Horse during the winter, and it is advisable e this at hand before severe frosts set he plants should be lifted, and those use should be stored in the root-house ar and covered with sand and ashes; aller roots should be tied in bundles tained for planting during February or .

as

now time all tubers were taken up, and stored for the winter. In some it is difficult to find room indoors for them. I find an excellent plan to get his is to clamp them in the same r as one does Potatoes, taking care re dry, correctly labelled, and a good g of straw or Bracken placed over before covering up with soil. An airould be left on the top of the clamp by a drain-pipe, chimney fashion. This be covered with a stone or slate when s likely.

time should be lost where new Rose are to be planted, as there is no time ovember. If the roots are dry when d dip them in a pail of thin mud for minutes before putting them in. should be made wide enough to take ots when spread out comfortably. The should be an inch or so below the surter the soil has been well firmed in the f bush plants.

ts

ts growing in frames must not be d or overwatered during winter. Give air at all times other than very frosty er. All decaying leaves and runners be removed from the plants, and to t the soil from becoming set and green uld be frequently pricked over with a ork or pointed stick. If slugs attack wer-buds give the soil a dusting of old ccasionally.

ng

ough there is ample time to do this between now and February it must nembered that it must not be done when eather is frosty. It is a great adge where possible to get it done as soon as the leaves have fallen, and each individual tree or bush should be studied and pruned accordingly. The weaker the growth the harder the pruning should be.

Wall trees

It is best to loosen all ties when pruning the wall trees, and if the walls are given a good spraying of winter wash before tying back the growth it will be to the advantage of the trees later on, as it is impossible to wet all the wall when spraying the trees. When tying in the shoots and branches they must not be tight, as, when growth commences, damage will be done to the bark.

Planting hedges

Now is a good time to plant White Thorn, Beech, Myrobalan Plum, and Lonicera nitida hedges. Laurel, Box, Yew, Holly, and other evergreens are best left till spring. The site should be well trenched and manured if the soil is poor, and the plants are best set in a double row, allowing from 1 foot to 2 feet between the plants according to size.

Rock gardens

Leaves are falling now freely, and to prevent the young and small plants becoming smothered these should be removed frequently.

Leaves

Every gardener knows the value of leafmould, and it is during autumn that the leaves should be collected and stored where they can decay for future use. Oak and Beech are the best for the purpose. All Pine needles, Sycamore, and other coarse leaves should be avoided. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Vine borders

At this season there is always a likelihood of heavy rain, and the vinery borders ought to be protected against this as far as possible. I have seen sheets of corrugated iron or spare sashes from frames used for this purpose, but the more customary method is to cover the borders with freshly-gathered leaves as soon as they can be obtained. Oak leaves, or those of the Beech, are preferable to others, and a covering of about 18 inches will suffice. The leaves are kept in position by a covering of litter, and the roots are kept comfortable without being too greatly excited.

Peach houses

It is a mistake to assume that, although the trees may be resting, they do not require moisture. As a matter of fact, the roots of Peach trees are practically always active, and if they do not receive sufficient moisture there is almost certain to be trouble from bud-dropping in spring. Bearing this in mind, the borders should now receive a good watering with water from which the chill has been taken. In order that the border may assimilate the water satisfactorily it may be necessary to break the surface lightly with the fork before watering.

Hardy plant borders

Where tidiness is absolutely insisted upon the ripened stems of hardy plants may be cut over at the ground-level. These should be burned on a vacant quarter or, better still, trenched deeply into a vegetable quarter. Removals of plants which are badly placed can now be attended to. This is the best season at which to plant new Pæonies or to move old specimens. Deepen and manure the beds and give the plants ample room, for they do not like disturbance after planting, nor do they give of their best when crowded. Bought-in plants are, at times, very small, especially when new varieties are bought, and these cannot be expected to bloom for some time. Vacant places in the borders can be filled with Wallflowers, Cheiranthus, and other subjects which will bloom in spring.

Climbing Roses

If the exhausted wood is not already cut out, the work should be attended to at an early date. Many hesitate to deal severely with this popular type, but no misgivings need follow upon handling them rather drastically. Retain only the best of the current season's growths, cutting cleanly out all weak or damaged shoots.

Hardy fruit planting

When it is necessary to plant young fruit trees on the site from which an old one has been removed the soil ought to be renewed. For trees on walls a station 3 feet, or even more, should be cleared down to the foundation and refilled with the best soil which can be procured. Good chopped loam from an old pasture is undoubtedly the most desirable, but if this cannot be obtained form the station with fresh soil from the vegetable quarter. On no account ought manure to be put at the roots of young trees—indeed, fibrous loam alone is, at times, too rich for Apricots and Peaches on south walls. If the soil be too rich, long, sappy shoots which do not ripen will be produced. What is wanted is firm, short-jointed wood. Therefore, should the soil appear to be too rich qualify it with lime-rubble and a sprinkling of wood-ashes. Avoid deep planting; it is sound practice to put the trees at the depth indicated by their soil mark on the bark when received from the nursery. Every tree should be watered after planting.

Dahlias

Frost has now put a period to the display given by Dahlias, and the needful number of tubers for stock purposes must be lifted and stored before they are damaged. See that the lifting and labelling are in trustworthy hands, for mutilated tubers wrongly named are a source of irritation when the time for propagation again arrives. To keep the tubers plump let them be stored in a perfectly cool place, from which, however, frost must be excluded. A shed which suits the storage of Potatoes will be found equally suitable for the storage of Dahlia tubers.

Vegetable garden

If forced Asparagus be desired early it is necessary to cut down the growths at once and to place the roots, without resting, closely together in a bed with brisk bottom heat. Young plants only ought to be used for this purpose, and by "young plants" is meant those four years or five years from the seedling stage. It is absolutely useless to endeavour to force old and exhausted plants. Young plants will produce plenty of stems and will start into growth almost as soon as they get warmed up. Complete the earthing of late Celery. Leaf-disease appears to be prevalent this season, and, unfortunately, little can be done to get rid of it. If the Broccolis for spring use have not been attended to lay the plants over with their heads to the north. The check will be beneficial and will harden the growth. All root crops should now, or very shortly, be lifted and stored. W. MCGUFFOG.

Mabie Gardens, Kirkcudbrightshire.

FRUIT GARDEN

Grapes shanking

THE shanking of Grapes has puzzled physiologists as well as our most experienced practical Grape growers ever since Vine culture was first attempted in this country, especially under glass. In my own experience I have found that Grapes never show signs of shanking until after the berries have stoned, and then when subject to this disease all appears satisfactory until colouring indicates the change from the acid to the saccharine state. When this dreaded stage is reached the practised eye is ever on the alert for a few tiny black spots round the shank, a thin limpness of the stalk, and a stationary condition of the berries both as regards size and colour. These berries never recover, but shrink rapidly to the shrivelled vinegar condition, whilst the remainder of the bunch, and other bunches in their entirety on the same Vine, will attain the greatest perfection. Some varieties, notably the old Frontignan, are more subject than others to shanking, and what at first appears strange, Vines started in midwinter never produce a shanked berry, whilst similar varieties in borders exactly alike, but started in the spring, are badly affected by the disease. The internal treatment in each case being all that the most fastidious grower can wish, the cause of the mischief, it is quite evident, lies principally, but not entirely, in the mismanagement of the roots. I use this term in a qualified form, as I believe it is quite possible, where the roots have the run of the best border ever made, not only to produce shanking, but to ruin the crop by withholding water, by over-loading, or by destroying the best foliage when the Vines are in full growth. The conditions, however, under which shanking is most generally met with are too

HEAVY CROPPING—that is, allowing the Vines to carry a weight of fruit altogether out of proportion to the spread of leaves, whilst the roots, white and fleshy like those of the Hyacinth, are feeding in a fat border—it may not be too damp, but most certainly too wet and cold. If Vines thus situated were started on New Year's Day, moderately forced and lightly cropped, it is more than probable the berries would not shank to any serious extent, perhaps not at all; but allow them to break naturally, give them plenty of rich liquid throughout the summer, keep their quill-like roots growing well into the autumn, and although the foliage may be dense, green, and plentiful, some berries in every bunch will shank. This shanking is easily accounted for in the following way: The leaves, as autumn comes on, cease to act, and in due course fall, but the roots started late die back, as they are far from ripe. The Vines, nevertheless, contain a certain quantity of stored-up sap, which keeps them through the early stages in the following spring; but so soon as this is exhausted by the first flush and setting of the fruit a check follows, as they have no feeders to maintain the supply, the few they made in the preceding year being paralysed or dead. Now when a plant through any cause loses its roots, all gardeners know that it cannot renew them without the aid of leaves; consequently the formation of these has scarcely begun when the berries are passing the

STONING PROCESS; and although, as I have just stated, the disease does not then develop, it is owing to the pinch at this most trying of all stages that the foundation of shanking is laid. The same Vines, on the other hand, started in January have the whole summer in which to ripen their roots. These keep fresh and sound, and by the time the stored-up sap is exhausted they are again not only in full work, but capable of replenishing the cells before the Vines feel the check. When Grapes shank, the owner should first of all ascertain that they are not over-cropped, that the foliage is clean, healthy, and plentiful, that the roots are liberally supplied with water, and the house properly managed. Finding these points satisfactory, as most frequently he will, he must seek the prime cause of this evil in the borders, and although possibly only recently lifted, his only and never-failing remedy will be found in lifting and relaying again. I will not go into details, as the preparation of compost and the formation of Vine borders are thoroughly understood, but this much I may say, the compost should be poor rather than too rich. Bones or Thomson's manure should be used in preference to animal manure, and the drainage should be good. The roots formed in a well-drained porous border of this kind will be small, numerous, bright as gold, hard and woody, and so active that they will permeate the whole mass. These hungry mouths, capable of supplying any amount of wholesome food, it is hardly necessary to say, will ripen before the cold autumn rains set in, and in this condition they will be well up to, if not actually in advance of, their important work in the following spring. C.

Apricots

These are such luscious fruits and when they are forthcoming are so greatly appreciated that it seems rather inexplicable why they are not more extensively grown. One reason, and perhaps the chief one, is that they are considered difficult to manage. This is an erroneous impression, as their cultivation presents no more difficulties than the Peach and Nectarine, for instance. Another deterring influence with some, no doubt, is the fact of the trees being liable to the disease known as "gumming," which occasions the loss of branches in a very sudden and mysterious manner. According to my experience this, if it cannot be cured, can be largely controlled. So many make the mistake of providing too deep and rich a root-run for Apricots, which, in my opinion, if it does not cause the disease, predisposes the trees through the root system to fall a prey to attack by inducing a too luxuriant or sappy growth. A more shallow border and a compost of a less rich nature have, I have generally found, the opposite effect, and if this is the means of the trees requiring more time in which to clothe a given area of wall space the wood produced is more firm, is of medium texture, and far more fruitful than that resulting when the trees make vigorous growth.

A border 2½ feet in depth is deep enough for Apricots, and unless the natural drainage is satisfactory a good bed of drainage should be provided, as not only should the border be warm, but provision made for the passing away of water, of which abundant supplies are needed in spring and summer to enable the trees to perfect the crop. The chief constituents required for the making of the border are, when the soil of the garden is not suitable, good sound loam, some burnt soil, and wood-ashes, and of lime and brick rubbish a much more liberal quantity should be added than is generally considered requisite for Peach trees. This is, of course, not only to supply the lime so necessary for stone fruits, but also to prevent too strong growth being made. Much might be done to check a disposition on the part of established trees to check a too free growth and prevent "gumming" if root-lifting was resorted to; in fact, this measure should be adopted in any case, whether the trees have been planted but a few seasons or otherwise, directly it is noticed that wood of the wrong character is being produced. This has the same ficial effect that it exercises on Peache Nectarines, and if taken in hand before of gumming are visible or are not of ous nature it will materially assist in k the trees in a healthy state. Of cours great thing is to make a good start by ing the trees in a border constructed lines indicated above, and with that an attention to routine matters afterward will remain healthy, fruitful, and be fa subject to branch-dying; at least, such experience of the writer, now extending a long period. A.

Heading down old fruit tre

In the case of all trees, whether under restriction or free from restraint, comes a time when growth nearly ceas at least the growth made lacks vigour the power and stamina of the tree see have deserted it, the bark loses its na healthy colour, and the whole tree has crepit, hide-bound appearance. Thou still continues to make foliage the leaves substance, and look puny and sickly. this stage is reached the common pract to dig it up and plant a young tree in its From want of a little discrimination m tree with a good deal of useful work in been thus condemned. Of course, no can bring the dead to life, but if the s toms are simply those of exhaustion, there is no canker or decay visible, cu the head off will very likely restore health; at any rate, I have seen the succeed so often that, even in doubtful c it is worth a trial, as, should it fail, the only one season lost. Let us suppose is an Apricot, or Peach, or Plum gro against a wall; for several years it has but little fruit, and that little has been and inferior; it still produces blossoms, they fail to set, or if they set, the fruits in the stoning.

The best thing to do is to head it well d for the old channels up which the sap flowed have become contracted, and we get as near the source of supply as poss therefore do not be afraid of cutting d low. It is a drastic remedy, which will e kill or cure. If the tree has vigour en left to stand it, a long useful period wi added to its life; but if it succumbs, it simply be terminating a useless existe The tree must, however, be very far go this kind of treatment does not bring it ro The roots should be examined either season previous to the operation or the se afterwards, lifted, and brought near the face, and some fresh turfy loam shoul put round and amongst their feeding extr ties. Crushed bones and soot are excel stimulants to apply at the same time, as do not clog up the soil in the same way farmyard manure does, and they impa wonderful vigour and substance to the lea and a tree with puny foliage cannot good fruit.

A tree headed down, if its roots have attended to some six or 12 months previou will often bear a good crop within two y after heading down; therefore there is little time lost. It is generally thought the only time when root-pruning or lif can be done is in autumn or winter, although I should not recommend any that is bearing a good crop to be interfe with in summer, yet, in the case of the t under consideration, I should prefer to their roots and give them their supply of food in summer, say about July, doing work if possible on a cloudy day; or if t cannot be done, I would erect a tempor shade till the roots become active enough supply the foliage. When the earth is wa roots brought up from a colder stratum

n 1 foot or so of the surface and laid in earth strike out at once and have a ellous effect upon the tree for which they . Of course, performing such work in requires more thoughtful attention than e blights, and mildews, or whatever the various maladies may be commonly n by, are prevalent. T.

orts" from Gravenstein Apple

rticulturists at the State Experiment n, Geneva, New York, are calling at- n to a new Gravenstein Apple which solid dark red colour and is said to be idedly attractive fruit as compared with vell-known Gravenstein. As Graven- is highly appreciated in this country by n of its pleasing though peculiar flavour, uestion is of interest to English growers. new variety originated as a "sport" of nstein, and is identical in every respect the parent variety except for colour.

discussing the new variety, Dr. U. P. ck, station horticulturist, says:—"It from the old Gravenstein only in the dark red coloured fruits, the parent being light red and much striped with and green. Panks Gravenstein, er sport of Gravenstein, is also striped uch lighter in colour than Red Graven- although handsomer than the original y.

hese three Gravensteins are most excel- autumn Apples, but on the station ds the Red Gravenstein is so superior pearance that in the future its culture of the three will be recommended.

he trees on the station grounds came the Washington Nursery Co., Top- , Wash., in 1911. They have fruited l times, so that we are now certain of w fruit and that it differs only in colour. port is said to have originated with Mr. ent V. Whipple, of San Juan County, , about 1907 or 1908. It is now to be om several nurseries in the North-West rom the New York State Fruit Testing ation at Geneva."

The Pear

Pear is one of the hardiest and most us of our fruit trees. It is capable lapting itself to soil and situation better than the Apple. The situation be well drained, or there will be a diffi- under any system of management in ing the wood. On deep dry soil there necessity for working Pears on the e. It is on shallow soils resting on cold clays which even when drained so much soft spray to be produced that alue of this stock is seen and appre- . In many respects there is a simi- between the treatment suitable for and Apples. Summer pinching and ng the fruit are all important in Pear e, and success will in a great measure l upon the way in which they are l out. Pears are especially adapted for er training, and a good fruit-bearing more quickly formed than even in the f the Apple. As the Apple does not assume a pyramidal outline, so the is not readily converted into a dwarf rd. But where espalier training can- adopted the pyramidal is the best and useful form. The trees should be d 8 feet apart, and may be allowed tely to attain a height of 8 feet which e high enough for a small garden. Of , care must be taken that the tree is ly built up. As in the case of the er, if the leaders be allowed to grow st the lower part of the tree will not be urnished. A wire hoop fixed to three stakes will form a very good base for ng. When the tree is first headed down after planting, the best and most centrally placed of the young shoots should be selected for the leader and trained up vertically, and the others should be trained at equal distances apart horizontally, and fixed down to the wire to form the base. It is important that a good foundation should be secured to the future tree before the second tier of branches is formed, and this is entirely a matter of pruning and training. Much can be done in summer about the end of July by pinching a strong shoot or drawing its point downwards, and by that means driving the sap into the weaker branches. The leader may be pinched when it has grown about 18 inches, in order to throw the strength into the lower buds. At the second winter's pruning the leader must be cut back to within from 6 inches to 1 foot of the base of the new wood, this depending entirely upon its strength and the strength of the tree generally. Again, the best shoot must be selected for the leader, and the others tied down to the shoots made the previous year. This course must be followed until the tree has attained its allotted size. If it has proved successful, the shape will be a perfect cone, with the points of the branches assuming a weeping or pendent form. In the event of a good selection a small plantation of pyramidal Pears will in the course of a few years turn out to be a most interesting and profitable experiment, involving but a slight expense and an inconsiderable amount of labour, and that, too, of an agreeable kind. Pinching a strong shoot, and drawing its point downwards at the proper time, calls rather for intelligent observation than practical skill, as the term is usually applied, and the man who has had no experience in fruit culture, if thoughtful and penetrating, may obtain as much success as the practical cultivator, especially if the latter be imbued with prejudice and preconceived notions, and too much given to rule-of-thumb work.

Points on planting

In the first place the soil should be in a fairly good working condition, neither too wet nor too dry, though it is preferable to err in the latter than in the former, for no tree, plant, or shrub will grow satisfactorily while the soil is in a sodden state. It cannot be worked down between the fibrous roots that are practically devoid of soil, such as fruit trees coming from the nurseryman, an absolute necessity if success is to crown your efforts. True a barrowful of dry soil can be brought in as a help. The after-work of firming the surroundings, especially if of a heavy nature, tends to make it impermeable to the winter's rain or air to penetrate the soil. When the soil is on the dry side it is well to water in such trees in the absence of much rain. The pits or holes should be quite a foot wider than the roots extend, which will give the newly-formed roots a much better chance by penetrating the soil that has been broken up. Neither must deep planting be the order of things. The top layer of roots ought not to be more than 4 inches below the level of the land that is being planted. A small hillock of soil placed in the centre of the pit to rest the tree on is a wise precaution in all cases. Before placing the tree in position cut away any roots that have a tendency to go downwards as well as any damaged in lifting, spreading out the remainder evenly and in tiers, and well working in the dry soil between the roots with the fingers, slightly raising the plant once or twice during the operation, so that the soil can fill any small vacancy overlooked, and doing no treading until you have well covered the roots or much damage will be done.

Each specimen must be securely tied to its support to prevent it being swayed by strong winds. Stout tar-cord and a band of old sacking or other suitable material between stem and stake are a preventive of chafing the bark and absolutely necessary so that newly-formed roots receive no check. Should cold, drying winds set in, or hard frost threaten, apply a light mulch over the roots 3 inches or 4 inches in thickness. The foregoing remarks deal with fruit trees, though they are applicable to other trees and plants that hold but little soil when lifted. Roses, Lupins, Pæonies, as an instance among many others, all require the soil to be well worked in between the roots, especially those that have but few fibres. This detail may take up a little more time, but the planter will be amply repaid. Root action will be quicker and better able to withstand severe weather during the winter if set out in the fall of the year; likewise if planted in late spring to pull through a period of drought should such occur in the summer. In conclusion, let me add the necessity of examining each specimen at short intervals to see that the ties are secure, and with others no swaying too and fro; if so, immediately remedying it. J. M.

VEGETABLES

Witloof

I AM growing Witloof and should be glad to know how to treat, and also how to cook it. Can the present green leaves be used for cooking? Can the roots be stewed? I believe the roots should be dug up later and started in the dark for salad. Any hints would be very acceptable. J. P.

[Chicory should be left in the ground where grown until the middle of November, when the roots should be lifted and stored, after breaking off the leaves, in a trench under a wall or hedge, where they can be got at at any time when required. The trench should be deep enough to allow of a depth of soil equal to 6 inches being placed above the crowns. The roots should be stood close together and in an upright position in the trench. As it is the blanched tops or leaves only which are edible the general rule is to place a few roots at a time in warmth and in the dark, like Seakale, to force, when, if the roots have been well cultivated and the variety a good one, a close-grown cluster of leaves similar to the heart of a Cos Lettuce will develop on the crown of each. The roots may be planted close together in pots or boxes, watered, and if you have a Mushroom-house no better place can be had in which to conduct the forcing. Failing this, a cellar will answer. Sometimes accommodation can be found under the stage of a greenhouse. Here, if light can be totally excluded and head room allowed for growth to develop properly, equally as good produce can be grown as in the previously-named structures. These hints convey an idea as to how forcing should be conducted; and always remember that total darkness is essential, and that the temperature should not exceed 55 degs. After the first crop of leaves or heart has been used a second crop of smaller leaves will be produced if the soil surrounding the roots is kept properly moist. In addition to Chicory being in request for the making of salads in winter it is also used in various ways in the kitchen, the recipes for which you would find in any up-to-date work on vegetable cookery.]

Cauliflowers

One or more frames, according to the number of plants required for setting out next spring, should be filled with plants recently raised in the open and consisting of varieties such as Early Loudon, Walcheren, and Early

Giant. The plants should be allowed ample space, 5 inches apart each way being never too much room for development. That they may lift with good balls attached to the roots when planting time arrives the soil in the frame should consist principally of good, sound loam with a little old rotten manure or leaf-mould added. Keep the frames closed and shaded until the roots get a grip of the soil; afterwards expose them to the outer air on every favourable opportunity, and afford protection only in frosty and severe weather, as the hardier they are grown the less will they feel the effects of the change when planted out next spring.

Scarlet Runner Prizewinner

A great many grow this variety of Runner Bean simply for exhibition on account of its long and symmetrically-shaped pods. It is also equally as valuable when grown for general purposes; in fact more so, as the yield, though not so abundant as that of the best of any of the ordinary types in point of numbers, the pods being double and treble their length, prove it to be the more remunerative variety with which to cater for a large and continued demand. Even where a more limited supply has to be met it is worthy of cultivation, as its size and fertility render it unnecessary to grow so many rows or devote so much space to this crop as when ordinary sorts only are grown. As regards quality, I have always found that of Prizewinner to be second to none when cultural details of a routine description have had proper attention.

W. W.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FRUIT

Care of outdoor Fig trees

I was much interested in your article dated October 23rd—"Outdoor Figs." I have one Brown Turkey (espalier, fan-shaped) and two White Marseilles bushes, all young trees. The oldest (Brown Turkey) is an espalier six years old, trained to a wooden fence, and gave me a fair crop of ripe fruit this year, and, like the two White Marseilles, had a quantity of Figs on them that have not matured. I am afraid the White Marseilles is not suitable for this country. All are looking healthy, and, if anything, I fancy made too much growth. The espalier has felt the frost of last week, which has caught the foliage a good bit. As it is not too late to expect any more fruit from any of the trees would you advise me to remove the green Figs except the smallest ones, tie the branches together, and bind round with straw as a protection against frost for the future before the leaves are all off the trees, or when? Also, when is it safe to commence pruning without fear of the trees bleeding? Seeing there was a lot of Figs on all the trees in August I fed with Clay's Fertiliser, but this was not done before early September, and I fear I was too late to get fruit from the White Marseilles. In one of your papers I saw you recommended basic slag. Can you advise me to apply any to my young trees; if so, when and what quantity? I will be grateful to you for your valuable advice. The trees have all made good growth, but I should not say out of proportion to the amount of immature Figs on the trees, as these are very thick, particularly on the Marseilles. I had a few ripe Figs off the oldest of the Marseilles last year.

C. C. B.

[The varieties of Figs you name are two of the best for outdoor culture, but whether White Marseilles will succeed with you as a bush in the open is rather doubtful.. This variety does well at Worthing as a bush, but, of course, the position is more sheltered and warmer than we take yours to be. From your remarks we think the fruits which you allude to as not having ripened this season must be those produced by the current season's growth, and, if so, they will not ripen. It is seldom outdoor Figs ripen more than one crop, and that is produced by the wood made in the previous year. Next year's crop, by way of further explanation, is now to be found in embryonic form. It is to preserve these "embryos" from injury by frost that the covering of the trees in the manner described in article referred to is recommended, and we therefore advise you to do the same with your trees. With regard to the fruits now on the trees, as none of them will ever come to perfection they should be removed before covering up the trees. As to

PRUNING, this must be deferred until such time as it is deemed safe to remove the covering material next spring. Unless thoroughly conversant with this important matter we should advise you to get a practical man to do this for you, otherwise much of next year's crop may be sacrificed. You say the trees are making strong growth. The remedy for this is to lift and cut back somewhat the strongest roots and lay out the others afresh after adding some lime-rubbish as a corrective to the soil and to induce a firmer, short-jointed, and fruitful growth being made in future. Figs, we may add, should be planted in very firm and not rich soil. The border should not be deeper than 2½ feet unless necessary to concrete the base, in which case allow another 6 inches for the concrete bed. A width of 3 feet to 4 feet will suffice, and there should be a rampart of brick rubbish 18 inches wide and as deep as the border put in between the latter and the ground beyond. A compost of loam, wood-ashes, or burnt soil, with some lime-rubbish and a little bone-meal added will answer their requirements, as, whatever is required later in the shape of stimulants, should be afforded either in liquid form or as a mulching when the crop is swelling off. If unable to procure lime-rubbish you may then, if you wish, omit the bone-meal, and substitute basic slag for it. This is usually applied at the rate of from 6 ozs. to 8 ozs. per square yard, and this will convey a near idea as to the quantity requi you use it. The correct time to apply liquid or farmyard and stable manure already been mentioned, and they shoul on any account be added to the soil in the trees are planted, otherwise the will be strong, unfruitful growth.]

Diseased Grapes

(L. O. D.).—We are retaining your G for further examination. Please look full reply in a near issue. Is there any of the blight, mentioned in your attacking the wood and foliage of the V If so, we should be glad of specimen would help us in identifying the dis What is the variety? The specimens ar in such bad condition that, beyond thei ing a black variety, we cannot say wha Grapes were

Autumn fruiting Raspberries

(M. G.).—The variety Lloyd Georg really a very good and a sure cropper, th its flavour is certainly better on heavy We suggest that you grow both Lloyd Ge and November Abundance, two exce varieties for late supplies. For treatmen reply issue October 16th, page 632.

FLOWER GARDEN

Rust on Chrysanthemums

I am enclosing a few Chrysanthe leaves that have a rust-like blight upon t Can you tell me the cause and remedy same?

W. G.

[Very little can be done to stop rus Chrysanthemums at this time of the This trouble, somewhat prevalent in tions where moisture or shade of trees c in the way of growing plants, may be dealt with in winter and spring by dip the cuttings in sulphide of potassium a rate of ½ ounce to 1 gallon of water. dip again when the plants are in small Later the better thing to do is to sy the undersides of the leaves with the liquid. Spring and early autumn seem t the periods of visitation, and the thing be dealt with in time, as it is bound to away some of the strength of the leaves therefore affect the blossoms.]

Salvia Pride of Zurich

(F. F.).—To provide stock for the follo year a few plants of each variety shoul selected after they have done flowering, placed in a favourable position, so that be kept healthy and free from insects. tings struck in April will make good pl the same season, but the first batch sh be put in as soon as they can be obtai and the tops of these will, later on, gi batch of stronger cuttings than those t obtained from the old plants. The cutt will root freely in a close frame where t is a little bottom heat. In growing the pl on, the main points are to pot them as require it, giving them good rich loam, a liberal addition of manure, and to them stopped from time to time until have formed bushy plants. As soon as weather permits, the plants should be p in a cold pit, and later on they will do out-of-doors. If kept in warmth too the plants get spindly, and are also liabl the attacks of red-spider, and when th the case they will be ruined for the sea If, however, they are given a good start, plants will give very little trouble afterwa Although it is advisable to keep the Sal well exposed, they should not be left ou doors too late in the autumn, or they lose their foliage. As soon as they begi come into bloom they should be regul supplied with liquid-manure, which will siderably prolong the flowering season.

ing plant for name and treatment

C., Somerset).—

E plant sent for identification is Cobæa ndens. It was introduced from xico in 1792, has been long known ppreciated as a good greenhouse , especially where the rapid and effec- othing of large areas with greenery than any brilliant display of flowers is . It will also thrive in favoured dis- gainst a wall in southern and western s, and will cover a considerable space is work during the summer. We note has been a success in the open in your . In addition to its value as a climber, be effectively employed as a trailer, r large vases or for the outer ring of eds, and if the latter are rather high, ber will cover the piles so quickly. if lifted, headed back, and potted used a second year, but the better way aise seedlings. It should be given ich soil, and if kept watered will eely during the summer; when grown a wall it will, if given slight protec- e through an ordinary winter.

it is intended to plant the Cobæa in nhouse the roots should be confined check the growth, which soon be- nmanageable if given too much room. anting little else is required except training the shoots to fill the requisite space, cutting the plants in freely so as to keep them within bounds. Seeds, as a rule, are not very reliable, the best way being to place a single seed in each small pot, potting the seedlings on as required until placed in their permanent quarters. It may also be raised from cuttings. The variegated form does not come true from seeds, and can only be increased from cuttings.

Cobæa scandens variegata, a rapid and effective greenhouse climber

Iris diseases

Is there any cure for rhizome-rot beyond cutting way the diseased portion and dressing with superphosphate? It has occurred in many of the most expensive kinds shortly after planting, while the ground was anything but wet. Aphrodite seems especially prone to it. Is there any known cure for leaf-spot? I find this affects both Bearded and Beardless Irises alike. Clearly it cannot be due to lack of lime, of which the former in any case receive plenty. R. SPENDER.

Bagley Wood, Oxford.

[There is no cure for rhizome-rot at present. It would appear from recent research that several organisms can cause this condition, either separately or in conjunction. Superphosphate has in some cases been found helpful, but it does not cure. It is seldom that plants are completely killed, and if there is a danger of this it can be prevented by digging them up, removing rotted portions, and leaving them on a dry path or similar position for a few weeks; then replant.]

[There is no cure for leaf-spot disease. Every probable spray has been tried without result. The only thing to do is to go over the plants as frequently as possible and remove the badly-affected leaves. Keeping them clean in this way is really helpful. Affected leaves should be burned.]

—— For the last two years plants of my delicate Irises, such as Susiana, Aphrodite, Gatesi, Lorteti, and Sofarana varieties, when in an advanced stage of growth suddenly became limp and collapsed. I attributed the failing to some fungoid disease due, as I imagined, to damp, but on careful microscopic investigation of the drooping foliage, although there were indications of some such trouble, investigation of the rhizomes revealed numerous eel-worms in the heart of the root. How they came to be in the soil at first appeared a mystery, but on reflection, knowing that cow dung had been mixed with the soil, I learned that the cow dung collected in the dry state was doubtless very old, and was undoubtedly the cause of the trouble.

The Board of Agriculture recommend as a remedy for eel-worm four alternatives:—(1) Thoroughly saturate the soil three times at intervals of a fortnight, with a solution of one part of carbolic acid in 20 parts water. (2) Mix naphthalene with the infested soil. (3) Mix the soil intimately with gas. This and No. 1 remedy must remain for at least six weeks before they can be used. (4) In experiments conducted at Kew against another species of eel-worm the diseased plants were treated with sulphate of potash, the quantity used being at the rate of four hundredweights to the acre.

The Board add:—Eggs containing the embryo worm can be kept dry for six months without losing their power of hatching, and young worms have the power of resuming animation and active life after they have remained in a perfectly dry condition, in dead tissues or in dry soil, for between two and three years. They may be carried into fields and gardens in this dried state with manure made from infested hay or straw.—G. P. B., in the *Iris Society's Bulletin.*

GREENHOUSE

Ferns failing

(W. C. S. L.). We have carefully examined the specimens you have sent in—A and B—and have failed to find any trace of fungoid disease that would account for the yellow markings on the fronds. Examined under the microscope, the yellow-marked portions appear to have been pierced by very small creatures, probably mites of the red-spider group; or it may be that thrips are the cause of the trouble. We spent a long time over the examination, but failed to find specimens of either pest. If either of these pests is the cause of the trouble light fumigation would be the best method of control. A thorough clean-up of the house in which the plants are growing would help greatly in keeping down the attack. Wash all glass and woodwork with hot water and soap. Limewash all the walls. Autumn and winter are the best times to undertake the work of pest control amongst Ferns. You should remember that the cause of both red-spider and thrips becoming troublesome is dry conditions. The free use of a syringe and damping down the house will usually keep both pests under control. We fail to find any difference in the markings on the samples labelled A and B. Hardy Ferns are often attacked by these pests in dry seasons. An occasional syringing will assist the plants to ward off attack.

MISCELLANEOUS

Flowers for grave

(Thomas Connell).—On such a small place it will be impossible to have as much as you desire. The best way would be to cover the soil with some of the mossy Rockfoils and set a few simple flowers such as you suggest, in the way of Crocuses, Snowdrops, Narcissi, or any other that you fancy. A Polyantha Rose would look well planted half-way along the grave. A Cupressus or a Yew would outgrow the space.

Sterilising soil

(T. J.).—Procure a sheet of galvanised iron and lay it on three or four bricks at the four corners. Light a fire on the ground below the galvanised sheet, and when a good body of fire has developed spread some of the soil you wish to treat on it. Move it backwards and forwards until it is heated through, and when this happens put it into a dry place till wanted, and treat a fresh lot in the same way, continuing the work until you have treated as much as you want.

Boxes for exhibiting Roses

(An Old Reader).—Where Roses are exhibited in boxes the following are the dimensions:—For 24 blooms the boxes should be 3 feet 6 inches long, for 18 blooms 2 feet 9 inches, for 12 blooms 2 feet, for nine blooms 1 foot 6 inches, and for six blooms 1 foot. All boxes must be 4 inches high in front and 18 inches wide. These are all outside measurements. Inside each box there should be a tray pierced with holes to hold the tubes of water in which the flowers are exhibited. The boxes are usually made of ½-inch deal and painted over.

SHORT REPLIES

Bunny.—Smearoleum, for protecting the barking or peeling of young fruit trees and plantations from ground game and rodents, is made by Messrs. Thomas and Co., Ltd., Ceres Works, 19, Old Hall Street, Liverpool.

S. T.—According to Elwes and Henry the largest specimen of the common Oak is in the grounds of Powis Castle, Montgomery. Height, 105 feet; breast girth at 4 feet 6 inches, 23 feet 6 inches. One of the tallest trees in the country is the common Spruce at Studley Royal, Yorks. It is 140 feet, with a girth of 12 feet 10 inches at breast height. The largest of the Cedars of Lebanon, in Mrs. Combe's garden at Pains Hill, Cobham, Surrey, is 120 feet high, with a girth of 26½ feet. We measured this magnificent specimen about six years ago. It is probably the largest Cedar in the kingdom.

William.—The damage to the leaves has been caused by the fumes of the lamp. You can tell this by the texture of the leaves, which are soft and flabby, and in time will all fall.

V. V.—The best Ampelopsis for your purpose is one named A. muralis, a self-clinging variety, closer-growing than the type. It colours well and grows as quickly. It is best to obtain plants on their own roots. This variety is listed by T. Smith, Daisy Hill Nursery, Newry. You can probably get it from almost any leading nurseryman.

NAMES OF FRUITS

G. S. S.—1, Probably Crofton Scarlet; 2, Adam's Pearmain; 3, not recognised; 4, Norfolk Bearer.

J. W. French.—Pear Beurre d'Aremberg.

A.—Apples: 6/157, Newton Wonder; 62/128, Adam's Pearmain.

NAMES OF PLANTS

E. B. Summers.—1, Variegated Aloe; 2, Partridge-breast Aloe (Aloe variegata).

P. A. Law, N. Wales.—1, Chlorophytum elatum; 2, immature growth of some conifer, most likely some Cypress, possibly C. funebris; more than your snippet is needed to make sure; 3, Eucomis punctata; 4, Euphorbia Cyparissias.

Wisley Rose trials

The Council of the Royal Horticultural Society has considered the recommendations of the R.H.S. Rose-judging Committee and has made the following additional awards of the Wisley Rose Award (W.R.A.) to Roses under trial in their garden at Wisley:—

CLIMBING VARIETIES.

Award Class 1.—Paul's Scarlet Climber, raised by Mr. W. Paul, sent by Messrs. Dobbie and Co., Edinburgh; Francois Juranville, raised and sent by Messrs. A. Dickson, Newtownards, Co. Down.

Award Class 2.—Fraicheur, raised and sent by Messrs. Turbat, Orleans; Mrs. Wallis, raised by Mrs. Wallis, sent by Mr. G. Carpenter, West Hall, Byfleet.

SINGLE VARIETIES.

Award Class 2.—Irish Fireflame, raised and sent by Messrs. A. Dickson.

SEMI-DOUBLE AND DOUBLE DWARFS.

Award Class 2.—Old Gold, raised and sent by Messrs. McGredy, of Portadown; Lulu, raised and sent by Mr. Easlea, of Eastwood, Essex; Souvenir de Mme. Boullet, raised and sent by M. Pernet-Ducher; Gwynne Carr, raised and sent by Messrs. A. Dickson.

DWARF POLYANTHA VARIETIES.

Award Class 2.—Ellen Poulsen, raised and sent by Messrs. Poulsen, Copenhagen; Chatillon Rose, raised and sent by Messrs. A. Nonin, Paris.

Wisley Cabbage trials

The following awards have been made to the undermentioned Cabbages by the Council of the Royal Horticultural Society after trial at Wisley:—

SPRING-SOWN.

Award of Merit.—Cotswold Queen, sent by Messrs. J. Jefferies; Wheeler's Imperial (Warminster stock), sent by Messrs. Cooper, Taber; Primo, sent by Messrs. Watkins and Simpson.

Highly commended.—Nonpareil, sent by Messrs. J. Carter and Co.; Express, sent by Messrs. Nutting; St. John's Day, sent by Messrs. Daehnfeldt and Jensen; Midsummer, sent by Messrs. Pennell; Pride of the West, sent by Messrs. J. C. Wheeler; Primo, sent by Messrs. W. H. Simpson; Rosette Colewort, sent by Messrs. W. H. Simpson.

Commended.—Stanley, sent by Messrs. Kelway.

RED VARIETIES.

Award of Merit.—Roode Nunhemmer, sent by Messrs. Nunhem; Vesuvius Pickling, sent by Messrs. Webb.

Highly commended.—Red Drumhead (extra selected), sent by Messrs. Wheeler (Warminster); Perfect Red, sent by Messrs. Barr.

Fuel supplies for glass houses

The Secretary for Mines, Lt.-Colonel Lane-Fox, received a deputation representing the Council of the Royal Horticultural Society and consisting of Lord Lambourne (the President), Sir William Lawrence (the Treasurer), Dr. A. W. Hill (of the Royal Botanic Gardens, Kew), Mr. George Monro (of Covent Garden), Lt.-Colonel Stephenson R. Clarke, the Hon. H. D. McLaren, and Mr. F. R. Durham (the Secretary), at Dean Stanley Street on Tuesday, Novemb to discuss the question of fuel supp glasshouses.

Lord Lambourne introduced the dep and pointed out the great importance plant industry, both in connection wi supplies and employment. He re Colonel Lane-Fox that during the war thirds ration of fuel was provided f sumption in glasshouses in England.

Sir William Lawrence pointed o hybrid and rare plants, if lost, could replaced. It would be a calamity if th cultural trade came into the hands of competitors.

Dr. Hill pointed out that the Gove had taken into consideration the importance of the Gardens at Kew value of the collection of plants, an that the private collections should b into consideration.

Mr. Monro spoke of the position trade and of the importance to the fo ply of the country of raising young v plants in the autumn and winter.

Lt.-Colonel Lane-Fox received the tion sympathetically and stated th shortage of fuel was such that he co hold out hope of a sufficient supply o produced fuel to keep glasshouses hea he would look into the matter an municate with the Royal Horti Society as to the possibility of grower able to obtain supplies from other sou

Benn Brothers' Other Jour

The Cabinet Maker.—Destructi Furniture Pests; Notes from the Journals; Instruction in Cabinet-maki

The Chemical Age.—The Terms British Chemical Combine; Metal Supplement: The Metallurgy and Tin: Some Advantages of Fuel Oil.

The Electrician.—Electricity Sup Derby; New Generating Station at N "The Installation and Operation of Advancers," by D. B. Hoseason.

The Fruit Grower.—Imperial Frui Number: Full Prize List and Descri Competitions (Illustrated); Empire ing Boards' New Apple Box; Fruit-g in Northamptonshire.

The Gas World.—Monthly By-Coking Section; Cartoon by Wallace A Study of Accidents in Gasworks.

The Hardware Trade Journal.— London Issue: London's Great Wee Prince of Wales at the Royal Metal Pension and Benevolent Society's F "The Hardware Trade Journal" Carn Record Trade Gathering; "London Hardware; Round the Showrooms places of Bygone Days: Old Patterns.

The Timber Trades Journal.— Trade Lecture: "The Handling of woods at the Port of London"; Its Future Supply—2; Trade in Columbia.

Report on condition of horticul crops on the 28th October

Broccoli (autumn).—A good crop ge

Brussels Sprouts.—Crop well up t age.

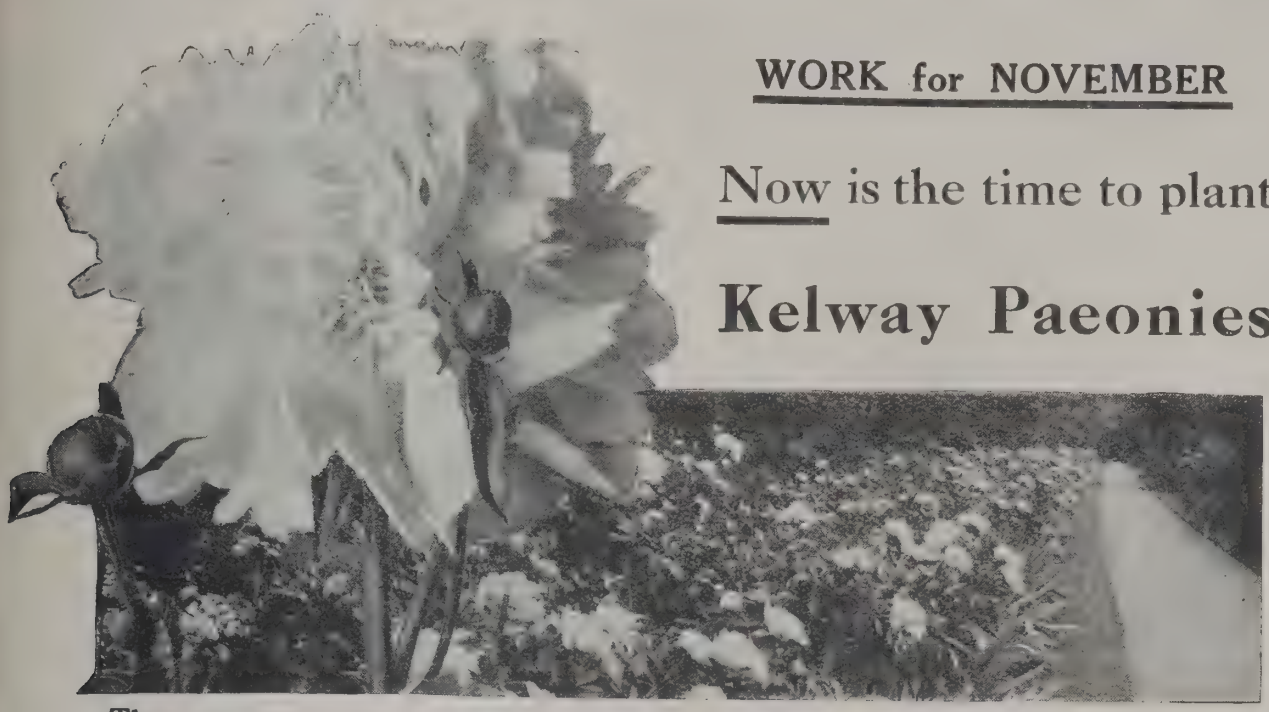
Cabbage (autumn and winter varie A very good crop.

Cabbage (autumn-planted).—Dry delayed planting in some districts, but are now making good progress.

Celery.—Crops good, but disease pre much blight reported.

Seakale (for forcing).—Crowns dev well.

Chrysanthemums.—Early varieties fl well; much frost damage to later v under glass owing to coal shortage.



WORK for NOVEMBER

Now is the time to plant

Kelway Paeonies

They are extremely hardy and will thrive in almost any situation—they produce a magnificent profusion of rich bloom—they possess, in many varieties, a delicate and delightful perfume. Choice named collections, 24/-, 30/-, 42/- a dozen.

KELWAYS, THE CREATORS OF GARDENS BEAUTIFUL, Langport, Somerset.

The flowers that bloom in the Spring, tra la!

Yes, and to get the flowers to bloom in **your** garden in the Spring, you must plant now. Our Collection of Rock Plants is unsurpassed, and **we will send our Catalogue post free on application.**

Here's an idea! No doubt you are racking your brains to know what to give your Aunt for Christmas. You daren't pass her by. Why not give her a dozen Delphiniums? A few plants make an ideal and an appreciated gift.

Let us help. We will send, carriage and packing free :—

12 Delphiniums - - -	in 12 distinct vars.,	for **24/-**
12 Rock Plants - - -	„ 12 choice „	„ **10/-**
12 Michaelmas Daisies -	„ 12 „ „	„ **15/-**

When ordering, kindly enclose your card, to be sent with the plants.

W. Wells, Junr.

HARDY PLANT NURSERIES : : : MERSTHAM, SURREY

TREES AND SHRUBS

A rare Chinese tree (Cedrela sinensis)

THE tree-lover meets with pleasant surprises, especially in the gardens and streets of our older towns. Tucked away here and there are many rare and interesting trees whose existence often becomes known to the botanist only when they burst into flower or fruit. Such a surprise happened to me recently when, in response to a telephone message, I paid a visit to Mr. William L. McKee's summer home at Bristol, R.I.

The estate faces Narragansett Bay, and is singularly rich in trees of many sorts, and, blossoming for the first time was the particular tree which occasioned my visit. It proved to be Cedrela sinensis, a tree which brought back vividly to memory years of wanderings in the heart of China. In that land it is not only common but one of the most valued of hardwood trees. To the Chinese it is the "Ch'un tuen shu," or "Hsiangi Ch'un" (Fragrant Onion Tree), and its young shoots are gathered, cooked, and eaten as a vegetable after the manner of Spinach. To the foreigners in China it is the Chinese Mahogany, on account of its timber, which is beautifully marked with rich red bands on a yellowish-brown ground. The wood is fragrant and easily worked, does not warp or crack, and is highly esteemed for window sashes, door joists, and furniture.

Under forest conditions in China this Cedrela has a straight trunk with relatively few branches, and grows 80 feet tall. Mr. McKee's tree is nearly 40 feet tall with an irregular, much branched crown and a short trunk, measuring 5½ feet in girth and clad with flaking, dark grey bark. When or by whom this fine tree was planted is not known with certainty, but to Mr. McKee's knowledge it has been there for 30 years, although it has never borne flowers until this year.

On the day of my visit, August 5th, nearly every shoot bore a sub-terminal, much-branched, pendent panicle, each from 1½ feet to 2½ feet long, with a multitude of flowers themselves small, milk-white, and slightly fragrant. The leaves each measure 2 feet in length and are equally pinnate with from 10 to 15 or more pairs of leaflets. They very closely resemble those of the Tree of Heaven, but when crushed lack the unpleasant odour of that tree, and are without the characteristic glandular teeth at the base. With its large and handsome foliage and abundant masses of flowers Cedrela sinensis is strikingly ornamental. E. H. WILSON.

Arnold Arboretum.

Propagating Lavender

This is the best time of the year in which to increase Lavender by means of cuttings in the open air. Where Lavender is in much request it should be the aim of the grower to provide a reserve of plants so that in cases of emergency, or when old bushes become leggy and unsightly, they may be replaced with sturdily-grown examples which, being of good size, are at once effective and yield a good crop of flower-spikes the following year. Cuttings root readily enough in any good garden soil. The best consist of shoots of last year's production, which can be slipped off the branches with a "heel" attached. Cuttings of this description usually root freely the first season, and the wood, being firm, losses during the winter are but few. If the soil is very dry at the time of insertion a good watering would be beneficial, otherwise they give little or no trouble beyond keeping the ground clear of weeds until the plants grow and almost touch one another, when they should be transplanted, setting them out in rows 18 inches apart each way. The cuttings, which should be inserted 4 inches to 5 inches in depth, require to be made very firm, and are best planted with a dibber. Beyond trimming off any loose bark on the "heels" and removing a few leaves on the lower portions of the stems of the cuttings they need no further preparation. The cuttings may stand 9 inches apart in rows 1 foot asunder.

Cornus alba sibirica variegata

The charm of ornamental water can be greatly enhanced by the planting of the above shrub in close proximity to it. I have seen clumps of it overhanging a pool, and a striking picture it made, the reflection of the slender stems adding not a little to the picture. In common with others of its kind this Dogwood does not require to be planted so that its roots are actually in the water, but rather on a somewhat elevated position, and one that is close to the margins of the pool. All the summer the shrub is covered with silver-grey foliage, and when this departs the glowing red bark is revealed. As the colour of the bark is retained all the winter it strikes a cheerful note when most other shrubs are dull or unattractive. If planted near a background of tall Willows the red colouring of the stems is emphasised to the fullest extent. Although old wood takes on a pleasing hue, young wood excels it in freshness and brilliancy. It is advisable therefore to cut the growths back in early spring and thus secure a quantity of young wand-like shoots.

H. STEVENS.

The creeping Thymes

For summer flowering I strongly recommend these to those in search of superior rock plants. These small-leaved and free-flowering plants are really grand for all rock gardens. The growth is fairly rapid, small plants becoming large clumps in a year. They never appear weedy or untidy, as they are evergreen, and when starred over with their thousands of tiny flowers they form a delightful feature. Dryness they seem to revel in, and soon push their masses of foliage over the boulders and through crevices. Like most rock plants, they root as they extend, drawing nourishment from every bit of soil they come across. An ideal home for the Thymes is on a stone wall, and when in large masses covered with their tiny flowers the effect is very fine. F. H.

Osmanthus purpureus

The hot, dry summer experienced in this part (N. Devon) suited this shrub to perfection, for when October arrived it covered itself all over with its tiny white flowers. Their scent is delicious, and although small they are large enough to be noticeable. As is the way with a good many small-flowered shrubs, they produce their flowers all along their stems, and good specimens are a fine sight. During the early part of the summer the Osmanthi are only handsome shrubs resembling the Holly without prickles, but their beauty is still more enhanced by flowers as autumn draws near. There are many varieties to choose from. The most common is O. Aquifolium, with O. illicifolius a good second. There are also variegated forms and the purple-leaved variety, which in my opinion is the best. The young growths are a soft deep purple, which turns to a dark green but slowly. It is decidedly a very handsome shrub, quite hardy, and sprays cut for vases, etc., will fill the rooms with delicious scent. Once it becomes established it grows very fast, so no one may fear about cutting as much as required for room decoration. F. H.

EDGELL'S HOUS
Strongly made in sections, roof included, and erecte
dispatch, with bolts for bolting together.
Staging, also 21 oz. English made glass cut to sizes in
9 ft. by 6 ft.
£13 16 0
10 ft. by 7 ft.
£15 15 0
12 ft. by 8 ft.
£17 2 0
carr. paid.
Made by Skilled Workmen.

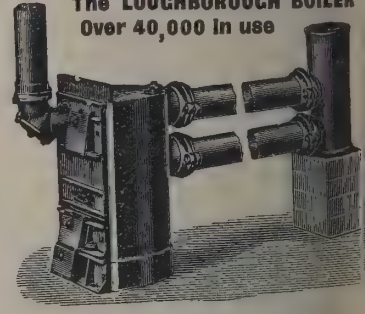
TENANT'S FIXTUR

Made in c
sections, bo
plied, and
paid.
7 ft. by 4 ft.
£4 0
9 ft. by 6 ft.
£6 2
12 ft. by 8 ft
£9 19
EDGELL'S Buildings have proved by test to be t
Send for our 96-page Catalogue of Portable Buil
every description, post free.
Established in Radstock 32 yea
W. & A. EDGELL, Ltd (Dept. R.), Rad
near Bath.

RUSTIC POLES, GARDEN S
AND FLOWER STICKS Free
ASH POLES, 10 ft., 1½ in. to 2 in. butts, 7/
12 ft., 2 in. to 2½ in. butts, 9
14 ft., 2 in. to 2½ in. butts, 11
Garden Stakes, 10 ft., 5 in bdle., 1/6 7 ft., 10 in
9 ft., 6 in bdle., 1/6 6 ft., 12 in
8 ft., 8 in bdle., 1/6 5 ft., 20 in
Hurdles, 3/- each. 4 ft., 26 in bdle., 1.2
All kinds of rustic wood. Larch poles, all sizes, cut
PRICES ON APPLICATION.
MARTER & SON, Coombe Road, Kingston-o

Make your Garden Beau
in Winter

Plants to grow and how to grow them, with colo
plain illustrations.
By A. W. DARNELL. Price £1 1
Descriptions and full cultural directions of over 5
Publishers: L. REEVE & CO., L
6, Henrietta Street, Covent Garden, L

The LOUGHBOROUGH BOILER
Over 40,000 in use

The high reputation of this Boiler
ciency and economy is still unrival
Easy to fix, easy to manage, and m
nomical in fuel, it is the ideal Boiler
Amateur's Greenhouse.
Price Lists and Estimates for com
apparatus on application.
MESSENGER & CO., L
LOUGHBOROUGH, Leicestershir
London Office: 122, Victoria Street

GARDENING ILLUSTRATED

2488—Vol. XLVIII. NOVEMBER 13, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

RUS GLAN-SUS, THE NESS OF IANTHUS I AND 682
Blenheim diseased ... 692
n's Crab ... 682
and Pears, ng 692
athering ... 693
s, unhealthy 692
Aster Cloudy Blue ... 683
Begonias, winter flowering 689
Broom, the White Spanish (Cytisus albus) 692
CHRYSANTHEMUMS AT THE NATIONAL SHOW 686
Chrysanthemum shows 688
Chrysanthemums, watering 688
Ferns, Maidenhair ... 694
Ferns on old walls ... 694
Fruit trees at Lowdham 694
Fruit trees in the flower garden 684
Fuchsias, drying of ... 693
Gardening society within the Civil Service at Acton, formation of a ... 694
Geranium argenteum album 683
Grapes, bottling of 692
Hedges of ornamental shrubs 693
HERACLEUM MANTEGAZZIANUM ... 683
India rubber plant, unsatisfactory ... 693
Ipomœa rubro-cærulea 682
Lettuces and Endive, storing 691
Lime, the uses of ... 691
Michauxia Campanuloides 689
Nerines and their treatment 685
NERINE SEEDLINGS, RAISING ... 685
Peaches and Nectarines 684
Pear, malformed ... 693
Pears, grittiness in ... 684
Plants for cool house 693
Pollination, cross ... 692
Potato crop, the ... 694
Prickly Heath (Pernettya mucronata) 692
Romneya Coulteri ... 693
Roses in cold house, pot 693
ROSES IN THE COLD GREENHOUSE .. 681
Seakale, growing ... 694
Solanum capsicastrum 693
Vallota purpurea ... 682
Vines, unsatisfactory 692
Wood-ashes, value of 691

Roses in the Cold Greenhouse

N in an unheated greenhouse it is vellous what may be accomplished, slight protection of only a glass roof es enabling anyone to grow some of ly Roses of the Maréchal Niel and 's Yellow type, which are difficult to with without some protection. isiting the gardens at Lockinge, near e, Berks, recently we were pleased that Fortune's Yellow is still grown lass—a very old plant of this variety s to carry a good crop of blooms . We have seen Roses on walls mainly de- Peach-trees that had an-to protection—glass aised on brick piers. nese, lovely Roses may ned during the spring. ntial to plant the Roses lrained borders, and if happen to run outside, that excessive rain is off the roots by means or boards. Anyone g a south wall and ld care to erect a lean- against it could ensure rand display of blossom arch and April without f any artificial heat.

the greatest factors to s starting the plants vth very steadily. Air freely given from the ch pruning as is neces- ch is not much, as this one in early autumn) e attended to during Climbers should have ral growths shortened t all well-ripened long ld be retained. The e best grown on what n as the long-rod Bush, Tea, and Hy- Roses treat as one utdoor plants—merely any growths that ap- be exhausted, leaving g, healthy shoots, say, 3 feet in length. If are wanted from the over the long shoots a ow the plants to break y as possible, giving possible, unless frosts Most growers must served what great the plants have to when grown outdoors —sometimes scorching-hot weather, at others quite cold and wintry—but they come through the ordeal right enough. So will it be under glass, if the young growth is produced under almost natural conditions. Dampness must be avoided as much as possible by careful ventilation. After foggy nights give the branches a shake next morning to disperse the moisture, and air early. A little lime scattered about assists in keeping a drier atmosphere.

As far as possible, a temperature of from 45 degs. at night to 50 degs. or 55 degs. by day should be the aim. On a bright sunny morning the glass will run up higher than this, but if plenty of air is on, this will not do any harm. Watering, when required, should be done about nine a.m., and be careful not to spill much about. As the days lengthen foliage develops more freely, then more moisture may be present in the atmosphere. Extremes of heat and cold should be avoided as much possible.

We much prefer Roses planted out in these cold structures, but they may be grown in pots if desired. The climbing and semi-climbing Roses are also preferable, but nearly every sort of Tea and Hybrid Tea Rose, by very sparsely pruning, may be had in quite a tall plant in the course of a year or two, especially if tied up to a Bamboo-cane. Standard and half-standard Roses, planted out, are also grand for the cold-house. If the structure be a rather low one, such Roses as Maréchal Niel and W. A. Richardson, also Climbing Niphetos, will give a lot of bloom from standards, allowing the growths to droop rather than training them on the roof to shut out the sunlight.

Let the border be well made at first, then it will last for years if an occasional mulching of well-rotted manure and bone-meal be applied. Be very careful not to overdo the fumigating, as this is often the cause of flower-buds dropping. Better fumigate on two successive evenings than give too strong a dose on one evening.

Varieties. — The following are the most suitable. Hybrid Teas and Teas will produce most flowers, but if the house is fairly large a few Hybrid Perpetuals may well find a place, such as F. K. Druschki, Mrs. John Laing, and Hugh Dickson. As, however, they only flower once, they are not so useful as the Teas. Tea Scented Roses will keep up a continuous flow of flowers. Of these we have found Mrs. Foley Hobbs, Mrs. Herbert Stevens, Molly Shar-

Mrs. Herbert Stevens, one of the best Tea Roses to keep up a continuous flow of delicious blooms under glass

man Crawford, Niphetos, and Maréchal Niel as good as any, while they are much larger than when grown in the open. Many of the Hybrid Teas are useful for pot culture, among them being Ophelia, Mabel Drew, Golden Ophelia, Melody, Mrs. Chas. Russell, Richmond, Dean Hole, Lieutenant Chaure, Edward Mawley, Caroline Testout, America, Mrs. Joseph Welch, and Mrs. Aaron Ward. The new variety, America, is disappointing in growth, but it produces a few good flowers.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

The hardiness of Plagianthus Lyalli and Anopterus glandulosus

By chance I happened to turn over the pages of your issue of May 1st last, and was interested to note an article by Bruce Hewitt on that charming native of New Zealand—Plagianthus Lyalli. He remarks in Devon and Cornwall it would succeed if planted against a south wall. I hazard the opinion he under-estimates its hardiness, for here in Renfrewshire it has bloomed profusely for the last four years or five years as a bush in the open without the slightest protection further than it is sheltered from the cold winds by a high Yew hedge, in return for which it pays the penalty of the soil being robbed of both nourishment and moisture. Perchance in plant life, like human beings, there are more deaths and ill-health caused by over feeding and drinking than starvation and drouth? Certainly my plant gets neither loam nor leaf-mould, as Mr. Bruce Hewitt recommends, to get fat on, and it blooms magnificently each year. When originally planted, however, some 12 years or 15 years ago it was annually cut down to the ground by frost much less severe than it has recently experienced, and as it blooms on the old wood I had to be contented with its foliage alone for decoration. But now, for some reason or another, it stands the frosts which in late winters have been decidedly severe. Even on the 29th and 30th ult., I had two consecutive mornings in which the thermometer stood at 27, and that, too, accompanied by a blazing sun to melt it. I had hoped my shrub would have ripened seed this year, but, unfortunately, it came to nothing.

Then, again, in the same issue, page 275, "H. C." draws attention to the merits of Anopterus glandulosus, a Tasmanian shrub, remarking that it is looked upon as a greenhouse plant, in proof of which Bean does not appear to mention it in his "Trees and Shrubs Hardy in the British Isles." It also, I venture to say, is much hardier than it is given credit for. With me it was under a sort of glass protection for several years, but as it failed to bloom and took up too much room it was put outside, and has since stood all the abuses that a Scotch climate can pour upon it for the last 10 years without any apparent injury. This, however, has never shown the slightest disposition to flower. It also is growing in the poorest of soil possible. If well fed and trained to a wall it might bloom, but then it might also die, and as its leaves are very attractive both in summer and winter the owner is content to rest with its present performance, though a few blooms would not come amiss, as they seemed very decorative in your illustration.

Renfrewshire FORMAKIN.

Anopterus glandulosus

Vallota purpurea

"One lives and learns," but is there not some mistake about Vallota purpurea flowering freely in the open garden in Devonshire? I see "F. H." says it dies down in November. Vallota purpurea is an evergreen bulb and much resents any injury to its long, persisting foliage, so that I am tempted to ask what the bulb can be. I should fancy it would be Amaryllis Jacobæa or some other hardy Amaryllis. When does it flowe would be so great an addition to E flowers if it bloomed in the open borde perhaps "F. H." will tell us in what his bulbs bloom. How very effective t Vallota purpurea would be if one could them as one does another Cape bul well-known blue Agapanthus.

Like many other gardeners, I have seen such a show of flower on the Bell Lilies as this year. As far north as east Yorkshire they have bloomed dantly, even in places where they hac grown for many years with scarcely a spike once in a way. There must be reason for it, and I, for one, consider was the great intensity of the sun's ra tween July 10th and August 15th. "actinic power" of the sun's rays that period was very remarkable, and pretty sure that if the actinic power sun's rays is duly measured and not shall have a clue to many problems. fact of the clearer atmosphere from t sence of smoke this year may have a Yorkshire hills, but it could not have that cause that gave abundant flow Devonshire. The connection betwee spots and actinic rays needs more w out. EDWARD H. WOOD

Ipomœa rubro-cœrulea

Given a fine summer one hears a deal of the beauty of this annual spe Ipomœa when grown out-of-doors, esp in the more favoured parts of the c (see issue November 6th, p. 667). Wh conditions are none too favourable doors it can still be depended upon as lightful climber for the greenhouse, in structure its charming blossoms are throughout the latter part of the su and, given a gentle heat, well on in autumn. It is in foliage and in flowers Convolvulus-like, the blooms, each f inches to 4 inches in diameter, being charming shade of pale blue, with, they die off, a reddish suffusion dow centre of each segment. This Ipomœ very easy culture, all that is necessary to sow the seeds in a gentle heat spring, shifting the seedlings on when sary into larger pots, using a rich soil. will then make rapid headway, and n trained up the roof or rafter of the house, while, should there be no space able for that purpose, they have a very effect when trained around a few Like many of its relatives, this spe rather liable to the attacks of red-s especially if the atmosphere is at al Some years ago seeds of an Ipomœa, the name of Heavenly Blue, came, I b from across the Atlantic, but it turned be the same as Ipomœa rubro-cœrulea F

Apple Sam's Crab

Has your correspondent, S. Bright low (issue November 6th, page 666), to either of the local nurserymen county, as I should think they would to supply it, as it used to be, if it is now, well known in the Stoke Edith a joining parishes, and, if my memory me right, was much used with other va for cider-making? I think the late Watkins, of Pomona Farm, Withi used to list it, but do not know if the n is still in existence. The editorial ad excellent, and if the scions on your spondent's tree should not be all that be desired he could no doubt obtain sc a more suitable character if he were to inquiries among the farmers and cottag the above-mentioned district, or he co sert an advertisement in one of the papers prior to grafting time, setting

quirements, and get them in this way. pple in question has a pleasant short- flesh and is very sweet and juicy. It of handsome appearance. W.

Heracleum mantegazzianum

IS giant Cow Parsnip is probably the gest hardy-flowering plant in cultiva- n. In size and vigour and general t is a great improvement on the older eum giganteum. The deeply-gashed is more distinct, the colour a livelier and the surface rather more polished. efore the great flower spike is thrown leafy mass is a fine sight. It is one of called biennials that takes three years e to the flowering state. When the

Cow Parsnip or Hogweed in flower (Heracleum mantegazzianum)

sometimes known as the "Cart-wheel er." The umbels of white flowers are et high, the stalks radiating upwards he ribs of an umbrella turned inside out

is at its best it is pleasant to be able to some visitor who is not well acquainted e potentialities of a garden :—"Come a flower that measures 4 feet across talk 14 feet high," and to enjoy the " that bursts out when on turning a the gigantic plant comes into view!

G. J.

Geranium argenteum album

delighted to learn that not only does y good friend, Mr. Ingwersen, possess ite form of Geranium argenteum, but will in due course present me with of it. How like him! With regard mutation of my plant of Geranium um purpureum, I fully agree with Mr. sen that this seems impossible, and e impossible having happened which it so very interesting. Mr. Ingwer- uggested explanation of the miracle the right one, but I do not think it e plant came to me as G. a. pur- , and that is what it undoubtedly was and in flower, and had it been any- lse either my foreman, Mr. F. Barker, robably both, would have spotted it— e should also almost certainly have a seedling G. cinereum had there e, as Mr. Ingwersen suggests, during the time it was becoming strong and large enough to kill out the G. argenteum purpureum.

No. I think the explanation is much more interesting than that. I believe it is just a case of an ordinary, everyday, common or garden miracle. It is true—at least we have it on perfectly good classical authority—the leopard cannot change his spots, but the Tulip, the hybrid garden Tulip, is more fortunate, and can undoubtedly change its petals. The "breaking" of Tulips is one of those miracles which have become a commonplace of the garden.

You plant Clara Butt one year, with her gentle immaculate pink, and up she comes next year all freaked and streaked with red. She has remained constant for many years. It is only comparatively recently that she has started "breaking." This "sporting" of flowers is not uncommon either. Chrysanthemums and Carnations are constantly doing it, and leaf and branch "sports" occur too. My plants of that delightful dwarf rock conifer, Juniperus hibernica compressa, have on more than one occasion thrown "sport" branches of the common Juniperus hibernica, of which it is itself perhaps a "sport" variety: A case of a "sport" sporting back to its parent.

In the case of Geranium argenteum purpureum, I begin to wonder if the plant is, after all, true argenteum—a mere colour variety of the species. Does anyone know definitely its origin? Was it collected wild, as a colour variation among the type, and if so, by whom, and where? I, for one, had always assumed this, but, I must confess, without any authority. I now have a suspicion that the plant we grow under the name Geranium argenteum purpureum may not be pure argenteum at all, but a hybrid between argenteum and some other species. If this is the case, it might explain the impossible, the miracle that has occurred here on my nursery. Hybrid origin would make such a leaf mutation or sporting possible.

In saying in my former note that the plant had become G. cinereum, I was speaking in a broad gardening sense rather than botanically. The leaves of my plant are superficially now the leaves of cinereum and no longer those of argenteum.

Mr. Barker now reminds me that one day this summer we noticed in a rock garden we visited together—I am practically certain it was Kew—a plant exactly like ours here. It was labelled G. argenteum purpureum; it had the deep claret crimson purple flowers, but the leaves of cinereum—so to speak.

It would be interesting to learn if Mr. W. Irving, of Kew, has observed any mutation in his plants of G. argenteum purpureum this year. And I hope someone will be able to throw definite light on the origin of the plant called Geranium argenteum purpureum.

I am sorry to disappoint Mr. Ingwersen, but I am afraid it really is just an ordinary miracle that has happened here, and not one of those extraordinary cases of an alien seedling cropping up side by side with an alpine and swamping it, which lead customers to write to the worried nurseryman that the Gentian he sent them has changed into a Dandelion—can it be the bees?

Stevenage. CLARENCE ELLIOTT.

Heracleum mantegazzianum in May

Aster Cloudy Blue

With reference to the experience of "G. J.," issue Nov. 6, page 671, as regards the failure of Aster Cloudy Blue some seasons, may I say that it is essential that this variety should be broken up and replanted every year. The best results are obtained by growing it on single stems; it then forms a pyramid of great beauty, flowering right down to the ground. ERNEST BALLARD.

Colwall.

Fruit Trees in the Flower Garden

THE old-fashioned orchards with standard fruit trees and grass below have well-nigh become extinct. Few homesteads of any size were at one time considered complete without them. The depression in agriculture and, above all, the sweeping away of small holdings have sealed the doom of farmers' orchards, and sadly they are missed. There is no reason why they should be altogether lost to the country, for the taste for planting trees is stronger than ever, and the market grower has found better methods of growing fruit for market. But it is not for market but for home use that I would plead for the more extended use of fruit trees of kinds that are both useful and ornamental. I see no reason why owners of small gardens should keep on planting giant forest trees in their small gardens to smother everything beneath them, when fruit trees—especially when in flower in spring, or when loaded with fruit in autumn—are altogether more ornamental and decidedly more useful than the ordinary run of trees one finds planted in gardens. I lately saw an old kitchen garden which had been much neglected until the fruit trees had grown quite large, and the old Gooseberry and Currant-bushes formed a regular thicket beneath them. The owner set to work, grubbed up all the bushes, cut all the mis-shaped trees, leaving the best shaped and best placed ones, and cut away the lowest branches, leaving as much of the young wood as possible at full length. He then levelled the soil and laid turf over the surface, the result being a very pretty lawn, and when the spring came the effect was very fine, for large groups of double Daffodils had been left in the soil, and these pushed their way through the turf and flowered splendidly. During the summer a continual succession of fruit, from May Duke Cherries to the latest Apples and Pears, has been obtained. I am well aware that one does not get fully-grown trees in the very spot they are needed, but trees that will fruit at once are so cheap now that the cost is no more than that of Poplars or Limes.

Many of our Pear trees have such beautifully coloured foliage that they rival the Virginian Creeper in its fiery crimson garb, and many others are beautiful in shades of golden-yellow. One of the prettiest fruit trees in late autumn is the Quince, with its large, pale yellow fruits and its golden foliage that hangs on late in spite of autumn gales. It is singular that while the common Almond is freely planted in the flower garden, so few of the useful fruit-bearing trees are ever seen, except in the kitchen garden. If we could get rid of the idea that it is impossible to combine the ornamental and useful, a great impetus would be given to planting fruit trees in pleasure grounds. G. G.

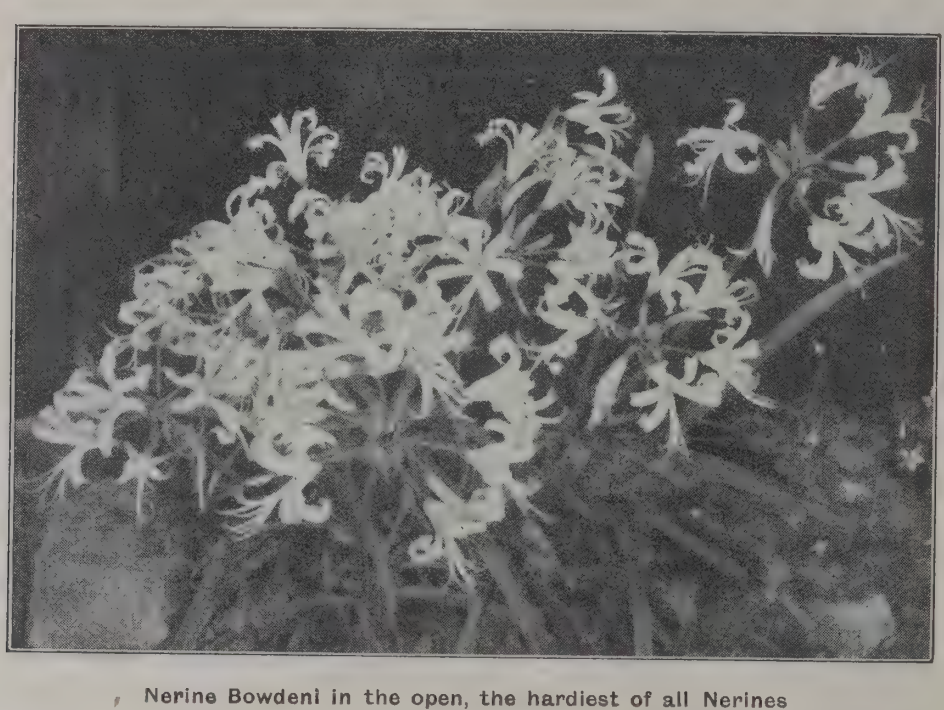
Peaches and Nectarines

As Peaches and Nectarines do not succeed in the open, the warmth and shelter afforded by walls are necessary. The wall may face south-east, south, south-west, and due west, the first-named position being advisable only in warm and sheltered districts. The walls themselves may be part of the boundary or intersecting wall in a kitchen garden, the front or side wall of a dwelling house or premises attached thereto. It matters not which, so long as they are not less than 8 feet to 9 feet in height and, in cases where but one or two trees are to be planted, room for extension to right and left of the stems of the trees. Walls constructed of brick are the best, as they absorb and retain a great amount of solar warmth. Concrete and walls built of stone will also answer. The last-named should be faced with cement, and in both instances such walls can be made warmer in appearance if not in reality by colouring them with Venetian red. To do so add sufficient of the latter to obtain the correct tint to fresh-made limewash and in which linseed oil was mixed while the lime was hot to make the wash adhesive. To obtain a uniform tint enough wash should be mixed at the outset to colour the whole of the wall to be dealt with. Boarded fences, provided they are of the right height and aspect and that the boards fit closely together, may also be pressed into the service. Such fences should be painted a brick-red colour. Both fences and walls also, except where sheltered by the overhanging eaves of a dwelling house, should be pr with good wide copings to shield rain clear of the trees and to admit of or glazed copings being fixed under as a further protection when the trees into bloom.

Boarded fences may be dealt with by nailing a board on the top, givin slight incline towards the front so may run off freely. Both the last-r also stone and concrete walls, shou training purposes be wired and the given two coats of paint afterwards. walls need not be wired, as in thi training can be effected with the shreds and nails.

If a long length of wall is to be p and the soil is heavy and unsuitable, a should be made consisting of the materials such as loam, burnt soil or ashes, a liberal quantity of lime rub old plaster and some bone meal. This should be well drained and, if the sub wet and cold, concreted. Where but two trees or vacancies have to be mad holes opened out 6 feet in width and in depth will, if the subsoil is well dr suffice. Even then a good 6 inches of rubbish should be placed in the botton many cases the addition of loam and rubble to the best of the soil throw provides a suitable compost. Oth entirely fresh and suitable material be provided.

A good water supply near at hand valuable asset, especially when a whol is devoted to these fruits, as root wat and the washing or hosing of the during the growing season can then be expeditiously carried out. A.



Nerine Bowdeni in the open, the hardiest of all Nerines

Grittiness in Pears

You will much oblige by telling me causes the hard pellets, like grains of in the Pears enclosed—Doyenné du Co and if anything can be done to preve Almost the entire crop was spoiled, m less, also a crop of Bon Chrétien Pe have had a little of this before, but not so bad as this year. L. A.

[Grittiness in Pears is due to a de ment of woody tissue in the same, t some seasons being more pronounced t others. Some varieties are more prone gritty than are others, but this is th time we have seen "grit" in the fle Doyenné du Comice, and never on any sion have we seen it developed to such gree in Pears before as in those you We have generally noticed that in a summer such as the past has been, grit is, when the fruits ripen, more in evi than in a season when the reverse cond prevail. A fruitful source of gritt apart from climatic influences, is whe trees are growing in a cold, heavy soil particularly so when the roots descend the subsoil. The remedy in both instan to lift the trees, or if this is impossible the roots, and after ameliorating the tion of the staple by mixing with it a l quantity of old, crushed mortar, wood-a burnt soil, some good fibrous loam, o potting soil, to lay them out afresh in a r level position. In regard to tap-roots, should be cut off close up to the ball. probability your trees—seeing you hav fore had the fruits similarly affected—a need of this attention. The warmer th can be rendered, and the nearer to the face the roots can be kept by applicatio farmyard, stable, and artificial manures less likely are Pears to be gritty, or if should be present not to any apprec extent.]

Raising Nerine Seedlings: The Greatest Consolation of Autumn

By F. Herbert Chapman

Those who grow Nerines will now be enjoying the beauty of these autumn-flowering bulbs, their charming, bright, and desirable colours, and the unique sparkle on the petals which a sunny day gives them

IE reason why Nerines are not more rown is, I suppose, that they have cer- ain little requirements which the flower- ng public has not yet grasped. Inas- as Nerines require very little heat, and growing on without succumbing to any f indifferent treatment, they are emi- easy plants to deal with, but to get to flower well and rly is a rather differ- natter. Well roasting lbs in summer appears the solution, and the should undoubtedly own and flowered in nniest house possible. is where I am handi- l, as the only house in I am able to grow my s is situated right at ot of a steep and high o that it only gets the r about half the day. is I attribute the fact do not get so much from my Nerines as ne of my friends.

n told that the Nerine named after a Greek n. There are certain s, in human form, are well aware that a coquettish wayward- n their part is a sure us to admiration, and ubt this is the case he Nerine.

d from my note-books began my attempts at g raising with Ner- bout 20 years ago, and st seedlings began to in 1910 or 1911, and every year I sowed e batch of cross-polli- seed. Very, very of the resulting seed- have been discarded, st year I find that I ted no fewer than 88 es to the scrap-heap.

he quiet autumn sea- ne has time to make otes, and last year I t every plant that had rded bad or doubtful ; so that this should the survival of the with a vengeance. olours of my plants through all the grada- of shades of crimson, ink, and orange, to or nearly white, and of the half-tones of nd salmon are to me harming. A new type cently cropped up in the colours appear to be overlaid or d with a sooty tinge, giving a very fect to the flower; and I find that this as its admirers, although I confess it tle appeal for me. I have done a good intercrossing among varieties and un- seedlings raised by the late Mr. H. es, who did his breeding in a large nd who certainly raised a number of ful flowers. Seedlings in which a alba is one of the parents, seldom ood results, although I have raised worth saving, notably a pretty rose- lower which was greatly admired by the late Mr. J. T. Bennett-Poë, and which he allowed me to name after him. In losing him we have lost perhaps our foremost judge and critic of the Nerine. I used to send or take him my seedlings, and his help was most valuable. When he did not like a flower he was quite outspoken about it, but when a variety appealed to him it gave one such satisfaction to see the eyes of this fine old Irish gentleman sparkle as he exclaimed: "Oh! What a beauty!" Bowdeni is a Nerine I have not made much use of in breeding, first crosses with it being very unsatisfying, but in the second generation it is possible that there may prove to be better results. A few years ago I resolved to make a sort of system of pollinating all my best seedlings, when possible, with Fothergilli. The results are beginning to become apparent, and I am very pleased with them. Fothergilli as a pollen-parent undoubtedly gives size, substance, and vigour; and, as to colour, it appears to me that you may get just anything, for at the present moment I have a large pan of seedlings from a Fothergilli cross, flowering for the first time, that appear to range through nearly all the colours known in the Nerine.

There are gardeners who find the autumn of the year dull. If they want something to interest and thrill them, let them try the Nerine. I make them a present of the suggestion. A friend who was looking at my Daffodil seedlings in the spring one day, said: "I can't think how you get through the autumn."

The reply came readily enough: "I enjoy a good Apple, and then there are the Nerines." And I still look on these two things as among the greatest consolations of autumn.

Nerine Alice, shown by Dame Alice Godman, South Lodge, Horsham, before the Royal Horticultural Society on November 2nd

From this one small potful of bulbs arose five strong spikes of large rosy pink flowers with an average of ten flowers to one truss

Nerines and their treatment

The different Nerines form a bright feature in the greenhouse during the autumn months. There is now a goodly number of new varieties, many of which have had their merits recognised by the Royal Horticultural Society within the last two decades. As, however, it takes a long time to work up a stock from a single plant, but few of these can be obtained from the ordinary trade sources. For general use, one of the best is Nerine curvifolia, more generally known as N. Fothergilli major. With reasonable treatment, this can be depended upon to flower year after year. It is most satisfactory when the bulbs are allowed to remain undisturbed for years; in fact, till they are tightly wedged together. Such being the case, it is evident that the soil must be of a good, lasting nature, that will not decay quickly. The main portion of the potting compost must consist of loam, lightened to the necessary extent by rough silver sand. If the loam is of a heavy, adhesive nature, it may be lightened by the addition of a little peat or leaf-mould, but in ordinary soils this is not necessary. The drainage, too, must be good.

Complaints are by no means infrequent that Nerines do not flower well, and this can generally be traced to their being given the wrong treatment. It must be borne in mind that, after flowering, the plants make their growth, hence they must during the winter be assigned a good, light position in the greenhouse, and enough water given to keep the soil fairly moist.

So treated, they will continue to grow steadily through the winter, and more rapidly when the days lengthen.

CHRYSANTHEMUMS AT THE NATIONAL SHOW

CONTRARY to general expectation the annual exhibition of the National Chrysanthemum Society held at Vincent Square, Westminster, S.W., on November 4th and 5th, provided a display of the "Autumn Queen" that well maintained the high traditions of this Society.

The competitors in the chief class for 36 Japanese blooms, in 12 varieties, three blooms of each, in vases, staged blooms of the highest quality. Mr. Chas. Beckett, gardener to Major the Right Hon. Sir John Ward, Chilton, Hungerford, was awarded first prize for a series of blooms exhibiting high cultural skill. The varieties shown by this clever cultivator were Mrs. M. Sargent (white, shaded green), Mrs. B. Carpenter (deep rose sport from Mrs. Algernon Davis), W. Rigby (deep yellow sport from Mrs. G. Drabble), and the latter, a beautiful white, was also shown in splendid form and condition; also Red Majestic (a reddish-bronze sport from Majestic), Mrs. Algernon Davis (pure pink of beautiful drooping form), Louisa Pockett (large white), Julia (a rosy-bronze sport from Mrs. B. Carpenter), Mrs. George Monro, Junr. (a compact bloom of velvety crimson colour), Norman Chitterden (white, faintly tinged green), Rosamond (wine-red on pale yellow ground), and Mrs. F. J. Fleming (rosy-lilac on white ground). The last-mentioned was the least interesting variety. The most noteworthy blooms shown by other growers in this class were:—Majestic (a large bloom of a golden-amber colour), Mr. T. Slack (chestnut-crimson), Mrs. J. S. Kelly (bright rose), Victory (a large deep flower, colour, white, shaded pink), Mrs. R. C. Pulling (ochre-yellow, very large), Princess Mary (yellow sport from the white Queen Mary, a huge flower of much refinement), Mrs. J. Gibson (a magnificent mauve-pink, not often seen nowadays), and superb examples of Mrs. Peter Murray, a lovely rich purple amaranth. The foregoing varieties represented the better Japanese large exhibition blooms shown at this fine exhibition.

LARGER SHOW BOARDS.

Another very interesting competition was that for 12 Japanese blooms distinct, and was described as an "Experimental Class for Big Blooms." The 12 blooms were displayed on show boards provided by the Society. The boards were much larger than the orthodox show boards, the holes for the tubes being arranged 10 inches apart. In this way the ample proportions of the present-day huge flowers were displayed in such a way that the whole of each individual flower could be seen quite easily. The idea emanated from the Hull show, where a slightly larger show board is used in their principal classes. In the present instance grand examples of the following Japanese varieties were staged:—Julia, General Petain (light pink), W. Rigby, Princess Mary, Louisa Pockett, Queen Mary, Mrs. A. Brown (a large blush-white globular bloom), Mrs. Algernon Davis, Red Majestic, Mrs. Jas. Gibson, Majestic, and Mrs. B. Carpenter.

Disbudded Japanese blooms of the kinds grown for market were superbly shown. The more noteworthy kinds were of the Japanese, Aldyth (bright rich crimson with golden reverse, of beautiful form), The Wizard (
bronze sport from the well-known
Sorcerer), Comus (yellow), Atalanta (b
ful pink), Iolanthe (a delicate pale pi
lovely form), Mrs. R. F. Felton (rich
crimson), Blanche du Poitou (white),
Elder (deep golden-yellow), and Jean Pa
(a rich glowing copper-bronze, very
flowering). Good market singles w
J. H. Blythe, Maxwell (yellow), an
beautiful free-flowering incurved J
Streater (primrose sport from H. W. Th

The new Single Chrysanthemum Everlasting

Chestnut red, with bright yellow zone. One of the finest Singles of recent introduction. Award of Merit, R.H.S., November 2nd; First-Class Certificate, N.C.S., November 4th

SINGLE-FLOWERED VARIETI

It was generally admitted that the
is late and that single-flowered varieties
very late. It is gratifying to note, the
that there were so many single-flo
varieties shown in excellent form and
tion. Some well-known growers were
spicuous by their absence, owing to th
that their flowers were not yet ready.
class for 12 vases of large singles, di
for the George Monro Challenge Cup
were some very good singles shown.
in the first prize exhibit were:—Nona (
of good form), Mrs. W. J. Godfrey (
pink), Mrs. A. B. Hudd (bright ye
Jessica (bronze-red), Susan (rose sport
Molly Godfrey), Molly Godfrey (deep
with white zone round disc), Mrs.
Hancock (beautiful bronze sport from
W. J. Godfrey), Hilda Shoebridge
silvery-pink), Edith Dimond (deep y
shaded bronze), Mrs. R. Harris (rich g
yellow), Sandown Radiance (chestnut
son), and Robert Collins (bright rich a

Among the several Floral Deco
classes the most interesting was that
arrangement of Chrysanthemum b
suitable for a hall table or

SIDEBOARD DECORATION.—The compe
was good, but the first prize exhibit sto
well from the rest for its bold and st
conception of a hall-table decoration. A
of Mosaic vase was utilised in whi
arrange the flowers, and those that were
were large and handsome, well-grown
mens of the Japanese variety General
verse, or something better, and a few b
of a large white. It was a fine effect
was a beautiful illustration of what co
done with large exhibition Japanese b
in bold decoration.

THE NEWEST CHRYSANTHEMU

Many novelties were submitted t
Floral Committee of this Society on
4th, and the following varieties receive
First-class Certificate:—

WHITE BALL.—A charming little inc
reminding one somewhat of Mrs. Geo. R
popular for so many years, but the flore
narrower than in that variety. Fron
H. J. Jones, Ryecroft Nursery, Hither G
Lewisham, S.E.

CARINTHIA.—A very large, loosely-inc
Japanese bloom having broad floret
curving at the tips; colour, chestnut
buff reverse. From Mr. H. Woo
Shirley, near Birmingham.

AQUITANIA.—Another fine Japanese nc
having rather narrow florets recurving e
twisting and curling at the tips and bu
a flower of good form; colour, bright
nut with gold reverse. Also from
Woolman.

YELLOW MAJESTIC.—This is a stu
canary-yellow sport from the popular v
Majestic, and appears to have all the
qualities of this family. From Mr.
man.

MISS MAY POWELL.—A beautiful
about 5 inches in diameter, having
broad florets evenly arranged around

1. The magnificent group shown by Mr. H. J. Jones, Lewisham, embracing all types of the Chrysanthemum. This group filled one end of the Hall for its entire length, and received the Large Gold Medal—the highest award on this occasion.

2. A view on the East side of the Hall; in the foreground is the Gold Medal group by Messrs. Keith Luxford & Co. Prominent in this group was the new single red variety, Everlasting, illustrated on the page opposite. Other varieties of distinction were Harold Wells, a large white exhibition Japanese, Mrs. R. F. Felton, the decorative red which created so much interest last year, and Belle Chinoise, a large deep yellow Japanese variety forming the centrepiece to the group.

3. Mr. and Mrs. H. J. Jones, in front of their remarkably fine group of Chrysanthemums. Mr. Jones, who is inseparably associated with Chysanthemums, was suffering from sciatica and attended the Show at considerable inconvenience. Happily, his efforts were rewarded, for he had the great satisfaction of knowing that he had put up one of the finest exhibits in the whole history of the Society.

4. The first prize display of single-flowered Chrysanthemums arranged for effect (Class 22), shown by Mr. F. J. Yarrow (Gardener, Mr. A. Robertson), Abbey Road, St. John's Wood. Four of the best varieties were Mrs. R. Harris (rich golden yellow), Susan (crushed strawberry), Stuart Smith (white), and Dignity (red).

THE NATIONAL CHRYSANTHEMUM SOCIETY'S SHOW, November 4th and 5th

of proper proportions; colour, apricot-bronze. From Mr. Woolman.

FIFI.—This is a charming variety that evolves dainty sprays of pretty blossoms so useful in decoration; colour, mauve-pink, tipped gold; beautiful under artificial light. The plant grows from 3 feet to 4 feet high. From Messrs. Cragg, Harrison and Cragg, Heston, Middlesex.

IOLANTHE.—A very distinct market Japanese variety about 6½ inches in diameter. The florets are of medium width, and build a flower of even form, highly attractive; colour, delicate pink. Also from Messrs. Cragg, Harrison and Cragg.

ENTON SUN.—A medium-sized Japanese flower about 7 inches in diameter, having florets of medium width, building a somewhat solid reflexing flower of good form and substance; colour, golden-apricot. From Mr. W. Hall, The Gardens, Enton Hall, Witley, Surrey.

LADY FINLAY.—This is a very promising large-flowered exhibition sort having broad florets that build a bloom of drooping form; colour, ivory-white. From Mr. R. Evans, The Gardens, Warfield Grove, Berks.

PERRYONA.—Another promising exhibition variety. The florets are fairly broad, and recurve in somewhat loose though fairly even fashion; colour, purple—some people think rosy-purple. Also from Mr. R. Evans.

THALIA.—This is a crimson-coloured flower with a buff reverse, having long florets of medium width curling and incurving at the tips and building a promising exhibition bloom. Shown by Messrs. Keith Luxford and Co., Harlow, Essex.

EVERLASTING.—A single-flowered sort some 5 inches to 6 inches in diameter, having broad florets of good substance neatly arranged around a disc of useful size; colour, rich crimson. A specially good flower. Also shown by Messrs. Keith Luxford and Co. See illustration page 686. D. B. C.

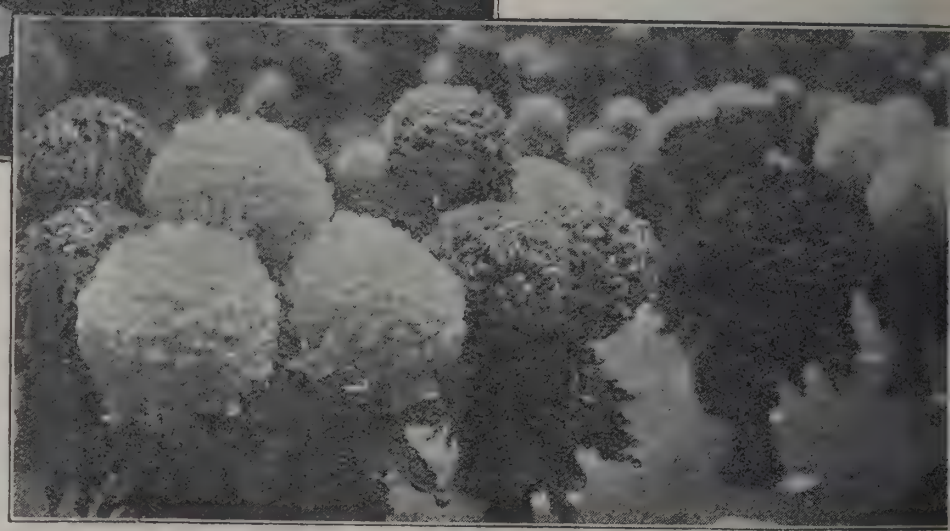
Watering Chrysanthemums

Watering plants in pots requires more care than many appear to think, and a great number of Chrysanthemums suffer in this respect. Giving too much moisture at the roots rather than not enough is often the cause of unhealthy plants. This over-watering is very likely to occur just after the plants are placed in the flowering pots. I believe in keeping the soil on the dry side—at least, until the same is completely filled with roots. Watering Chrysanthemums is considered quite a daily item. That is to say, a supply is given almost regardless of the weather. Now, it occurs to me that during dull, sunless days, unless the wind is drying, there is enough moisture in the atmosphere to prevent the leaves from flagging; and at such times the roots are more likely to be moving in partially dry earth than in that in a soddened state. I would rather sprinkle the leaves than pour water on the roots during sunless weather. I should then expect to find roots coming to the surface for moisture. During bright sunshine the danger of over-watering exists in a far less degree, and flagging of the leaves is then avoided. But not even then is it wise to water every plant at the same time. Go over the collection in the morning, and deal with plants quite dry at the roots. Then again at midday and in the evening take another round among the plants. The well-known practice of tapping the pots is a good one. A ringing sound usually indicates dryness at the root. But if a doubt exists, lift a pot, and its comparative weight will provide a very good sign of the condition of the earth. A cultural error to be avoided is not giving enough water at a time to thoroughly soak the whole ball of earth. Mere top moisture will not do; the bottom must be soaked as well. Then the mistake of applying manures too early is not uncommon. Stimulants are not necessary at the time roots have ample fresh soil to run in. To give fertilisers then is a sure means of either unhealthy or soft growth. When stimulants may be given depends upon the time the plants are potted and the size of the pots used. If the plants are growing freely and the foliage healthy we may be sure proper food is being supplied in abundance. When the pots are well filled with roots the quickly put on a starved look, and then time to begin feeding.

Chrysanthemum Pictures at the National Show

Above.—The experimental class big blooms. In this class exhibit were provided with large show boa in which the holes to secure the c and blooms are 10 inches apart fr centre to centre, thus providing m space for the blooms than the regu tion boards permit. The innovat met with general approval. We ill trate the winning blooms shown Mr. R. L. V. Sherwood (gardener, J. Heath), St. Gatien House, Ne market. Among the best blooms this stand were William Rigby, Julia Louisa Pockett, Princess Mary, a Red Majestic.

Below.—The battle of the giants 36 Japanese blooms in 12 varieti three blooms of each, to be staged vases. The class was won by Ma the Hon. Sir John Ward, Chilt Hungerford (gardener, Mr. Char Beckett, brother to Edwin, of Alde ham House Gardens).



Chrysanthemum Shows

IF these are not so general as they some dozen years back, a goodly nu manage to keep an autumn exhibitio ing. It can hardly be said that there i same keenness in competition as forn simply because times have changed in pr gardens. There are fewer to warrant ing a staff of gardeners, and occupan glasshouses suffer in consequence. Th thusiasm for the flower itself may b strong as ever surely among amateurs small growers; somehow, this class of vator prefers in a good many cases to c results of labour in developing fine blos at home rather than indulge in rivalr public.

Rarely does one find in these days than half-a-dozen competitors in one c rather less really, and yet it is easy to r

ces in the years gone by when it was ncommon to find a score. And, unforely, those we will term the big exhibiall out one by one, with exceedingly few the breach. Interest in certain forms e flower or style of growth has ished, too. For example, the close haped incurved is now almost a negliquantity, the giant trained plants are to be met with, while other types of the , such as the Anemone-centred, the tiny , and so on, are merely curios now. minating sections are the Japanese and ngles, the only two that count, in fact, se later times. To get the former as as possible is still the aim, and the nable method of presenting them is in The old style of fixing the blossoms boards is not entirely passed; still, it sing. One notable effort is being made ke this way more pleasing by a leading y in the north. This is by arranging on bigger boards than of yore, so as to he individual specimens ample room to themselves. The writer, however, not anticipate a general change in this on.

e arrangement suits the big Japanese ably, and, of course, it is the only way suitable for displaying the graceful . By the way, too, the taste in these does not lean so much to shapely ed blooms as it does to their being and graceful withal. From the point w of exhibitions, then, it is the largest est in the way of varieties that are nent, and this means a comparatively number. The public may not tire of the few so long as there is a continuin improvement either in colouring or tion. Possibly the limit in size has y been reached. At the end of these ks a list of choice sorts will be added.

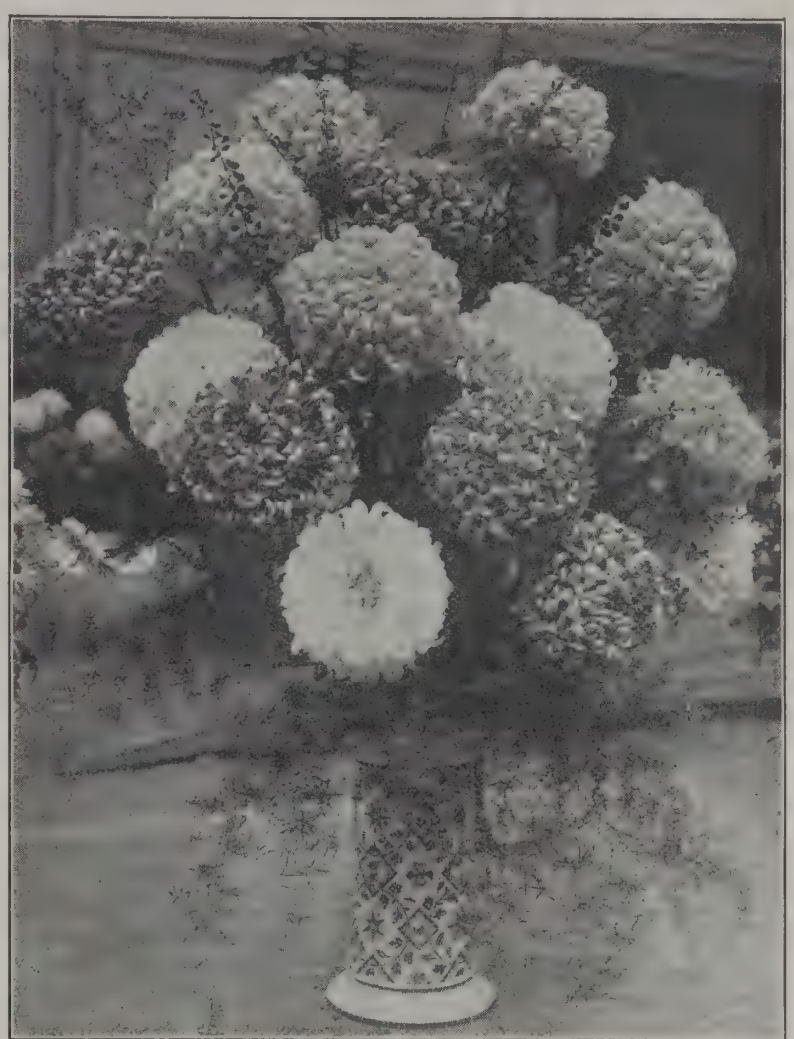
bring fresh interest to Chrysanthemum It is pretty certain some new style of will have to be exploited. I fancy we got this in the medium-sized specimens pular in these days for commercial pur- To perfect them requires just as skill as does the growing of the giant , and they are incomparably the more . Why not ask for these samples to be in half-dozens or dozens in one vase? would be one way, indeed, of reviving curving type of flower, which was so r at one time.

ountry shows, especially where the oldned group of plants is to be found, might well be some change. Probably ass of exhibit has lived so long because e walls of a building requiring sometto hide them. Anyhow, one has little tion for the ordinary sample of group umbled mass where the good hides the Why not have big vases of flowers and n foliage mixed? Have them placed igh enough for the eye to see. More han not this class of exhibit is arranged already high table and the visitor is to look up to it. A dozen Japanese es would include Julia, Louisa Pockett, ric, Mrs. B. Carpenter, Mrs. G. le, Mrs. G. Munro, Mrs. R. C. PullMr. T. W. Pockett, Princess Mary, Mary, Wm. Rigby, and Wm. Turner. lways well to have additional varieties ct from on account of not being able to ery one in characteristic form every Ajax, Edith Cavell, Gigantic, Miss Roope, Mrs. Algernon Davis, Mrs. l Wells, Mrs. H. Tysoe, Mrs. Peter y, Mrs. S. Noble, Norman Chittenden, oseday will be useful. Fifteen single for show would be:—Absolute, Bronze Crimson Dawn, Hon. Edith Smith, Felton, Mrs. Joyce Moore, Molly GodMrs. T. Hancock, Mrs. W. P. Godfrey, Mona, Phyllis Cooper, Red Molly, Sandown Radiance, Susan and White Model.

The colours of the above may be had from the list of any specialist in Chrysanthemums. The sorts named include several of merit which are new, and there is bound to be an addition or two desirable after the present season has finished. H. S.

Michauxia campanuloides

I BELIEVE very few people grow this plant, and therefore this present notice of it comes at an opportune moment, for now is the time to be ordering seeds, and a packet of seed of this plant will assuredly be asked for in many orders. If seed is obtained it may be sown at any convenient time during the spring months, and the heat of a warm greenhouse is sufficient to ensure its germination. If the plants come up thickly, when they are large enough to handle they should be pricked off into a pan or box, and by June or July they may be planted out. As they will not, under the best of culture, flower till the following year, the aim should be to grow the plants strongly the first season, so as to ensure a fine, free blossoming next year. For this purpose it is best to have a nursery-bed or border of warm, light, rich soil, and if the plants are planted out on this they will make great progress through the summer and early autumn months. During the latter part of the autumn they may be planted in their flowering positions, and if the soil is well suited to them they will throw up a flower-spike reaching a height of 5 feet or even more, and bearing many flowers over an interval of several weeks. It sometimes happens that plants wait till the third season before blooming; but these are generally the weaker ones. In any case after flowering they die. The colour of the flowers varies in different plants, some having pure white ones, whilst others are tinged with pink and some are of the palest lavender hue. It lasts well in a cut state, and as the flowers are borne on long branches they can be used for and blend admirably into bold and striking floral arrangements. C. M.



Chrysanthemums for a hall table, or sideboard decoration

The first prize sideboard decoration at the National Chrysanthemum Society's Show by Mr. G. Richardson (gardener, Mr. J. Vanstone), Holly Mead, Tulse Hill. This vase contained large blooms in bronze, white, and golden-yellow, with Berberis foliage and Asparagus Sprengeri. It was awarded the special prize offered by Sir Jeremiah Colman, Bart., President of the National Chrysanthemum Society.

Winter flowering Begonias

These beautiful plants well repay for a little extra attention bestowed on them at the present time. Tying should be done as the shoots advance. A steady temperature of about 60 degs. should be maintained. Water should be freely given in a tepid state to plants that have filled their pots with roots. Encourage them by applying weak liquid-manure, soot-water, and Clay's Fertilizer alternately each week.

REMINDERS FOR THE WEEK

Southern and Midland

Spinach

In some gardens it is essential that a continuous supply of Spinach is kept up all the year round, and during the next two months is the most difficult of the year. There are two ways of growing Spinach for winter use, and those who sowed seeds of the Perpetual variety as advised have now a good supply of succulent leaves. These should be cut down regularly before they become tough. The second way is by sowing during August or September, as advised in a previous calendar, seeds of the Prickly variety. These plants should be thinned out and used until the remainder stands 6 inches asunder. Keep the soil stirred and free from weeds.

Rhubarb

It is none too soon to place a few roots that have been lifted and exposed to the weather for a few weeks into the shed or cellar in which they are to be forced. The crowns, when set, should stand just above the surface of the soil, and should be given a watering with a rosed can. It is a mistake to subject Rhubarb at any time to strong heat, such as close to hot-water pipes, as much better sticks are obtained when grown under cool conditions.

Broad Beans and Peas

Now is a suitable time to sow a row of early Long Pod Bean and a round-seeded variety of Pea in gardens that are not too exposed and the soil in a light and friable condition. The Beans should be set in a well-manured trench 4 inches apart in a double row and 3 inches deep. The Peas also require a well-prepared trench, and the seed should be sown more thickly than recommended for general crops. Slugs are usually troublesome to these crops, and should be guarded against by keeping the ground strewn with old soot or sharp fine ashes around the plants.

Sweet Peas

The seeds sown during the early days of October have germinated well and are now growing freely in cold frames. Ample ventilation must be given on favourable occasions, and on fine days the lights may be drawn off. One chief item is not to over-water the plants, as many of them will rot off if the soil becomes waterlogged during frosty weather. Slugs must also be guarded against at all times, and when the plants are 3 inches high do not hesitate to pinch out the tip of each plant.

Cuttings in Frames

Pentstemons, Antirrhinums, Violas, Nepeta, and other plants rooted during autumn and that require shelter during winter must not be coddled by keeping the frames closed during the day. All they require is protection from severe frost, snow, and heavy rain. The boxes should rest either on a bed of ashes or on boards. Water only when the soil shows signs of dryness.

Forcing Bulbs

Where the Roman Hyacinth, Polyanthus, Narcissus, early Tulips, and others were potted and plunged in ashes during the first or second week in September they should be examined, and if growth is advancing and the pots well filled with roots they should be removed to a cold frame, and if the sun shines it is wise to shade the frames for the first few days. See that the roots do not become dry.

Chrysanthemums

It is surprising how quickly these plants throw up their flower-buds when placed in the greenhouse. Allow ample space between each plant, and if the plants are growing in a lean-to house they should be turned occasionally.

Fruit trees

Where new plantations are to be formed now is the best time to get the trees and bushes in their stations that have been previously prepared by double digging. Unless the soil is very poor it is not advisable to add any manure into which the roots will come in direct contact. A mulch of manure should be given when planting is over. Attend to staking and do not prune the shoots until the buds are swelling in spring.

Pruning

Standard fruit trees, when once established, do not require, as a rule, a great deal of pruning if the main branches were properly regulated when the trees were young. Where any of this work is to be done, the sooner it is completed after the leaves have fallen the better. The first step is to remove any dead or diseased wood. Thin out the branches if they are unduly overcrowded, removing all those that cross one another first. It is a sound method to paint over all wounds with tar or some other substance as the work proceeds.

Strawberries

November is a good time to lightly fork over the Strawberry beds, removing any runners or weeds that may have been left. Basic slag forked in at the rate of 4 ozs. to the square yard I find excellent, afterwards top-dressing the bed with several inches of partly-decayed manure. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Climbing plants

Climbing plants, admittedly, may be bought cheaply from the nursery, but there are, in most establishments, plants which have a sentimental value. Among these are Ivies and some forms of the Honeysuckle. This is the time at which these may be propagated from cuttings. Choose wood which is well ripened, and lay the cuttings in at the foot of a wall if possible, although they will, of course, do quite well if put out in the open. Roots will soon be emitted, and the young plants may be transferred to their permanent quarters early in March.

Bedding and planting

Except in unforeseen circumstances the spring bedding ought now to be completed. Wallflowers, Cheiranthus, Polyanthi, Daisies, Daffodils, Sweet Williams, and so forth should be watered, if necessary, until they are established. Beds of Tulips and of Hyacinths may be screened by spriggy pieces of Laurels or of Aucubas, which shelter the bulbs. Small, bushy plants of Retinisporas make useful foils to dwarf plants when the former are planted in beds of some size.

Late Grapes

Assuming that such Grapes as Mrs. Pince, Lady Downe's, Alicante, and Gros Colman are now ripe, it is a matter of individual opinion whether the bunches be left on the rods or cut and bottled. Personally, I incline to the former procedure if properly managed, and if the houses be not required for other purposes. Mrs. Pince and Lady Downe's will hang until March. Of c it is necessary to look over the bunch intervals in order to remove berries may go wrong, but if the atmosphere be buoyant there will be but little dange bottling be decided upon, and unless th a properly-fitted Grape-room, darkne essential, and the temperature ought n fall below 55 degs.

Plants for forcing

All shrubs and herbaceous plants whic intended for forcing should now be in pits or frames. The lights, at present, s be kept off, for the longer the period o and the cooler the conditions under whic plants are kept the better will be the re Rhododendrons and Azaleas which plenty of buds and which are not of a wieldy size may be lifted, potted up, and pared for early flowering in a cool h Among Rhododendrons, Pink Pearl is useful for this purpose; so, too, is Cunninghami. The latter forces very e and if it be planted out after flowering p of strong buds is, as a rule, formed fo following season's work, although it i advisable to force any given piece in successive years.

Plant houses

Primula obconica is very useful at time, especially some of the newer col If the blooms be removed as soon as cease to be effective the plants will mai their display for a long period. Water t and, indeed, all Primulas sparingly. withered leaves of Chrysanthemums oug be picked off at least twice per week. I brilliantly-coloured Salvias show symp of damping, the fire ought to be kindle night. In the stove there will now be p of colour, and a brisk heat is desirable. Crotons and Dracænas the best positio regards light, in the house. Reduce climbing plants—Allamandas, Passifl what not—with a free hand. If ther mealy bug in the house utilise wet day combatting this loathsome pest. Less w will now be needed in the fernery. earlier forms of the Davallia, now goin rest, should have their supplies of moi reduced for a time. Young pieces of al all Ferns can be moved on practically at season if there is a regular and sufficient l

Kitchen garden

Potatoes and, indeed, all root c with the exception of Parsnips and Jerusalem Artichoke, ought now to b store. Globe Artichokes should be prote by a mulch from possible damage by f and offsets of these can be lifted, potted and placed in cold frames for the forma of new beds or for increasing the st Lettuce and Cauliflower plants in frames must have free ventilation. I found it good practice to run wire net over the frames at this time instead of put on the sashes. If green Mint and Tarra be required early in the year the neces number of roots should be lifted at o boxed, and put in a cold frame until the of the year, when they respond very qui to a brisk heat. Full-grown Endives Lettuces in the open must be protected f frosts. Nothing appears to be more suit than freshly-gathered and perfectly Beech leaves. Let the burning of gar rubbish, the wheeling of manure, and digging and trenching be hurried on in able weather, and see that winter vegeta are safe in the event of severe frost.

W. MCGUFFO

Mabie Gardens, Kirkcudbrightshire.

The Uses of Lime

a reply to a correspondent on page 662 our issue for October 30th, we have d to point out that there are various of lime, and that each has some special the garden. In response to many in- s we now try to set out the actual ns for the application of lime to the soil. ower of the soil to produce good crops ds to a large extent upon three factors, nditions, namely, the chemical, the al, and the biological factors. Lime is linked with all these factors, and if to be kept in a high state of fertility it ential that some form of lime be from to time applied. The part lime plays in factor is set out below.

CHEMICAL FACTOR.—Lime is an essen- em of plant food, inasmuch as it sup- the element calcium to the plant. ent crops vary greatly as to the amount lcium required. Turnips, Peas, and are examples of crops which take up m in large quantities. Potatoes take ry little. In both cases calcium is re- d from the soil, and, when the crop is a certain quantity of calcium is lost to il. Another item on the chemical side e fact that lime acts upon various in- le plant foods in the soil and renders foods soluble, so that plant roots can b them. A good example of this is the of lime upon insoluble organic material ining nitrogen. Another example is potash is present in all clay soils, and e application of a potash salt often gives ncreased crop. Lime will often give as good a result on certain clay soils, o the fact that when lime is applied le potash is released. The above ex- es will serve to show that lime plays an tant part in the chemical factor of soil ty.

E PHYSICAL FACTOR.—One of the greatest of lime on soil fertility is due to its effect the texture and general physical soil tions. This effect is very marked in which are on the clay or heavy side. It d be noted that clay particles are capable isting in two states. In one state the les remain as individuals, sticky and d very tightly together. In this state can only move very slowly in the soil, he drainage of a soil in this condition is s bad. It is also impossible to obtain h on a heavy soil when the clay particles n this condition. The second condition ay particles is that, where, instead of ining as individuals numbers of them ggregated together into tiny crumbs. e so aggregated the crumbs of clay act ough mere particles of that size. Water percolate much more freely, and the age is therefore much improved. In a late spring it is often possible to prepare d-bed on limed land when unlimed land too wet a condition to allow of its being ed. This effect is also well marked on soils during a dry spell in summer. Un- l land cracks very badly, limed land does

E BIOLOGICAL FACTOR.—The effect of lime his factor is not quite so easy to demon- e, but an example or two will serve to what we mean. Soils which are short ne are said to be acid. This condition is d on both clay and sandy types of soil. gradual decay of organic matter in the depends upon the action of certain ria in the soil. The bacteria responsi- or this decay cannot flourish and work r acid conditions, therefore we find that field the soil of which is in an acid condi- gradually accumulate a "mat" of un- ed vegetable material on the surface of the land. Under garden conditions organic manures do not decay, and are therefore useless as plant food. Another example is the effect of lime upon club-root of Turnips and Cabbages. This disease, in contrast to the bacteria we have been writing about above, flourish only under acid conditions. In soils containing plenty of lime the fungus club-root never makes any headway, the opposite happening in unlimed land. This effect of lime was dealt with in more detail in a reply to a query published on page 618 of GARDENING ILLUSTRATED for October 9th.

The above will serve to show the importance of lime in connection with soil fertility. We hope soon to deal with the question of The best time to apply Lime, and also The Mode of Application.

Storing Lettuces and Endive

Hard weather now having set in, the lifting and storing of Lettuces and Endive to prolong the supply of salad well into the winter should be no longer delayed. Cold frames and pits are the most serviceable and suitable places for storing them in, as they can then be kept cool, and at the same time protected from frost. Failing these structures, roughly-constructed frames of boards, or skeleton pits, with the walls formed of turves, will answer very well, provided there are old lights or shutters to cover them with during wet and frosty weather. To form the frames, pieces of 4-inch by 3-inch quartering should be driven in at the corners and at intervals along the back and front, to hold the turves in place. If the stakes for the back are 3 feet in length, and those for the front 6 inches less, the pit will be 2 feet deep at the back and 18 inches at the front if the stakes are driven in to the depth of 1 foot. When the turf walls are built up to the height of the stakes, put boards on the top, 9 inches wide and 2 inches thick, and nail them down to the heads of the stakes. The turves should be placed one on the other as regularly and tightly as possible, and, when completed, cut down the face, both on the inside and outside, with a turf knife to render the surface even. These temporary structures are useful for various purposes, and if the precaution is taken to bank fine cinder-ashes against the outside of the walls, frost can be effectually excluded. This latter is a good method, too, of dealing with ordinary cold frames, and if ashes are not available, long, dry stable litter, placed round them, forms a good substitute. Mats, Bracken, or long litter are necessary to afford additional protection in frosty weather, as it is equally as important to render the top portions of the frames or pits frost-proof as the sides. Any kind of light soil answers for placing in the frames, etc., and for working in and around the roots, or, rather, the balls of soil, for it is essential that each plant be lifted with a good quantity of soil attached to its roots. If this is in a medium condition as regards moisture, there is then no need to water the plants in.

The front portions of Peach-cases and orchard-houses, too, are sometimes utilised for storing Lettuces and Endive, the plants being placed on the floor, and the "balls" surrounded with any kind of suitable soil there may be at hand. Endive and Cabbage Lettuces may also, at a push, be planted on a sharp, sloping bank of garden soil or ashes, formed at the base of a wall facing south or west. The bank may be 18 inches in width at the base, and from 2 feet to 3 feet in height, and, if the aspect is right, any blank wall will answer the purpose. If old lights or shutters are not available to protect them with, hurdles trussed with straw or Bracken will, when leant against the wall, ward off a good deal of frost. The plants should be set fairly closely together, and commence planting at the bottom of the bank, making the soil quite firm round the plants, and proceed in this way row by row till the apex is reached. It is not to be expected that the plants will keep so well in this way as they do in pits, etc., but it is preferable to leaving them to take their chance in the open garden.

Value of wood-ashes

Are wood-ashes a good thing to use in planting perennials on a stiff clay or heavy loam? Is it possible to overdo the dose, and would the ashes act as a manure or merely help to lighten the soil? ROCKERY.

[The value of wood-ashes in gardens, both for fruit and vegetable growing, cannot be over-estimated. They not only act as a fertiliser, but also as valuable agents in raising the temperature of cold soils, besides operating in a beneficial manner in keeping them open, and so rendering them more easily worked. On light soils, wood-ashes are also serviceable, the lighter the character of the staple the less need there is for application generally, the exceptions being in cases where wireworm and maggot are troublesome, and where the soil has become nothing but a mass of humus from repeated and heavy dressings of manure. This latter is often found to be the case where the soil is anything but light, and although the presence of so much humus is not then quite so detrimental, both in this and the former instance the soil would be greatly benefited by the application of a good dressing of wood-ashes for a season or two in lieu of manure. These wood-ashes, containing a considerable amount of carbonate of potash—the quantity varying according to the materials used at the time of burning—sweeten humus-laden soils, so to speak, and counteract the evils arising from a too free use of organic manures. Again, the more charcoal the ashes contain, the more is their value enhanced, as this takes up and retains moisture, which is thus stored ready, as it were, for absorption by the roots of both plants and trees, as the case may be, when they come into contact with it. On wireworm and maggot-infested soils wood-ashes are of special value, as they greatly assist in getting rid of these troublesome pests if their application is steadily persisted in. They should then be applied as a surface-dressing at the time the seeds are sown, in addition to giving the plot a good dressing when digging, taking care to incorporate them well with the staple. For sowing in Potato drills after the planting is finished, and before closing in the drills, they are of the utmost service, and act as a first-rate fertiliser. For getting rid of fly on all the Brassica tribe nothing can equal wood-ashes, only they must be applied in a dry state, while they can also be used on Turnips with similar results.

The use of wood-ashes in connection with fruit-growing is also well known. Here they are valuable in many ways, but principally for incorporating with other constituents when forming new fruit tree borders. They are also used for mixing with new compost in the transplanting of fruit trees when it is necessary to place some new soil over and round about the roots. As a surface dressing for fruit tree borders, wood-ashes play an important part, as, in addition to their rendering valuable manurial aid, they also heighten the colour of the fruit. Again, they may be used with excellent effect in the pot culture of orchard-house trees when mixed with other ingredients, also for Pines and Tomatoes. Wood-ashes are also useful in the eradication of Moss on lawns.]

TREES AND SHRUBS

Prickly Heath (Pernettya mucronata)

I READ in a garden journal of recent date (not GARDENING ILLUSTRATED) that these ornamental shrubs require a well-drained bed of light, peaty soil. This, however, is not my experience, for, whereas such shrubs make plenty of growth in light, sandy, and peaty soils, the berries, which comprise their greatest charm, are scarce, and, more often than not, non-existent. This is due to various causes, the chief of which is, in my opinion, dryness of such soils during the critical flowering and setting periods, and if anyone who has tried them in peaty soils and dry positions, with disappointment in the matter of berries, will transfer a portion of his plants to low, moist, heavy soil he will be greatly surprised with the results in due course. These South American shrubs revel with me in heavy soil near a stream, where they grow in the grass without any other care than the cutting away of the latter twice during the summer. It is nothing unusual to find them a mass of bloom before the previous year's crop of fruit has left the bushes. They never fail to mature a bountiful crop of their beautiful large berries, which are decidedly attractive from September to March, their heavily-laden branches being much sought for for indoor decoration.

Growing on the north-west side of an old cottage, as I write, is a long line of these most beautiful shrubs absolutely laden with handsome fruits, many of which are the size of Cherries and of various shades of colour, including white, pink, lilac, crimson, and some almost purple, produced with such abundance as to almost obscure the little fresh green prickly leaves. Under these conditions and with this minimum of care the plants sucker freely and increase in size year by year, so that one is at a loss to understand why such plants are so rarely seen. Other groups of these shrubs growing on high, dry, and rather poor soil in this same garden, although making plenty of growth, provide us with a mere sprinkling of berries, almost unnoticeable. The average height of these plants is about 3 feet, with a similar or even larger spread of branches. They are evergreen in character and very pretty when in bloom.

Another point in favour of these shrubs is that during average winters their ornamental fruits are not taken by birds like those of the Holly and other showy fruit, but pheasants and poultry are very fond of them, and will soon clear the bushes if allowed to do so. These shrubs may be raised from seeds or increased by means of cuttings or division of the roots. The suckers which spring up about their base form excellent material for this purpose and make nice plants in three years. Here in Sussex I have never known the plants to be damaged by frost. E. MARKHAM.

[We have distinct recollections of the late Mr. Kingsmill bringing from his garden at Harrow many years ago branches in the many shades of colour now to be had laden with fruit. We have never seen the Pernettya fruiting so freely. The soil in which these were grown was a heavy clay and showed clearly that a heavy soil is all-important in the cultivation of this shrub.—ED.]

The White Spanish Broom (Cytisus albus)

Too rarely seen is this pretty spring-flowering shrub which, during April and May, produces a distinct and very pleasing effect, quite unlike the majority of this numerous family. The graceful bushes reach a height of 5 feet to 6 feet in three or four years, and will even attain a height of 15 feet with age. When laden with its white flowers, borne in long racemes, there are few more attractive flowering shrubs, and if massing is resorted to the result is very picturesque, the growth so slender and graceful, yet dev floppiness so objectionable in some o other varieties and hybrids. The grey- of the shoots during the winter is not wi charm when tossed to and fro by storm may be easily raised from seeds, and lo warm, sunny position. M. G.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plan be named should send fair examples of each stem, leaf, flower, or fruit. (Snippets of b and points of shoots are useless.) Not more four plants should be sent in any one week b same correspondent. Where more than one is sent they should be numbered. Of conifer cones should always be sent.*

Naming fruit—*Several specimens in diffe stages of colour and size of the same kind gr assist in its determination. We have rece from several correspondents single specimen fruits for naming, these in many cases being ripe and otherwise poor. We undertake to n not more than four varieties at a time.*

FRUIT

Diseased Blenheim Orange Apple

I enclose a piece of a Blenheim Orange Apple tree, and shall be obliged if you can tell me what is the cause of the swellings on it? The tree is a cordon and bears well, but is mostly covered with these tumours; can they be cured? CHIRCOMBE.

[Your trees are attacked by the American blight—a wretched pest and difficult to eradicate. The following will effect a cure if well done: Procure 1 pint of soluble petroleum, 1 lb. of soft-soap, and mix with clay to the consistency of paint, and thoroughly paint all parts of the trees at this season. We would also add that ordinary petroleum is readily made soluble by incorporating thoroughly with soft-soap—say double the quantity of soap to the petroleum.]

Unhealthy young Apple tree

(J. Ashworth).—Your Apple leaves show that two causes are operating to cause the unhealthy condition of your tree. (1) Some of the leaves are attacked by the fungus, Apple scab. This disease attacks the wood, leaves, and fruit of most varieties of Apples. Cox's Orange Pippin is very prone to the disease, and we are doubtful if the variety is likely to flourish under the soil condition mentioned in your letter. The appearance of this disease on so young a tree is not a good omen for its future. If you examine your foliage you will find dark olive green sooty patches present. Your best plan will be to collect and burn all the diseased foliage, and in the spring prune hard all the growths that have grown this season. The prunings should also be burned. If the disease reappears, the tree should be sprayed with soluble lime sulphur at summer strength. Are there any other Apple trees growing near? If so they are probably affected with Apple scab and should receive attention. (2) The foliage also shows signs of a bad attack of Apple leaf scorch. This trouble is one about which little is known. It often appears on certain types of soil, but is usually worse on light soils. You should try the effect of applying an annual dressing of sulphate of potash at the rate of 1 oz. per square yard. A dressing of potash has in many cases given a good measure of control with leaf scorch.

Gathering Apples and Pears

(Jas. North).—We should not think your Apples and Pears have sustained any injury from recent frosts. By the time these lines appear in print, however, we advise you to gather and store the Apples and Pear question; although as the fruits ma they will naturally take on a yellowish ti varying in intensity according to the var but they will not turn red or crimson if t is no sign of such colouring on the sur of the fruit at the present time or w gathered.

Cross pollination

(Jas. North).—For cross-pollination ei Marie Louise d'Uccle, Pitmaston Duch Clapp's Favourite, or Beurre Super which flower about the same time Doyenné du Comice, should answer.

Bottling of Grapes

(F. D.).—The bunches of Grapes are with enough of the wood on which they h grown to reach down the bottle for the Gra to hang clear. It makes little differe which end of the shoot is thrust into water, as water will be imbibed from ei end. Any room may be fitted up with she or racks for placing the bottles on in a sl ing position. All that is required is equable temperature of from 45 degs. to degs. Well-ripened Grapes, under such c ditions, will generally keep longer than if on the Vines.

Unsatisfactory Vines

(X. Y. Z.).—Your Vines are suffering fr loss of roots, hence the shanking. It is so much the want of manure as new roo Your dressing of cow manure is not the b If you get down to roots you will find a ficiency of surface fibres, and no matter w manures you use only aggravates the d when there are too few roots to absorb e food given. Doubtless at some period y have overcropped your Vines. This is oft done; or they may be too crowded. Whats needed is new root action, but to get this y must secure new top-growth. The best pl doubtless, would be to lift the Vine, but p bably you cannot lose a crop for a season two. Our advice is this: At this season ca fully remove surface-soil till you come roots; you will probably find these none t plentiful and destitute of fibrous growt Cut away any decayed ones, and give fre surface-soil, not in great quantities, such good loam, bone-meal, and mortar-rubble, wood-ashes, and you may remove a porti of border further from roots. Give new s or drainage as necessary. Take up son new shoots this year from the base, one to Vine, and only crop very lightly, not for hard, and remove any weak growth.

ormed Pear

ır).—The tree roots have evidently down into a cold clay soil and fail to oper food. To remedy this you ought the tree—if not too large—and clear the sour and inert soil, replacing it with good loam to which have been added bone-meal and lime-rubbish. If there p root this should be removed. Another of the trouble may be non-fertilisation flowers.

ering Apples

.—The dessert Apples you have—Scarlet .reil, Sturmer Pippin, and Cobham or Pippin—are all late kinds, and should on the trees so long as may be safe. November 10th is late for such gather- t least, it is in the south, but it may so far up in the midlands as you are. ree parting from the tree is a very good ripeness is true, but the condition of ps when a fruit is cut open, showing eds to be brown or well coloured, is ed as the best test of ripeness. The for Cobham is from November till ıry, Scarlet Nonpareil till March, and r Pippin from December till May. ıly, with you all the varieties may onger. Much depends on the length fruits hang on the trees to thoroughly , care taken in gathering and storing, so in keeping them fairly cool and in ıosphere that is not too dry.

TREES AND SHRUBS

s of ornamental shrubs

ve bought a piece of land 70 feet wide out 260 feet in depth, and I want to ır advice about planting an original tractive screen the length of the two Ordinary wooden fencing is extremely ive, and, though it may be useful, it is Also it would be a costly business to the inner sides of two long 6-foot with cordon or wall fruit trees, climb- ses, and so on. My rather vague pro- s to plant Beech for the entire length two sides and spaced at irregular ls the following ornamental shrubs:— Cotinus atropurpureus, Berberis steno- Choisya ternata, and also to break by planting in the hedge, say, Pyrus , Pyrus Eleyi, Prunus Pissardi, ntha, Cratægus coccinea plena, and in variety. I hoped in this way to dense growth of evergreen (or brown ıe Beech), and to break the monotony ıe shrubs and trees of varying heights. I include Briar Roses, Rosa Moyesii, nicera nitida in such a hedge, and per- few Larches? Or is my hedge going like a patchwork quilt? The soil is y with a moderate admixture of loam. edges will run, roughly, north and and at the northern boundary there ılready a thick spinney of Oak, Alder, illow. I have a quotation in a cata- rom Scotland of transplanted Common 20 inches to 30 inches, at 100s. 00. This seems very cheap. Would reliable at the price, do you think? rserymen are unknown to me.

W. L. I.

s quite a good plan to plant hedges of ntal shrubs with a stiffening of Beech. am would be a good alternative to though they both have much the same er of close, twiggy growth when trimmed. Of the shrubs you name it be well to omit Larch. Rhus Cotinus be scarcely tall enough. Guelder nd Ribes are both excellent in a shrub also the fruiting Barberry and any of rus, Prunus, and Cratægus that you Lonicera nitida would be rather lost in such a hedge, though it is perfect as small dividing green walls in formal gardening. Here and there one of the wilder-looking Rambling Roses, such as Evangeline, would be very desirable; if led up into a Prunus Pissardi the effect would be excellent. It would be best not to "spot" the flowering or berrying bushes, but to have, say, three or four Beeches or Hornbeam and then a few yards of selected Pyrus and Cratægus; then, again, Beech, followed by Guelder Rose and Ribes, then, perhaps, three or four green Hollies with Forsythia suspensa led through them, and then another quiet stretch of Beech. In some such way there would be no patchwork effect, but a series of interesting incidents more or less separate from each other. The bulk of the hedge could be trimmed to a nearly straight line, but the front should be allowed some play, the better to show off the special ways of each group. It would be tempting to allow the shrub hedge a good width, such as 6 feet at least, and to have at its foot a 6-foot to 9-foot verge of grass and then the path. The quotation from the Scotch firm appears low, but we cannot give an opinion on the Scotch plants, not having seen them. We advise you to deal with a firm of repute.]

Romneya Coulteri

(J. B.).—This does best on warm, loamy soils, and we see no reason whatever why you should not try it in your district (Galloway) against a wall with a south aspect. In the winter mulch over the roots with some light, porous material, such as Pine needles or rough Cocoa-fibre. You can place over the branches during very severe weather a mat or such-like, but it should be removed directly the weather breaks. A great point in the culture of this is to get healthy plants in pots, such as yours are, planting in April, and disturbing the roots as little as possible. Prepare a station for it as follows:—Take out a hole 2 feet deep and wide and fill in with loam, leaf-soil, the latter half-decayed, in equal parts. Plenty of sharp sand, a little old mortar-rubbish, and some old manure may also be added and mixed together. See to it also that the drainage is good.

ROSES

Pot Roses in cold house

I shall be glad of some advice as to the management of Roses (Tea and Hybrid Tea) in pots in my locality (London). Hitherto they have done very well. I have a greenhouse (unheated) where the Roses are housed during the winter (November to April). They were then put outside to flower (some plunged). This year, for the first time, they have been a failure. Out of some three dozen I have lost about one-third. Six trees look unhealthy, with few blooms and generally scant foliage. I repot about once a year. Should I use manure, pot oftener, and when? The Japanese Rose (rugosa) and its varieties, single and double, do splendidly with me in the open border. They are the only Roses for London.

H. E. W.

[We think you do wrong in turning the plants outdoors in April, seeing that you have kept them under glass for five months. If it is necessary for you to remove the plants from the cold house, could you not make a shelter for them where they could be protected from cold winds and the night air? If possible, keep the plants in the future in your cold house until after flowering at least—in fact, we should say do not turn them outdoors until June. Once a year is quite often enough to repot. The best time to repot is after they have rested two or three weeks following their first blossoming, then keep them in the cold house until the plants have made another growth. Only top air should be given, and that very sparingly when winds are keen, or days are dull. Water when required, and syringe freely between six and seven on the mornings of fine days, and again in the afternoon about five o'clock. Gradually harden off the second growth and then plunge the plants outdoors in August until the following November. When repotting use a compost of two parts loam, one part well-rotted manure, with a 5-inch potful of bone-dust to each barrowful of soil. Pot very firmly into clean pots, but do not over-pot—that is to say, do not give a weakly plant an extra large shift. If a weak plant is worth keeping at all (which we much doubt) it is best not to repot until it has gained strength. When the plants are showing buds no larger than Peas they can take liquid-manure, increasing this in quantity and strength as the buds swell. We advise you to procure some new plants at once to replace those of your stock that are weak. See also leading article, page 681.]

GREENHOUSE

Plants for cool-house

(H. W.).—Your choice of climbers is not very extensive, though the blue (cœrulea) and white (Constance Elliot) Passion-flowers should suit your purpose. For the early months of the year you must depend for flowers upon hardy subjects, which under glass will naturally bloom a little earlier than they will out-of-doors. Such things as Tulips, Hyacinths, Narcissi, Lily of the Valley, and Spiræas, with a few shrubs, such as Lilacs, hardy Azaleas, double-flowered Plum, and Spiræa confusa, will help to form an attractive feature, while in the summer you can principally rely upon Fuchsias, Pelargoniums, Begonias, and the many plants advertised for the purpose in the pages of this paper. In the autumn Chrysanthemums will yield a display for a time, but the absence of fire-heat will cause many of the blooms to damp.

Solanum capsicastrum

(A. C.).—You ought to have cut the plants back to about half their length as soon as the berries began to decay, and placed them in the greenhouse, then when the young shoots commenced to grow repotted in a compost of two-thirds loam, one-third leaf-mould, and a little silver-sand. The plants should have been kept in the greenhouse till May, when they should have been given a sunny spot outdoors to induce them to flower and fruit. When frost threatens in the autumn they should be removed into the greenhouse again.

Drying off Fuchsias

(Fuchsia).—I consider the plan of laying Fuchsias on their sides and keeping them quite dry all winter a very bad one. Under these conditions the shoots often shrivel, especially if the plants are in very small pots, the roots also being injured beyond recovery. I am aware that Fuchsias, when bare of foliage, have a somewhat rough, untidy appearance, and this, probably, is the reason why they are stowed away out of sight in winter. The welfare of the plants, however, should be considered, and natural treatment given while they are resting. They should be stood on a stage or shelf in a cool, airy house or pit, and the roots slightly moistened, say, once a month. This, while not inducing them to start growing, will preserve the wood in a plump condition, and the plants, when pruned and potted in spring, will make rapid and satisfactory growth.

Unsatisfactory India-rubber Plant

(G. H.).—We think that most probably your India-rubber plant has become so root-

bound that it can make no progress. This can be ascertained by turning the plant out of the pot and examining the condition of the roots. If found to be in a perfectly hard mass, loosen them as far as possible and repot into a larger pot, using fresh turfy loam, with which are mixed a little well-decayed manure and some sharp white sand.

Ferns on old walls

(F.).—If small plants are obtained in spring and planted between the stones or bricks with a little soil they would soon become established, and speedily form a perfect wall fernery; or spores might be sown with every prospect of success. Walls shaded from the hot sun of summer are best suited to this purpose, and at the foot of such a wall a rock garden might be made, which could also be planted with Ferns and alpine plants.

Maidenhair Ferns

(G.).—Ferns or other plants continually kept in rooms do not require water every day. Sometimes once a week is often enough. Feel the soil in the pot, or rap the outside of the pot with the knuckles; if it sounds hollow give enough water to wet the soil thoroughly; if the soil feels dry, water in a similar way. An occasional wetting of the fronds is beneficial in keeping them free from dust, but daily sprinklings are injurious. Plants far away from light in a room do not succeed so well as those that get more light, through the window even. Move your Ferns to the window at times, securing them from direct and powerful sunlight and draughts, and attend carefully to watering them.

VEGETABLES

Growing Seakale

Please give a few hints on growing Seakale. When should new plants be put in, and how treated? S.

[Your first aim must be to have the ground manured and deeply dug in the autumn. If you want profitable Seakale you should dress heavily with half-decayed manure. Then in the spring—say, early in April—purchase Seakale-seed, of which you want at the rate of 1 lb. weight to a rod of ground, or thereabouts. The drills should be drawn as for Peas, and 20 inches apart, so that in a rod of ground, 16½ feet by 16½ feet, you would have about nine drills, each 16½ feet long, or a total length of 148 feet of drill for a pound of seed to sow, although even then thinly. The sowing should be done about the middle of April, and the seed at once covered up. Growth takes place in about three weeks. When the plants are well up they should be thinned out to about 10 inches apart. From that time forward all that can be done is to keep the hoe moved freely between the rows until the leaves cover the ground, also giving the plants in the summer two very light sprinklings of coarse salt or nitrate of soda. If the ground be at all good, growth should be strong, and in the late autumn, when the leaves have died off, you should have a fine lot of roots and crowns. The proper course then is to open a small trench at one end of every other row of roots, and to fork them out, taking care not to break the roots. The other rows can be left to have their crown growths in the spring blanched by covering the crowns with a ridge of loose soil 8 inches to 9 inches deep. The plants lifted should be hard trimmed of all side roots, each piece of which should be laid all the same way as cut off, the main roots, with crowns attached, being left some 7 inches each in length. All these should be laid in quite thickly into any spare soil temporarily, being just covered, the crowns being kept upwards. During the winter a few scores each week, or less often, can be put into soil in any dark, warm place in a cellar or other store, and, being watered and closely covered up to exclude light and air, growth soon follows, and the crown growths, when 7 inches in height, can be cut and used for cooking. If the outdoor rows be covered up with soil in March, crowns for cutting can be had in that way so soon as the lifted stock of roots is exhausted. Those can be left for similar treatment the following year, the intervening ground being well manured and dug over. The side roots from the lifted crowns mentioned above should be cut to straight lengths of 4½ inches to 5 inches each, and all carefully laid one way, then laid in thickly in some temporary position till April, when they can be planted with a dibber in rows as for seedlings, the tops of the root-pieces being just covered. In that way an unlimited stock of Seakale-roots may soon be obtained each year.]

NAMES OF FRUITS

Skisdon.—The Pear was too decayed when received for naming. The names of the Apples we give are conjectural only, as the specimens in each case are not good enough to admit of a definite opinion being given. 1, Litchampton Russet; 2, Squire's Pippin; 3, Gooseberry Apple.

Pear.—Pear Baronne de Mello.

CATALOGUES RECEIVED

J. Cheal and Sons, Crawley, Sussex.—List of Roses; list of trees and shrubs; hardy flowers.

Keith Luxford and Co., Sawbridgeworth, Herts.—Chrysanthemums and Perpetual-flowering Carnations.

The Burbage Nurseries, Ltd., near Hinckley, Leicestershire.—Burbage Roses and fruit trees.

Formation of a Gardening Society within the Civil Service at Acton

A well-attended and particularly successful meeting was held at Bromyard Avenue, Acton, W. 3, on Monday evening, November 1st, 1926, at which it was proposed to form a Horticultural Society. It was unanimously decided that the title should be the Civil Service (Acton) Horticultural Society, to embrace the whole of the staffs of the Ministry of Pensions and the Ministry of Health housed at Acton.

Mr. H. H. Rix, of the Awards Branch, Ministry of Pensions, who is keenly interested, was voted to the chair, and after opening the proceedings called upon that well-known horticulturist, Mr. William Biggs, of the Ministry of Pensions, to introduce the subject for which the meeting had been called.

Mr. Biggs ably responded, making a very lucid speech embodying the object of the suggested new Society which, *inter alia*, included the exchange of plants, the purchase of seeds, plants, trees, and fertilizers at discount prices for the benefit of members, advice, periodical circulars, lectures, and shows, and concluded by mentioning that the subscription would be 1s. per annum.

The meeting was very enthusiastic, and it was decided to appoint a secretary, two assistant secretaries, joint treasurers, and a committee of seven to launch the new project with the least possible delay.

Over 600 members of all ranks and grades of the two Ministries have already signified their willingness to become members, and without doubt this number will be considerably augmented in the near future.

Mr. Biggs was unanimously elected chairman, and Mr. Louis Bird, of the Ministry of Health, Room 11, was elected secretary.

Fruit trees at Lowdham

It is no small thing to have a prestig history of nearly 150 years behind a bus and the old-established firm of J. R. P and Sons, which dates back to 1782, enviable record. We recently had the tunity of visiting their nursery at Low Notts., and a tour through the differe partments revealed a fine organisation. department—seeds, bulbs, fruit, and trees, and sundries is run on excellent which involve the minimum of time be the receiving and despatching of orders

The nursery occupies so many acres was impossible to cover the whole durin time at our disposal, but we were partic impressed with the fine stock of Apple including all the best varieties. The were making fine growth, and many c first-class crops. A tremendous numb shoots of this year's growth were a goo over 8 feet high, splendid growers whic of the skill and attention given to the door work of the staff. A medium q tree seemed to be unknown in these ac bushes, standards, fan-trained and co Pearson's have a reputation for qual keep up, and our visit showed us how that reputation is being maintained.

LATE NOTE

The Potato crop

Practically all the Potato crop has lifted in most districts, and the tubers been clamped in clean and dry condition the whole the Potatoes are small, and are light. Disease is reported in near districts, but especially so in the impo Potato areas in the east of the country the eastern counties the crop is estimat be nearly 2 tons per acre below the av of the past 10 years, and in the north-ea counties about 1¼ tons below average, the north and in the south-west of En and in Wales yields practically equal t average have been obtained. The yiel acre over the whole of England and Wa estimated at 5.4 tons or about ¾ ton b average. The estimated total producti 2,682,000 tons is 532,000 tons smaller last year's crop, and 476,000 tons belo average of the 10 years 1916-1925.

GARDENING APPOINTMEN

Mr. H. Deverell, formerly garden Lt.-Col. P. B. Cookson, Meldon Morpeth, as gardener to F. Straker, Angerton, Morpeth.

Mr. W. Effamy, formerly gardener to C. Bethell, Cheam Park, Sutton, Su as gardener to the Earl of Arran, T Priory, Brentwood, Essex.

Mr. J. C. Harper, formerly gardener to Bryant, Bryn Mair, Llandudno, Car gardener to A. Bradbury, Esq., Ly Lupus, Llandudno.

Mr. E. W. Norton, formerly garden Essendon Place, Hatfield, Herts, as dener to Miss Baird, Abbots Hill, K Langley, Herts.

Mr. E. J. Stenner, formerly garden Prince Victor Napoleon, Farnbor Hill, Farnborough, as gardener to W Cottingham, Esq., Woolley Hall, Ma head.

Mr. W. H. Symons, formerly gardener t Hon. Mrs. Smyth, Stockton House, ford, Wilts, as gardener to Sidney H Esq., Langford House, Bristol.

Mr. H. Winter, formerly gardener Frederick Straker, Esq., Angerton Morpeth, as gardener to W. A. Sil Esq., Aughton, Ormskirk.

Mr. Thomas Hunter, now gardener to J Gemmell, Esq., Harescombe, Northwo Middlesex.

GARDENING ILLUSTRATED

2489—Vol. XLVIII. NOVEMBER 20, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

yth Chrysan-m Society ... 708
xton's Superb 697
two good late 695
es, own root 706
us, green-mealy bug on 707
ia or Cornus ra 697
oths 706
ON CHRYS-EMUM SHOW 702
ula Telham 696
themum, in of the 703
Carnations, rust on 707
Clerodendron fœtidum 707
Clover, Bush (Lespedeza Sieboldii) ... 695
Dahlias, Collarette, some good 703
Dianthus deltoides Brilliant 708
Dianthus glacialis ... 696
Dogwoods and Willows 707
Fern, Hart's Tongue 707
Gardeners' Benevolent Institution, the ... 696
Grapes, diseased ... 706
Gunnera magellanica 696
HEDGE CLIPPING MACHINES 697
Hollies from seed, raising... 707
Hydrangeas, Blue ... 707
Hydrangeas, standard 707
Irises, Dutch 701
Jasminum nudiflorum, pruning ... 707
Laurustinus under glass, the 697
LAYING OUT A HILLSIDE GARDEN AT FOXHILL, NEAR FARNHAM 701
Lavender, pruning and the care of 707
Lilies lifting 708
Medlar, the 697
Michauxia campanuloides 696
Narcissus bulb danger 696
Nectarine Early Rivers in cold house 706
Pasture land, treatment of... 705
Peach, the double-flowered (Prunus persica var. flore roseo pleno) 696
Pears 700
Peas, dwarf culinary 708
Potatoes, seed, false description of 705
Potato trials at Wisley 705
Privet, variegated, standards of 707
Rhododendrons for forcing... 707
Rose, Gloire de Dijon, cutting-back a... ... 706
SHRUBS, HARDY, PRUNING 698
Strawberries, wintering pot 700
Streptosolen (Browallia) Jamesoni ... 696
Tomatoes: Preparing for spring 705
Tree planting, autumn 700
TREES AND SHRUBS WITH COLOURED BARK 695
Vallota purpurea ... 696
Veronica edinensis ... 695
Vine borders, covering down outside 700
VISIT TO VEITCH'S OF EXETER, A ... 699

Trees and Shrubs with Coloured Bark

: various trees and shrubs which have ght-coloured bark make an important ition to the winter attractions of the pe. Such plants thrive in ordinary soil and often succeed under condi- which are not considered ideal for inds of shrubs. The most conspicu- urs are red, yellow, brown, and silver , with now and then a plant having green stems.

s conspicuous in the Cornus family, ious forms of C. alba being very nt, whilst C. stolonifera and C. a are also very showy. The red- d Willow, a form of Salix alba which is sometimes called the l Willow, is also very attractive, another Willow with reddish bark, form of S. alba, is britzensis, virescens is another red-barked hilst Rosa alpina has also red bark. cratægifolius is another shrub with d stems. Amongst yellows, Salix llina is one of the most conspicuous. ith the other colour-stemmed Wil- ould be planted in the vicinity of here the colour will be reflected and litional inter- he colour of ark is always t when the s are cut down , the pruning ne in March. nd golden- l Willow is S. babylonica aureis, a tree weeping . There is, , some doubt is tree being named, some es placing it lba. Another with yellow s found in stolonifera iramea. are numerous with bright ark, one of effective be- adelphus Le- erectus, al- ll the Phila- s are showy. ndra flexu- S. Tanakæ spicuous in p, as are also many of the Spiræas, Rubus spectabilis, R. odoratus, R. nutkanus, the Neillias, Deutzias, Forsythia suspensa, and Ribes sanguineum. Arbutus Andrachne and A. Menziesii may also be referred to in this group, for the young bark is very conspicuous after the older bark has been shed. Silver and glaucous-coloured bark is found in several instances, particularly amongst the Rubi. The best known species is Rubus biflorus, often spoken of as the whitewashed stem Bramble. Then there is the Chinese variety, quinqueflorus, an even stronger plant, together with such kinds as R. lasiostylus, Geraldi, trianthus, reddish with glaucous bloom, thibetanus, and leucodermis. S. daphinoides is the handsomest of the glaucous-barked Willows, while of trees the most conspicuous with silver bark are the Birches. B. nigra, the red Birch of the United States, is conspicuous by reason of its rough, red-brown bark.

The Larches are, perhaps, the most conspicuous of deciduous coniferous trees, their bark being bright brown, but Taxodium distichum is also boldly outlined amongst other trees by reason of its brown bark. Bright greens are to be found in Leycesteria formosa, the various Brooms, Kerria japonica, and the Ephedras.

Whenever these subjects are planted for the sake of their winter effect it is always desirable that they should be placed in good-sized groups in commanding positions, where their presence may be noticed from a considerable distance.

Woodland and stream in Mr. Scrase-Dickins' beautiful garden at Coolhurst, Horsham, Sussex

NOTES OF THE WEEK

Two good late Apples

TWO of the very best late-keeping Apples for orchard planting are Alfriston and Norfolk Beaufin. The former is a large green fruit, tinged with red on the side next the sun, excellent for cooking, and in April and May, when it has parted with some of its acidity, it is not bad eating. The tree is a good grower, and worked on the Crab makes an excellent orchard-tree, and bears freely. The Norfolk Beaufin is a well-known kind, which seldom fails to bear well. I have a large old tree of it standing out in the grounds, sheltered by some old Elms, growing near it, and for the last 20 years, and probably much longer, it has never failed to produce annually good crops of handsome highly-coloured fruit. This Apple improves by keeping till after Christmas. I had it fresh and firm last June. E.

Veronica edinensis

This is a diminutive evergreen shrub seldom more than 8 inches high. When in good health the deep green branches grow so densely that they form compact spreading tufts. It is distinguished from other species by the dense full tufts which it forms when it is established and by the glaucous shiny hue of the foliage. The dense character of the plant and the heavy green of the leaves at a short distance remind

one of our native Box. When in good soil and fully exposed it forms neat tufts, and in spring is covered with a mass of tiny white flowers. Old plants will last for many years, although after some time, perhaps owing to the slow growth of the plant, it is liable to become straggly. It should then be replaced by young ones. When well grown this plant will prove a delightful ornament, especially when it is grown into masses with one side falling over a rock. It should be exposed to the full sun rather than shaded if the best results are to be obtained, and will thrive in any soil provided it is open and gravelly. Cuttings taken off in late summer and kept in a cold frame during winter make neat plants in two years.

H. STEVENS.

The Gardeners' Benevolent Institution

An appeal is being made on behalf of this time-honoured institution which grants permanent relief by way of annuities to aged and distressed gardeners and to necessitous widows. There are 250 persons, aged and infirm men and widows, now receiving annuities. The assured income of the fund is only £1,000, and there are 50 applicants on the waiting list. Contributions, large or small, should be sent to the Secretary, Mr. George J. Ingram, 92, Victoria Street, Westminster, S.W.

Narcissus bulb danger

Some interesting investigations into what is called "Lily rash" are recorded in a recent issue of "The Lancet," by Dr. Sibyl Overton, H.M. Medical Inspector of Factories (writes Our Medical Correspondent).

This skin disease has occurred from time to time amongst people who cut the stems of flowers—chiefly Narcissi—or handle the bulbs of Hyacinths, Daffodils, Narcissi, and Tulips. It has been believed, says Dr. Overton, that it is due to the acrid juice of the flower-stalks or to oxalate of lime in the bulbs.

Recently visiting two large firms which deal with bulbs on a large scale, Dr. Overton found that a few of the packers had a peculiar inflammation of the skin of their fingers. It extended under the nail and caused considerable pain.

Dr. Overton found that out of Tulip bulbs an acrid juice could be pressed which would rapidly produce inflammation under the nails.

Campanula Telham Beauty

This Campanula has done exceedingly well with me this season, its beautiful china-blue flowers lasting in perfection some time. From the garden standpoint I always value a Campanula from the length of stem occupied by the flowers or buds, and in this respect Telham Beauty is very good. The blooms expand widely, and if the spent flowers are removed directly they fade the flowering period is considerably prolonged. Offsets are produced in great abundance around the old stems, and instead of allowing them to become a close, dense mass I separate them into single strong crowns, securing thus much finer results. It must have good rich soil and plenty of water in dry weather, and then the stems will reach 4 feet and over in height. For those in search of a choice Campanula I can strongly recommend this variety. F. H.

Streptosolen (Browallia) Jamesoni

During April and May this plant makes a fine display in the cool greenhouse, especially if planted out and trained to wires on a sunny wall. It is a handsome species and may be grown in pots and trained as small standards and pyramids. Such specimens are useful for the flower garden, where bold effects are desired, while for furnishing the centre stage of a greenhouse they are ideal. It is also useful for covering pillars in the greenhouse, and here again it ought to be planted out wherever possible.

Introduced from Colombia in 1847, it soon became popular, although perhaps it is not so extensively cultivated to-day as its merits deserve. It is evergreen and has a free-growing bushy habit, the half-pendent trusses of vivid orange-red flowers being most conspicuous. When grown in pots for greenhouse decoration it should be fed liberally when the receptacles are full of roots, otherwise the shoots become hard and stunted, and fail to produce the wealth of richly-coloured flowers of which the plant is capable. S. Jamesoni enjoys a good rooting medium, such as a sandy loam and leaf-mould with a moderate sprinkling of bone-meal added. Propagation is effected by cuttings, and these will root readily at almost any time if placed in a close frame and afforded a little heat.

T. W. B.

The double-flowered Peach (Prunus persica var. flore roseo pleno)

The beautiful rose-pink flowers of this little tree are very attractive about the middle of April, even though they appear at the same time as those of the Magnolias, Camellias, Viburnums, and a host of other fine things. There are many varieties of the Peach with double flowers, including a white one, but of these I prefer the subject of this note. It does not quite relish our heavy soil, but, nevertheless, it blooms every year, and in warm, sandy soils would grow more freely. Wherever used it should have an evergreen background. SUSSEX.

Bush Clover (Lespedeza Sieboldii)

The warm days of late have brought this graceful shrub to such a state of perfection that well-flowered examples are attracting considerable attention. The luxuriant, freely-branching growths are laden with rosy-purple Pea-shaped flowers. In one instance, where this delightful plant is situated at the back of a 5-foot wall which also acts as a retaining wall, its long elegant growths fall over to the courtyard below in a beautiful way; indeed this appears to be the ideal position for such a loose and graceful plant to display its charm. With me it blooms th the greater part of September and Oc when flowering shrubs are few in num refer to this pretty subject as a shrub, growth is of a woody character. Its however, die to the ground each ye should be cut clean away before new g commences in spring. In Surrey, a warm, sandy soils, no difficulty w perienced in flowering this plant in an tion, but on colder land a sunny, shelter should be chosen and the soil made f following which no difficulty will perienced in its cultivation or its annu bountiful display of bloom. This plan long known under the name of Desm pendulifolium. M

Gunnera magellanica

This grows only 2 inches or 3 inches and has distinct, rather rounded leave winter the plant crowns are quite bar magellanica is fairly hardy, although known it die in severe winters. I plant of G. magellanica one winter, w big specimen of G. scabra also succu but that was an exceptional winter, an then plants of these two species hav protected by a little dry straw abo crowns in the winter. G. magellanica a good, rather open, and well-drainee It is increased by division. S. ARN

Dianthus glacialis

This quickly forms neat tufts, from spring numerous flower-stems, each b a quantity of deeply-fringed pink f rising well above the dense foliage. It forms mossy tufts of the freshest gree few plants are so useful for carpets of g ing verdure in winter. It thrives in th garden on the level ground, or in fissures between rocks packed with grit and stones in full sun. When so pla forms neat tufts and has a pleasing ef all times. A lover of limestone, it l position slightly elevated, where it fairly dry. A top-dressing of grit sho given once a year. It may be grown old wall, and should be carefully pack a deep chink with soil and stones. I will do well and eventually bear mas bloom. Cuttings root freely if presse sandy soil in a cold frame.

Chepstow.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Vallota purpurea

WITH reference to my note, "Vallota purpurea planted out," issue October 30th, page 650, to which Edward H. Woodall refers in issue of November 13th, it gives me great pleasure to inform him that Vallota purpurea grows and blooms well here in beds in the open during September. Owing to the month being so exceptionally fine and warm this year, the plants flowered remarkably well. The beds are well built up for drainage, and the compost is rather sandy. In these warm valleys of South Devon many things can be grown in the open that are even impossible just outside on the uplands, let alone in Yorkshire.

When I first came here, some years ago, I myself was astonished at the number of greenhouse plants growing and flowering well against walls, etc., in these warm valleys.

When I stated the foliage died down, it was good enough in a general sense, as all the longest leaves rot down to the surface with the damp, but underneath the p tive bracken there are always one or t the short ones that remain green and h which, on the approach of warm w grow vigorously. F

Sidbury, Devon.

Michauxia campanuloides

The reader who searches the pages o logues may be baffled if he should lo plants of the noble Michauxia campanu He will also discover in his garden pere tions that this plant (see issue Nov 13th, page 689) is seldom seen in gal The reason for this appears to be th Michauxia is little more than a bienni does not always flower the second year seeds. Like other plants which are so year and bloom next one or in subs seasons and then die off, M. campanu is found troublesome in many garden is thus given a wide berth even in or seeds. Yet it is such a bold and unco plant that many might well grow it. plants may occasionally be purchased f few specialists, but raising from seeds

he most economical and satisfactory d for those who have space. M. nuloides likes a warm, sheltered place e garden, and those in cold districts t find it safer to put a light over the s in winter in case of mishaps caused by nusual severity of weather. Michauxia nuloides is a truly distinguished plant e grand family of Bellflowers. It from 3 feet to 8 feet high, and when it s its candelabra-formed pyramidal head ge white flowers touched with purple is striking. A single plant looks well in ler, but a group, such as may be raised seeds, is truly superb, and would com- this Michauxia to many. M. atcheffii is now more grown, but M. nuloides should not be neglected.

S. ARNOTT.

The Medlar

ecent query in GARDENING ILLUSTRATED ning the Quince reminded me of r neglected and almost forgotten fruit, Medlar. It must be of considerable ity, for Shakespeare (in Henry V.) "You'll be rotten ere you be half ripe, hat's the right virtue of the Medlar." altogether from its fruit-bearing value, edlar is rather an ornamental tree, its habit of growth and the fine autumnal of its foliage making it worth its place garden. It succeeds in most soils, but will not fruit if planted in wet places, gh they will bear if put out near a lake am if the roots are not in a continually state. Within a hundred yards of the Dee, near Kirkcudbright, I have seen extraordinarily fine Medlars which l freely year by year. The trees were d on a mound fairly well exposed and of great age, their curious crooked bs being very picturesque. These were Nottingham Medlar. Other sorts are Dutch Medlar and the Royal Medlar. uits ought to be picked when they part from the tree and kept in a dry place. been told that dipping the fruits in a solution of salt and water will prevent rmation of that fungus which results in tting of the fruits, but as I have never hat expedient I am unable to vouch for rectness. W. McG.

bie.

enthamia or Cornus fragifera

s is in unusual beauty this year at Nice. tree that enjoys moisture, so the un- summer rains in June and July, and August, have produced such a crop of Strawberry-like fruit that it is most gly beautiful. If only they were as o eat as they are to look at it would be ery garden. It thrives in southern nd in sheltered places, but I have never the fruits so large or so bright in . I hope some friend will tell how it s in his garden. Certainly it is worth e in the most select collection.

E. H. WOODALL.

The Laurustinus under glass

s hardy shrub should be grown by all eed white flowers in the dead of win- When I had charge of a nursery on the ent we had several big specimens were found to be of great value at mas and through January. They were s and were grown in the open air the summer until October, when they placed in a temperature of about 50 As we had a brisk demand for ets and cut flowers at that season, and inters were more or less severe, there me difficulty in obtaining a supply of flowers through January. In this y flowers are, of course, scarcer in the part of the year than at any other season, therefore anything that will yield bloom when Chrysanthemums are past is welcome. The Laurustinus can always be relied on. Few plants yield such a rich reward for time and expense incurred. Not only are such big specimens useful for cutting, but they are suitable for the decoration of big conservatories, corridors, and entrance halls, where tender things cannot well be used. Smaller plants in pots have their uses. I have seen nice little specimens in 7-inch and 8-inch pots with several good heads of bloom, and which can be used for the decoration of unheated apartments where the temperature is low during the winter. These plants should, of course, be in the open air from May until November, and in order to economise labour they can be plunged. An occasional watering is all they need. The variety lucidum is better than the typical form, the flowers coming very pure. BYFLEET.

Hedge clipping machines

IN your issue of October 30th you published an illustrated article on the subject of hedge-clipping, and I am now venturing to send you two illustrations—photographs taken for me by my friend Mr. L. W. Williamson—to show another way of doing the same thing. It will be seen that we can cut our hedges here, which are 9 feet high, without steps. The Yew hedges are over 4 feet thick, therefore steps are needed for cutting the tops, and we find it easier to do that part with the old-fashioned shears. I had no idea we had so much hedge until I came to measure it up, but I find we have over 880 yards, so that taking both sides into consideration there is over a mile in length to be cut. It took three men three weeks to do this before we had "The Little Wonder," and that did not include clearing up. This year two men did it all in two weeks, including clearing up. The machine is an American (?) invention, but I wish very much some engineer would make a better one, for it has defects. For one thing, a part of its moving works are next the hedge. They ought all to be away from it. However, I am thankful for it until I can get a better, for I am convinced that walls and hedges are the backbone of a garden.

THACKERAY TURNER.

Westbrook, Godalming.

—— I have read with interest "G. J.'s" article about rolling steps, in your issue of October 30th, and agree with your contributor that this must be a great help when trimming high hedges. I have, however, recently seen in use on several estates in this country a most effective hand tool which is well under way to revolutionise hedge-clipping.

It is an arrangement of a row of knives with a cutting capacity of from 2½ feet to 5 feet, working on the same principle as a reaping machine, and it is possible to clip a hedge up to 10 feet high with the operator standing on the ground.

The machine will clip any kind of hedges equally well, and they look even straighter and neater than when clipped with hand shears.

Easy to manipulate and quickly altered for top cutting, it works from five to 10 times faster than the old-fashioned shears, and, as far as I can see, it is as essential for the hedges as is the lawn mower for the lawns.

O. J.

Hedge-clipping machine at work in Mr. Thackeray Turner's garden at Westbrook, Godalming

Apple Laxton's Superb

Some two or more years ago—perhaps less—there was a discussion on the best dessert Apple, and I rather fancy my friend Mr. Herbert Chapman went all out, like I used to, for Cox's Orange Pippin. I always thought it was the only Apple worth eating, but a fortnight ago I was given a fruit picked off the tree, and, having eaten it, I agreed it was the best Apple I had ever tasted. This was Laxton's Superb, a few trees growing side by side with a few Cox's Orange, all of the same age and all planted at the same time. Each tree of Superb carried a good crop. The Cox's Orange did not carry a single fruit. The raisers, Messrs. Laxton, describe it as a late Cox's Orange, but the fruit I ate was quite fit on November 1st, but no doubt the district and season have a good deal to do with this. To those who cannot grow Cox's Orange I strongly advise them to plant Laxton's Superb. It will crop where Cox's Orange fails. It is self-fertile and free from the diseases that attack Cox's Orange. Its flavour is, as its name, superb, and quite equal to Cox's Orange. I think it will supersede this variety on account of its much more reliable cropping qualities.

I write this chiefly with respect to the fruit as a dessert variety, and if it catches Mr. Chapman's eye I should like to hear his opinion of it—not, of course, as a fruit expert, but as a man who appreciates a first-class Apple. G. H. DALRYMPLE.

Pruning Hardy Shrubs

WHEN most of the deciduous trees and shrubs have cast their leaves, the time has come round when much good work can be done by pruning. It is a mistake, however, to consider the winter as the correct time for all pruning, as is sometimes done, orders being given that while paths are being swept and the garden tidied up the shrubs shall be cut back and trimmed into shape at the same time. Summer-leafing shrubs and evergreens with ornamental foliage suffer alike, the result being, in the first case failure to flower properly in the following season, and in the second sacrifice of beauty of form, apart from the fact that unsightly gashes in the wood are probably exposed to view.

Escallonia montevidensis, a handsome late-flowering shrub

Trees and shrubs cannot be mutilated in this way with impunity. On the other hand, something of the nature of each subject must be understood before the pruning is embarked upon, and although experience, observation, and experiment make the best teachers, yet much time can be saved by dividing shrubs into several groups, according to their habit of growth and the way in which they flower, and pruning them accordingly. It must not be supposed, however, that all trees and shrubs need regular pruning. On the contrary, for instance, trees do not require to be pruned annually, all that is necessary being to keep them shapely when young, and when older simply to cut out dead wood, thin an overcrowded head, or trim back a straggling branch whenever such treatment is called for. The smaller summer-leafing trees may be shortened when young, so as to get an open framework of branches, while for the larger shade and shelter trees such as Pines, one clean main stem or trunk, with side branches breaking from it at some height from the ground, is better. In this case, if the growing point of the tree gets damaged, or if for any other reason the tree forks into two leaders, the weaker of the two should be removed. As regards

SHRUBS, the principal evergreens need not be pruned every year; they should simply be kept in good shape and within the desired bounds, no attempt, however, being made to alter their natural habit and make them form an exact sphere or other figure, except, of course, in the case of topiary work or hedges. Thus, when it is necessary to cut back a shrub of this nature, a whole branch or branchlet should be removed, and from a place where the loss will be least noticeable. In this way there will be one cut instead of half-a-dozen, and that one will be concealed from view. Again, such shrubs as Hamamelis and Magnolias rarely need to be touched with a knife at all. Pruning would destroy their beauty of habit, whilst they produce quantities of flowers without it. Though it may not at first sight seem a matter of great importance whether many or few cuts be made, yet when one regards each cut in the light of a wound, which it really is, its significance becomes more apparent. The chief danger from wounds lies in the fact that they admit into the wood the spores of many of the fungi which cause diseases in plants, and which in many cases cannot gain an entrance when the bark is intact. To guard against this, all large wounds should be covered with paint, and where a saw has been used it is necessary to pare the wound over with a sharp knife before applying the paint. There is further danger from w with some plants, for Plums, Che Peaches, and indeed most species of Pr and also some Maples, bleed badly whe during the spring, so that if it is necess prune these the work should be done i autumn. Dead wood must always b moved as soon as seen, as it often har both insect pests and the spores of fu diseases, while the destructive silver-lea duces its reproductive spores only on that is dead. Another point that appl all classes of shrubs is the removal of flowers or flower trusses before se formed. This is especially important i case of Azaleas and Rhododendrons, th of losing bloom even being incurred Azaleas if the ripening of seed be allow take up the sap while next year's flow wood is being formed. Moreover, Rhod drons push up their young shoots in a c from just below the inflorescence, would therefore be liable to obstruct growth if not removed, in addition to t up the food supply, for the seed will al be fed before the young wood.

Turning then to the annual prunir summer-leafing shrubs, much depends c dividual taste; but there are many t which are generally recognised to pa regular attention of this kind, even alth no formal effect is aimed at. The examples of the first group are Forsy or Golden Bells. These produce their fl on the previous season's wood, an cidentally flower earlier in the year, before the leaves appear, for they hav preliminary growth to make. If a pla this description were pruned in the w most of the flower-buds would be cut and little or no bloom result. The co time for pruning them is immediately they have flowered, and every day w after the flowering period means wastin food sent up to the wood-buds that are g to be cut off, not to mention that which to the formation of seed. After the ren of all dead wood, and of any small or weak shoots, the remaining wood that just flowered should be cut back to one t buds of its base, according to the stre of the shoot. The tall, strong growths often arise from the base of such a shrub generally be treated as leaders or main s and simply headed back some inches. In way they can be made to take the place o exhausted branches. They will also be f very useful in adjusting the shape of bush, and the shape and desired size things that should always be kept in while pruning, for next to acquiring a pact mass of flower or fruit, or the hig quality in either of these, and also allow air to penetrate freely through the bush restraint of the size and the development maintenance of a good even shape wit large gaps in the growth, are the objects in pruning. If a shrub of this were pruned too severely, that is to say back very hard indeed, a year's flo might possibly be lost. In other words, plant might make so much wood that it c not ripen it sufficiently before the end of season, especially if this were a short one wood has to be thoroughly ripe before capable of flower production. If this sh happen, however, a magnificent displa bloom in the second year would help to a for the bare branches in the first. Unpru the commoner, stronger-growing kinds velop into a straggling mass unless they given some hedge or old tree to ram through. By training a Forsythia to a and pruning it hard every spring, a fine e is produced when the long, arching shoots in full flower. Jasminum nudiflorum sh be treated in the same way, while Cle montana, Cydonias, Lilacs, and Spir

Arguta and Thunbergi, produce their r in the same way, though many people r merely to thin these out. Wistarias, in they produce their racemes of flowers ly on one-year-old wood, are nearer to group than to any other, but they may be d in the dormant season, for as a rule racemes spring from the bases of the previous season's shoots. It is also a good plan to tip the young shoots at the end of the summer, so as to give the flower-buds the best chance of ripening thoroughly, reserving the hard pruning till March.

F. C. L. ROBINSON.

(To be continued.)

A Visit to Veitch's of Exeter

HEN the architectural expert arrives at Exeter he probably makes a dash for the magnificent cathedral, but the of flowers quietly wends his way along New North Road in search of the s nurseries of Messrs. Robert Veitch on. In less than five minutes he finds f within the gates, and in a home of s and shrubs gathered together from ners of the earth he quickly forgets stle of the city without.

y tour among the Alpines it was easy which enjoyed the sun-baked condi- hat had been prevailing for so many The Prickly Thrift (Acantholimum eum) seemed particularly happy, and Coronilla iberica. The latter is a ite old carpeter, and I found it sprawl- ound with its abundant soft yellow ns, reminding one of a glorified Bird's-Trefoil. In another warm corner, g at the drought, was a vigorous f the popular Tropæolum polyphyllum, ng up its gorgeous yellow blossoms in profusion. Another drought defier I no- as the stately Sisyrinchium striatum. igh scorning the attentions of the gar- large flourishing masses had estab- themselves in the chipped-stone path amid their Iris-like foliage, they sent wealth of elegant blossomed spikes. wn colonies of Polemonium pauci- were looking particularly gay at the of the rockery. This is a distinct flowered species, and its wonderful ation furnishes one with an example ture's little anomalies. Whilst the are shy in appearing from artificially- eed, yet they come without stint when allowed their own way. We gardeners might well avail ourselves more often of Nature's idiosyncrasies in the matter of seed sowing. Another plant which was positively revelling in the hot weather was Phyteuma orbiculare. This little Rampion has fine violet flowers, and likes to be left alone when once congenially placed.

s in the Royal Nurseries, Exeter, re choice trees, shrubs, and Alpines re grown with marked success

The pale blue blossoms of Miss Willmott's Campanula made a very chaste picture among the grey stones. This gay Campanula is an offspring of C. pusilla, and every Alpine grower ought to establish a group or two of it. I noticed a very neat Erigeron named Elsie. It reminded me somewhat of Aster alpinus in habit, and it produces a lengthy display of rosy-pink blossoms. Another gem for sunny rock gardens is Helichrysum dentosum. It has pure white blossoms with striking yellow centres and charming silvery foliage. A truly fascinating little plant. I saw a very pleasing example of leaf colouration in a large patch of Sedum spathulatum purpureum. The foliage was a mass of glowing red, and I have made a note to include this in my next outlay in Alpines. A very handsome specimen of Philadelphus purpureo-maculatus was flowering. It is a hybrid descendant of P. Lemoinei, and has the graceful drooping habit of that species. When systematically pruned it makes an excellent shrub. The flowers are pure white with purplish blotches at the base. Two Leptospermums especially caught my eye, and they struck me as being well adapted for the rock garden. One was L. Boscaweni, which produces rosy-pink flowers on a compact bush; and the other was L. Nicholli, a New Zealand form with pendulous branches and numerous dark crimson flowers. Prunella incisa rubra looked very happy at the edge, and it is certainly a good dry-weather plant. This is an aristocratic relative of the Self-heal. It is quite a dwarf, and throws up an abundance of attractive red flowers above its prettily laciniated foliage. I was much struck also with Helianthemum lunulatum. This pretty Sun Rose comes from Spain, and has bright yellow flowers and a nice compact habit. Near by was the silver-leaved Teucrium pyrenaicum, with its broad heads of lilac and sulphur flowers. Lobelia Cavanillesi, which is only half-hardy in less favoured climates, flourishes abundantly in the open at Exeter. It grows about 2 feet in height and produces willow-like foliage and orange-scarlet flowers.

Space will not allow me to describe the numerous rare and interesting plants in the greenhouses, but I must name a few. They reminded one of those far-off days when people used to pay handsome prices for rare plants. There was a nice example of Sollya Drummondi, a plant rarely seen nowadays outside botanical collections. It is a dainty wire-stemmed climber with intense blue flowers, and it rejoices in the popular name of Blue Bells of Australia. Mr. Radley tells me it will do quite well in an unheated house. Macleana insignis is a greenhouse shrub of uncommon beauty. It has bright scarlet flowers and is sometimes seen flourishing in Cornish gardens. Elæocarpus reticulatus is a delightful shrub for the greenhouse. It has fragile white flowers which remind one of the blossoms of a Soldanella. On one specimen I noticed last year's purple berries hanging together with this season's flowers. The pale mauve-flowered Abelia longituda was very attractive, so also was Olearia insignis with its

charming silvery foliage. Some well-grown plants of Rehmannia angulata Pink Perfection bore ample witness to the superiority of this variety to the well-known type. Very attractive, too, as a pot plant is Senecio Heretieri. It has elegant silvery foliage and flowers resembling those of Cineraria stellata. A pretty strain of Cinerarias has, I believe been raised by crossing this plant with the large-flowered type.

HASLEHURST GREAVES, F.L.S.

[These famous and favoured nurseries attract plant lovers from all parts of the country. In addition to the plants mentioned in this article there are many choice shrubs, both hardy and half-hardy, many of which are scarcely, if ever, found in other nurseries. Mr. Peter Veitch sometimes brings flowering sprays of rare and choice shrubs to the fortnightly meetings of the Royal Horticultural Society, and these invariably arouse great interest. Any plant exhibited from this nursery is certain to command attention. Among the many good things that we have seen from the Exeter nursery are Buddleia Colvillei, Escallonia Iveyi, with its large white trusses which received an Award of Merit in the summer of this year, and the rare white Erica australis Mr. Robert.

The nurseries are also famous for their great collection of hardy Camellias, consisting of many rare and beautiful varieties, old specimen plants, and a house full of plants of all sizes for conservatory or outdoor planting. Many species of Acacia are also grown at Exeter, together with good flowering shrubs as Crinodendron Hookeri, Eucryphia cordifolia, E. pinnatifolia, Osmanthus Delavayi, Viburnum fragrans, and fine plants of Magnolias, comprising practically all the species and varieties worthy of cultivation.

Escallonia montevidensis, illustrated on page 698, was shown by Messrs. R. Veitch and Son, Exeter, before the Floral Committee of the Royal Horticultural Society on October 6th of last year. It is valuable in that it flowers so late in the season. In horticultural dictionaries it is given as flowering in July, but whatever it may do in its native habitat it is, in the S.W. of England, a good two months later. It is, unfortunately, rather tender, and although rarely harmed by winter frosts in Devon and Cornwall, it would be liable to suffer further north. It bears pyramidal spikes of white flowers which, though not particularly fragrant, appear irresistible to insects, which gather on them in clouds, 10 or 20 Red Admiral butterflies often congregating on a single bush in company with a peacock or tortoiseshell butterfly.—ED.]

FRUIT GARDEN

Autumn tree planting

THE season has once again come round when those interested in fruit culture in garden or orchard will need to turn their attention to the planting of some, at least, among the several kinds of fruit cultivated in Britain. There is no gain in deferring the work till late in winter, for the sooner trees are procured from the nursery the better are the chances of getting strong, well-furnished trees. Not only this, but they become well established before the spring comes round. In most gardens there are some trees that are not satisfactory for some reason or another. Sometimes canker so asserts itself in a tree that it is reduced to a state bordering on collapse. Much the better course of action is to root out such a tree and procure and plant another, perhaps, of another kind. Sometimes the variety is at fault, sometimes the stock on which it is worked; in other cases soil is the cause. I have seen many a tree in the open garden, and wall-trained, a complete wreck from various causes, that was retained from year to year. Dilapidated trees are retained by some with a hope that they will mend some day, but often such hopes only lead to disappointment, loss of time, and certainly a loss of material. There is no comparison between the produce of a young, healthy tree and that of an old, decrepit, cankered, or ill-trained specimen. Bad pruning and training account for much of the dissatisfaction associated with fruit-growing in small gardens, yet, in the pages of GARDENING ILLUSTRATED, advice dealing with the cultural details necessary is often and regularly given in season. Almost any and every kind of fruit-tree may be planted from now onward, whether trees are already on the place awaiting removal or have to be procured from the nursery. Readers may depend upon it good trees repay far better for the labour bestowed, giving heavier crops of higher-class fruit, to say nothing of their enhanced value and the pleasure which such culture provides. If a young tree has to replace an old one, merely digging out the old stump is not of itself sufficient preparation. The old soil ought to be wheeled away and fresh, not necesarily maiden turf, brought to replace it. Maiden soil culled from the pasture is certainly the best when it can be had, but not everyone can so indulge. As a rule, good fertile garden soil will grow almost any fruit, and if there is a tendency toward poverty, correct it with decayed manure, burnt refuse, and, in the case of stone fruits, some lime-rubble. These, perhaps, are small matters, but they are important, as they so largely increase the production of root-fibres—the pioneers of fruit-buds.

W. S.

Wintering pot Strawberries

The time is now at hand when Strawberries in pots will have to receive some sort of protection, for, although hardy enough to withstand severe frost in the open ground, they are far more susceptible to injury when grown in pots, from the more sudden fluctuations of temperature, dryness, and saturation; therefore, although as far as the tops are concerned they would be best fully exposed, yet, as success or failure depends mainly on the roots, we must see that these are protected from extremes that would be likely to injure them. After trying various plans, I am convinced that a cold pit or frame where the pots can stand on a coal-ash bottom is far better than setting them on any kind of shelves, as the moist, cool bottom keeps the roots from drying, and therefore very little artificial watering is needed in the darkest days of winter. To protect the sides of the pots, we place fallen leaves between them, pressing them up close as each row is placed in position. We keep the glass lights quite off, except during heavy rains, or sharp frost, for a little of both does more good than harm, while an excess of rain when the plants do not require it deprives the soil too much of its nutritive qualities, and excess of frost beyond what will ensure perfect rest for the plants can do no good, and may do much harm. Wintering on shelves near the glass, such as are utilised for fruiting, is about the worst plan that can be adopted, as the soil not only dries rapidly and more watering is absolutely necessary than is good for the plants, but perfect rest is impossible, and I am sure that anyone comparing two sets of plants in early spring that have been wintered under the two different plans will soon be convinced which is the better to adopt. Stacking the po layers on their sides in coal ashes, and b ing them up to any desired height, e against a wall or in the open, and cov with mats or straw in severe weather, plan that used to be largely adopted, b is open to the great objection of the imp bility of moistening the soil, so that had no glass available for covering the I would far sooner bed the pots in leav ashes on the level, and trust to coverin tops with litter, mats, etc., in severe wea as no plant suffers sooner than the St berry from drought; and if red spider established on the foliage, it soon sp when the plants are introduced to heat is a singular thing that one seldom amateur gardeners very successful with pot Strawberries; and, from my own o vation, I should say that many failures from putting them into glasshouses w temperature at least 10 degs. too high them, when they ought to be at rest.

A.

Covering down outside Vi borders

After this date it is always advisab cover down the outside borders of Vi with the object of protecting them from and heavy rains, as well as to con latent warmth and to prevent the sua roots being damaged by severe frost. same attention should also be bestowe borders which have been partly or w renovated, also such as may have recently top-dressed.

The outside borders of Vineries in vi ripe Grapes are hanging, as well as tho which late-keeping varieties are abou finish off, are also best covered dow heavy falls of rain or snow occasio superabundance of water in the border, as a result the roots take up more moi than is required for the needs of the which may in the first-named instance versely affect the keeping qualities oft fruit, and in the second may retard, ev it does not impair, the colouring, and re the fruit less likely to keep well when st

The material usually employed for purpose is tree leaves. These form a efficient protection if laid on the su about 1 foot in thickness and covered some litter or bracken to prevent them o blowing about. Bracken, where abun makes a good warm covering. To ha in the best condition it should be cut, d and stacked about the end of Augus early in September. If the weather is it dries or "makes" quickly after cut, and is soon ready for carting. stable dung or litter, that is the long s remaining after the shorter particles droppings have been shaken out, is material usually employed, and, when it be obtained, both it and bracken ma placed evenly and regularly over the bo about 18 inches in depth.

V.

Pears

When one reads of the enormous Pea be seen at the Imperial Fruit Show, thought arises whether like huge vegeta they are not too large for the ordin grower, especially when there are sm fruits of superior quality. Pitmaston Duchess, for instance, that always come the front for size, is certainly not in the class for quality. Fairly good in some pla it is only passable in others. Few pe care to tackle a 1½-lb. Pear. Duchess Angouleme, again one of its parents, large Pear of indifferent quality, and Beurré Clairgeau, a fruit that always cat the eye on the show table. Beurré Di

of exceptional size, and varies con- bly in quality. I found it decidedly rom a N.W. wall, but quite good from mer aspect.

en growing Pears rather largely, I four varieties varying in size from to medium that were general favourites eir respective seasons. They were an Bergamot, Thompson's, Winter and Zephirin Gregoire. The first l is most often met with in southern es as a standard, but is quite worthy a and rewards the cultivator for a little care and attention by consistent crop- and rather larger fruit. In addition to ality, it is a far better keeper than of the earlier Pears. The remarks on ing and keeping apply also to Thomp- one of the very best Pears. Winter has few superiors in its season, when be had at its best. Its only drawback liability to crack, and this, too, when varieties along the same wall are not d. Zephirin Gregoire is an excellent ear, a trifle below medium size. As lanting season is with us, it may be ble to give the reminder not to include any of the same season. Late mid- and late varieties are most useful, se other fruits are then getting over. a great mistake to overplant the first kinds like Jargonelle, Beurré Gifford, né d'Eté, and others, which to use a on expression, "are here to-day and to-morrow," and some of the earlier eason sorts are not much more lasting.

E. BURRELL.

A hillside garden at Foxhill, Charles Hill, Farnham, Surrey, the second year after planting. Designed by Mr. A. C. Kenrick

ying out a hillside garden at Foxhill, near Farnham

E laying-out of hillside gardens is ways interesting, and where the land opes sharply in several directions in a space, as it did in this case, interesting ms are sure to arise.

house, which was formerly two cot- lay at the foot of converging banks seemed to flow down to it like lava all directions and gave a very oppres- hut-in feeling. The object was, there- to push this all back and give as much space and freedom round the house as possible and at the same time avoid the feeling of being shut in by high walls. Dry-walling with Bargate stone was resorted to. The wall facing the Loggia faces south and is 85 feet long and 6 feet 6 inches high. It is planted in large drifts. Starting from the west end Pink Helianthemum, then Purple Sage followed by Catsmint, then in the centre, at top of the wall and falling over, Cistus formosus, and below grey-foliaged Helianthemum, then Rock Pinks and a big drift of Santolina are all planted on top of wall and continued on face in drifts from 15 feet to 20 feet. The illustration shows it in the second year after planting.

At the top of this wall is a narrow terrace 8 or 9 feet wide at the west end, narrowing towards the east, planted mainly with Rambler Roses which grow freely over another low wall which holds up a croquet lawn.

Just beyond the Apple tree seen in the lower illustration is a small Rose garden, on the same level as this terrace, which is reached by a flight of steps from the bottom lawn, and then some more steps lead to the croquet lawn; above and beyond this is woodland with Rhododendron and Cistus and other suitable shrubs.

The steps at each side of Lily Pond meet at a platform behind the wall. This wall is carried just high enough to comfortably lean over or sit upon. Then there is a flight of 12 steps straight up, ending in a platform and seat. From this platform side steps are repeated, but conversely. This treatment gives the effect of there being much more space than there really is.

On the east of the Lily Pond is another dry retaining wall with a lawn at foot, and then a herbaceous border gay from end of June till autumn.

Some trouble was experienced with the 6 feet 6 inches dry wall, owing to springs of water at back. It was decided to make a concrete channel behind the wall and cover this with Alder boughs and Heather to keep soil from silting up. This channel dipped from sides towards centre, where a little chamber was built. The water from there is taken to Lily Pond. This treatment has proved quite successful. A. C. KENRICK.

The Water Lily pool at Foxhill, backed by dry walling of Bargate stone

Dutch Irises

These are beautiful subjects for flowering during spring in the greenhouse and quite easy to manage. The bulbs should be set five in a 6-inch pot in the same manner as the Tulip and placed on a bed of ashes in a cold frame until growth is well advanced, when they may be taken into a cool greenhouse and grown steadily on near the glass, although they may be forced if necessary. They are at their best when grown entirely under cool conditions.

Brighton Chrysanthemum Show

November 10th, 11th, and 12th

THE Brighton, Hove, and Sussex Horticultural Society continues to make rapid progress. In 1922 the membership numbered 488. On the opening day of the Chrysanthemum Show it was 1,624, and an effort is being made to bring the number up to 2,000 this year. In a comparatively short space of time the Society has risen to a very influential position, and it would be difficult to overestimate the good work that it is doing in the town and neighbourhood.

The Society is in the fortunate position of having as its Chairman Councillor Richard Major, J.P., who has recently been appointed Mayor of Brighton.

Sir Cooper Rawson, M.P., presided at the luncheon preceding the opening of the show in the Banqueting Room of the Royal Pavilion, and he was supported by the Mayor of Brighton (Councillor Richard Major), the Mayor of Hove (Councillor H. E. Close), Alderman J. Colman, J.P., Hugo Talbot, J.P., and many other well-known local supporters of this Horticultural Society. The toast of "The Society" was left in the able hands of Col. F. R. Durham, C.B.E., M.C., Secretary of the Royal Horticultural Society, while Capt. Noel Sutton, M.A., and Edwin Beckett, V.M.H., responded to the toast of "The Visitors and Judges."

CHRYSANTHEMUM EXHIBITS.

The Brighton Chrysanthemum Show has grown to be regarded as one of the great horticultural events of the year. This year the show was larger than ever, and the vast sea of Chrysanthemums which Mr. B. H. Maclaren arranged in the Dome for the Corporation was one of the finest and most meritorious exhibits we have ever seen.

Not only were the Dome and Corn Exchange filled with exhibits, but the Art Gallery was also filled with choice flowers and fruits.

This is the first time that a flower show has been held in the Art Gallery at Brighton, and it was evident that many who came to see the Chrysanthemum Show also thoroughly appreciated the paintings. Possibly other Horticultural Societies will take a leaf out of Brighton's book. There was a tremendous attendance.

In the leading competitive classes Mr. W. H. Apted, Broadwater, Worthing, had things all his own way. He was first in the classes for 24 Japanese blooms, 12 Japanese blooms distinct, and six Japanese blooms. He was also first for vases of single and decorative Chrysanthemums. The best Japanese blooms shown by Mr. Apted included Thomas Pockett, Ajax, W. Rigby, Harold Wells, Louisa Pockett, Julia, Queen Mary, Majestic, G. Drabble, and R. Symonds. His best singles were Phyllis Cooper, Annette, Laddie, Susan, and Nona.

Mr. R. Middleton, gardener to Viscount Cowdray, Paddockhurst, was second in many classes, and his grand blooms of Majestic and Victory were greatly admired.

Mr. R. Paine, Partwick Nurseries, Henfield, showed vases of disbudded varieties in splendid form.

A remarkably fine non-competitive of Chrysanthemums was staged by M Keith Luxford and Co., Sheering Nur Harlow. Of the large Japanese exhi varieties shown by this firm special m should be made of the very large, golden-yellow Lady Edward Miller, a fied W. Rigby, illustrated on page 703. is probably the best novelty of the year. varieties Autumn Tints, Thalia, Chinoise, Thomas W. Pockett, and were all well represented. Special m should also be made of the single-flo Augusta (see illustration), a clear y and over 7 inches across. The fl are of good substance and the colo luminous quality. This variety gaine Award of Merit at Vincent Squar November 2nd.

Other fine singles shown by this firm Clytie (yellow), Everlasting (red), (white), Exmouth Pink, Laddie (ye Raleigh (deep red), and Lady Sanders yellow).

NON-COMPETITIVE EXHIBITS

The most outstanding exhibit in the Exchange was that of a superb collecti vegetables by Messrs. Sutton and Sons. kinds were grown to perfection and s by a master hand. Among the veget were Brussels Sprouts Fillbasket, S Cabbage Dwarf Green Curled, Carrots Red Intermediate and Favourite, Par Tender and True, Leeks Prizetaker. addition to serviceable table vegetabl these and many others we also obs Ornamental Gourds that looked so muc Oranges as to be mistaken for them. A deal of colour was also lent to this colle by the judicious use of Capsicum G Queen, Chile Cayenne, and a green climber or Tree Tomato rejoicing unde name Gyphomandra Betacea!

There were many other non-compe groups, and special mention should be of Messrs. J. Cheal and Sons' fruit autumn foliage, and Allwood Bros.' C tions, including Topsy, Spectrum, La Wivelsfield Apricot, and Maine Sunshi really good yellow.

A fine collection of Orchids from M Sutton Bros., Hassocks, would have seen to better advantage had more room available. The centrepiece to this group a grand plant of Brasso-Cattleya Antoi with 12 flowers and buds. Other cl plants noted in this group were L Cattleya Warham, one specimen plan Cypripedium insigne Agatha with 10 flo C. barbatum, C. Harrisianum, Dendrob formosum giganteum, Odontoglossum gr (a real amateur's plant, easily grown), the brilliantly-coloured Odontioda Papil

Prominent among the non-competitive hibitors were Messrs. Daniels Bros., Norwich; Mr. H. Hemsley, Craw Messrs. W. Balchin and Sons, Ltd., H Mr. F. Woollard, Brighton; The Pre Seed Co., Ltd., Brighton; Mr. W. G. Bri Hove; Chez Nous Nurseries, New Messrs. G. Miles and Son, Brighton; A. G. Vinton, Oldland Nurseries, Balcon Messrs. Reamsbottom and Co., West D ton, Middlesex; Messrs. Burfoot B Kingston-on-Sea; Mr. Penney, Hil borough, Kent.

The table decorations and fruit classe the Art Gallery were particularly good. M A. M. Swan, Colwood Lodge, Hayw Heath, was first for table decorations, Mr. N. D. Brooks, 18, Blatchington R Hove, was first for a circular group of Ch anthemums arranged with Ferns and o foliage. H. (

New single Chrysanthemum Augusta, seen at the Brighton Show

It is a bright yellow self of luminous quality and good substance. the flowers being as much as 7 inches across

praise of the Chrysanthemum

N anyone adequately praise the 'Autumn Queen" of flowers—the Chrysanthemum? I do not think so. has recently been my good fortune to a small local show, which brought home e, more forcibly than ever, the merits of wonderful and glorious flower.

e variety and beauty of its colouring, the almost numberless types, made me ion whether we possess any other flower e the Queen herself, the Rose—which make such a varied, bold, and inspiring ay. Even in making this comparison, ust remember that this feast of beauty wealth of colour come to us in the chill, dull days of November, when Nature is to rest and is slowly putting on her r garb.

would be very difficult to surpass, or equal, the grandeur and effectiveness of ge vase of these magnificent blooms ged artistically. In looking on such a one sees a more beautiful floral picture was given us by artists of old in those ings of flowers and fruit so treasured in ast.

at a nobility there is in the massive ese blooms of the reflexed-petal type. not too much to call them exquisite, for, as they are, there are much grace and y in their delicately-drooping petals. ps such lavish praise cannot be given equal truth to the incurved Japanese r, though, even there, we find a sym- of form and breadth of petal which our attention and secure our ad- ion.

typical incurved flower has a peculiar ation of its own. To some tastes these s may appear too formal, but no one gainsay the purity, neatness, and cy they possess, which have created an siasm amongst their devotees unsur- d by any other section.

the Decorative, Reflexed, Pompon, and one groups much could be said with force, for they all have a special charm. uld, however, be doing an injustice to ver in so casual a manner the merits single-flowered section. Among the, speak, modern Chrysanthemums, none isen so rapidly and completely into rity, or has taken such a deep and, I would say, lasting hold on public taste steem.

vell-arranged basket or vase in which single flowers are used in conjunction utumn tints is a revelation and a joy. praise of the Chrysanthemum has, so en confined to its real beauty. This is e of its attributes; it has other quite nding merits.

here a flower less difficult of culture or universally grown? Go where you there you see it holding up its refresh- ad. I have often looked with a pity- and sympathetic feeling at plants ling to grow beside the railway be- Battersea and Waterloo, and yet I een given the keenest pleasure to see ite creditable display they have per-

y cannot, of course, compete with those g under more favourable conditions, I pretend that those grand flowers I entioned, which are to be seen at every ion, are produced without great skill uch care and labour. What I desire hasise is the wonderful adaptability of lower. It lends itself to treatment would be death to many others.

he cottager, amateur, and professional t is a true and delightful friend. Given nplest culture and attention, it will re- with a reward far in excess of the and time bestowed upon it.

The new exhibition Japanese Chrysanthemum Lady E. Miller, which was much admired at Brighton Show

A grand golden yellow self with very long florets, shown by Mr. Keith Luxford

I can imagine someone saying: "Yes, this may be so, but it lacks sweetness of perfume." Certainly, it has not the delicate fragrance of the Rose, Sweet Pea, or Carnation. Nevertheless, its aromatic scent is most refreshing, and seems to be in keeping with the declining year.

Naturally, one expects, in the sun-flooded days of summer, an atmosphere laden with sweetness from the myriad flowers which brighten our gardens and adorn the countryside, yet, withal, the "Autumn Queen" is an outstanding example which should fill our hearts with true thankfulness and praise.

A. C. G.

Some good Collarette Dahlias

This comparatively new section is being rapidly added to every season by the various raisers. It is only a very few varieties that can stand the test of general cultivation, the great majority being only heard of for a season or two. Those I am about to mention, however, are so good that they are almost certain to retain their position for quite a while. All are excellent growers and very free bloomers, while the majority flowers early enough to suit even the latest districts. I give them in no order of merit, but simply as the names occur to me.

Mona, one of the dwarfest of the section, is also one of the most beautiful, being a very brilliant crimson-scarlet with a bright yellow collar. Lochnagar, with a pure white collar and deep purplish-crimson outer segments, is one of outstanding merit; its blooms, if not very large, being very shapely and freely produced. Black Watch, of somewhat similar colour to the last named, but without the white collar, is very pleasing, especially to those who prefer self-coloured blooms, the collar in this case being of almost the same shade as the rest of the flower. Green Park is another self, but bright lemon-yellow in colour. A rather tall grower, it is very effective at a distance. Tuscar is of a purplish-crimson colour, each petal edged with white, and it has a white collar. Holyrood, with creamy-yellow petals and a red band down the centre of each, is very handsome, but is inclined to vary considerably in colour. Goldendale is a large, handsome flower of a bronzy-yellow tint, the collar slightly deeper in shade. Scotia, a pure white self, is of good habit and blooms freely, but the collar being white detracts from its value somewhat. Starling, with lightish purple flowers of good size and form, has a white collar and is one of the earliest to bloom, and continues right through the season. Morag, of a fairly good pink colour, with collar of same shade, is a fine doer and greatly admired. Columba has reddish blooms of large size and good form, with collar of same colour, but tipped with yellow. Ouise is very late, unless rooted early and planted early. It has large, yellowish flowers with dull-red centres to the petals; not too free a bloomer. Hussar is another very fine scarlet with yellow collar, a little like Mona, but a much taller grower. A very pleasing variety but not too free a bloomer is Doon, with brick-red flowers and a yellow collar. This is one of the most beautiful of the lot. Avon is of fine colour (bright scarlet), but the collar is of the same shade, so it is not so distinct as are some of the others of similar colour.

C. Blair.

Preston House, Linlithgow.

REMINDERS FOR THE WEEK

Southern and Midland

Salads

The chief supply of these from now onwards must be depended upon from plants growing in frames. Lettuce and Endive must be carefully watched, and all decaying leaves removed. The soil should be kept stirred with a hand fork between the plants, and water given only when the soil becomes dry. A supply of Mustard and Cress should be kept up where a warm house or pit is at hand. This is best when sown in small batches every week.

Vacant ground

It is advisable to proceed with the digging and trenching of all vacant land whenever the weather is favourable, as, after the present month, the majority of soils is apt to become wet and in an unfit condition for digging. Frosty mornings can be made use of for wheeling on the manure and other material required for enriching the soil. All old Pea and Bean sticks unfit for further use should be burnt with any other rubbish.

Mint

There is usually a demand for green Mint during the early part of the year and before the spikes appear in the open garden. To ensure this, a few roots should be lifted and planted thickly in boxes of soil, and stood in the open or a cold frame for several weeks, when they may be placed in a warm greenhouse as required. In a short time the roots will shoot and provide fresh young leaves that will be very much appreciated.

Perpetual Carnations

The chief aim with these plants is to keep them vigorous and sturdy if a good crop of bloom is desired during the next two months. Special care is necessary in ventilating, watering, and feeding. At no time should the temperature rise above 55 degs. at night, and watering is best done in the early hours of the day. Plants that have well filled their pots with roots may be assisted with weak doses of some well-tried Carnation manure. The plants should be well spread out to allow a free circulation of air.

Lachenalias

These require no coddling, but where they are still growing in cold frames, it is advisable to remove them into a cool greenhouse and keep them growing as near the glass as possible. A shelf at the back of a fruit-house with enough warmth to keep out frost is all that they require. Where it is desired to grow them in baskets as hanging plants, now is a good time to transfer them.

Violets

The early planted Violets in frames are now blooming freely, and should be given weak doses of soot water. This is an excellent stimulant for Violets. Keep the blooms removed as fast as they appear and all runners picked off. Damping often causes severe losses amongst the plants, and to prevent this, air must be given freely and the crowns and axils of the leaves kept as dry as possible. Remove all decaying leaves.

Gaultherias

These are splendid low-growing shrubs, commonly known as the Partridge Berry, that adapt themselves to carpeting the ground beneath the shade of trees. The variety, G. procumbens, bears white flowers, followed by scarlet berries, while in autumn the leaves change to a beautiful crimson. G. Shallon is a more robust variety that bears purple berries, and one of the best plants to stand the drip from deciduous trees.

Rock gardens

Planting of Alpines is best left after this date until early in spring, and any plants coming to hand should be given the shelter of a cold frame or plunged in ashes in the frame yard. Any plants that require sheets of glass placed near them or other protection should now be attended to. All fallen leaves should be removed from among the plants.

Gladioli

Where these are not already in store, they should be lifted, dried, and stored away for the winter. Those that have been hung up in a shed to dry, may be sorted, cleaned and stored away in a dry frost-proof cupboard. All small bulbils may be kept separate for sowing thickly in drills for growing on next season to produce flowering bulbs.

The fruit room

A wet day should be chosen for overhauling the fruit-room, and all fruits that show the least sign of decay should be used immediately. Any late ones that are still in boxes or hampers should be laid out singly with eye uppermost. It is essential to keep the room dark and frost-proof by placing sacks or heavy curtains in front of the windows.

W. E. Wright.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Peaches in pots

Unless matters take a turn for the better before long, so far as fuel is concerned, it is to be feared that the early forcing of Peaches and Nectarines in pots will not be resorted to as usual. Where such can be done, however, it may be suggested that when the heat is applied it ought to be gentle at first. The trees, meantime, may be prepared by washing and topdressing, but the beginning of December is soon enough to put them to work. The heat during their initial stages may run about 45 degs. at night until the buds begin to push. Then the heat may be progressive, but never more than 55 degs. at night. Those who may be forcing young trees for the first time ought not to hurry them.

Vineries

If, by reason of drip in badly-glazed houses, there is likely to be any loss among ripe bunches, these can be cut and bottled. A fair length of stem ought to be allowed. Soft water is preferable, and a small piece of charcoal in each bottle will keep the water sweet. Grapes so dealt with will keep practically as well as if they had been allowed to remain on the rods. The growths in the Hamburgh house can be reduced to half their length. There will, at this date, be little or no danger of bleeding, and the extra light will be beneficial. The borders inside may be inspected, and if it appears likely that they are on the dry side they can be watered with tepid water.

Rock garden

At this season the rock garden will require a certain amount of tidying-up. Advantage, therefore, ought to be taken of good weather to attend to this work and, as it goes on, any little alterations may be done. It is to reduce some of the more exub growers at this time, and, of course, A plants out of pots can be put out almo any season. Colonies of seedling Prin so grown will, if planted now, quickly e lish themselves, and they will be read start off in spring. Some of the bien too, may go out in the rock garden. groups of Cheiranthus Allioni are showy in spring; Forget-me-nots, and es ally Ruth Fischer, are always attrac dwarf Wallflowers and Polyanthi ma effectively used—and so on. Any t plants or those which are liable to s from damp will, of course, require t attended to as their needs, in view of vious experience, indicate.

Strawberries in pots

Plants in pots, and which are intende forcing, ought now to be plunged in and, if possible, covered with spare from unoccupied frames. The Strawber a hardy plant, and most of those who forced it will agree that it responds quickly to heat when the plants have well exposed to frost—provided, always, the roots are kept fairly dry. Hence need for protecting these from exce moisture by using spare sashes as coveri

Pruning

It may appear, to many, to be prema to talk about pruning. Nevertheless, as foliage upon Red Currants and White rants usually falls when there has be few degrees of frost, there is no reaso delay the pruning of these. Establi bushes are easily dealt with—the oper ought, in all cases, to aim at keeping t open in the centre. Branches which are near the ground, too, are better cut cl out, as the fruit is liable to be spoile being splashed during heavy rains. Y specimens, of course, require different t ment, and in order to secure a good fou tion for future years it is advisable to with such bushes in a rather severe mar

Camellias

Plants in robust health set the flower b as a rule, very freely—more, in fact, will expand. It is wise, therefore, to the buds to some extent, and in cases w there are triple buds at the terminals centre one only ought to be retai Whether grown in pots or planted Camellias require some stimulant at time. The drainings of the manure h well diluted, are ideal for this purpose, weak soot water is almost equally g Where neither is available, a solution of good chemical fertiliser may meet the ca

Vegetable garden

The smother fire is a valuable adjun the garden, and at this time it is possibl get rid of much rubbish by burning. W cannot be burned can, as a rule, be bur All ashes from the fire should be kept If they are allowed to get wet the valu and very soluble potash is wasted. Cont the digging and trenching of all va quarters. Frosty mornings—and these this district, have come at a much ea date than usual—can be utilised for wheeling of manure. It is sound prac when it can be done, to have a numbe breaks and borders manured before digging begins in earnest.

W. McGuffo

Mabie Gardens, Kirkcudbrightshire.

Tomatoes: Preparing for Spring

IAVE grown Tomatoes in a border 5 et wide for 25 years with varying suc- ss, but have never had a failure. I have suffered from the attacks of fungus or , or disease of any kind. I have occa- illy had a slight attack of droop, but always mastered it by allowing the soil come dry and watering very moderately several weeks. I plant two rows, the s 2 feet apart, and I allow two stems to plant. These being tied together, the d of foliage is increased by about 1 inch The crop is nearly doubled, and the ty is quite as good as if it were a matter single stem only, and if one plant fails is the other to fall back on. When the two trusses are colouring I defoliate, but strict moderation, just taking off a leaf rt of a leaf here and there so that light s freely on to the fruit. Cutting away oliage in the way that many amateurs a foolish and barbarous practice. Mar- growers know better, as do good pro- onal gardeners. About once a week I over the plants and see that every fruit posed to sunshine and air, and that is all is necessary. It is well known to all rienced gardeners that the Tomato and Strawberry exhaust the soil more than other fruit or vegetable. In very old ens only the addition of loam or marl restore fertility and induce lasting ir. It is the same with the Tomato r glass.

r some years I made a practice of re- ng some of the soil and replacing with fresh mould of a free nature, adding charred material. Some three years I discontinued this practice, with the re- that there was a marked decline in the . Not only was this the case, but as as the plants had formed two trusses oliage flagged badly in the hot sun. I fore came to the conclusion that a al change was necessary. It happened I had a large heap of decayed vegetable er and charred refuse which had been mulating for several years, and this was d over several times during the winter, at it was in a quite sweet condition by nd of January. One foot of the old soil removed and was replaced by the fresh rial. The effect of this change was very ed. I have not had such a crop for years, and the fruit was very fine in ir. I have been amply repaid for the and labour incurred, for when Tomatoes grown for profit a small yield means ing for nothing. I would strongly ad- Tomato growers to change the soil dically. Worn-out soil means incurring er from fungus, stripe, and sleeping se. Badly-nourished plants are sure to e victims of one or more of the diseases h are the special enemies of the Tomato. tain amount of dung is beneficial, but to certain knowledge, if used without dis- on the excess of nitrogen will bring on ttack of the much-dreaded Cladiosporum rown fungus. I have seen a big house letely ruined early in August by the h use of horse manure. Where this rs my advice is to discontinue the use of ure for one year. Give a good dressing urnt earth and rely on artificials to pro- the swelling of the fruit.

e Tomato is not fastidious in the matter il. Any garden soil will do if it is not heavy, therefore it is easy to make the ssary change. Three inches of the top will do, but it should be turned up rough at it is mellowed and sweetened by the n of frost and wind. This will be re- d by the soil in which the Tomatoes have been growing. If there is any decayed vegetable matter some may be used. Add to this some decayed manure, a little lime, and a rather liberal addition of soot, and you will have a rooting medium which will ensure a good crop of fine quality fruit. Those who water with intelligence and ventilate freely need have no fear of fungus disease of any kind. From the middle of June until there is again danger of frost I leave air on the top ventilators at night, and watering is done as early in the day as is possible. Those who water in the afternoon and close the house for the night are looking for trouble. White dy has in some places been abundant this season, but in striking contrast to what has happened in previous years, I have seen scarcely an insect on my plants. I can only account for this immunity by having taken the pains to destroy every Sow Thistle and Nettle, not only in my place, but within measurable distance of it. A single clump of Nettles growing in the near vicinity will sometimes be enough to infect several Tomato-houses. BYFLEET.

Treatment of pasture land

I am about to take over a piece of land, to grow hardy flowering plants, as well as some fruit and vegetables. It is pasture at present, the turf not very coarse, the soil fairly light and gritty, with chalk subsoil; situation on slight slope and fairly dry. Should I dig the turf in or take it off and stack it, for potting, etc.? Would you advise a dressing of some soil fumigant for destroying grubs, etc., in the soil, to be dug in at the first digging? Would the digging of it in prevent me also digging in stable manure at the same time? Would the insecticide injure any plants put into the ground just after the digging? E.

[If you require soil for potting, seize the opportunity, and strip the turf off the plot from 2 inches to 3 inches in thickness, and stack it in a ridge-shaped heap, when it will be ready for use in the course of a few months. If not required for this or any similar purpose, then strip off the grass with as little soil adhering as possible, and place it between the top and bottom spits of soil when the trenching of the plot is being done. The whole of the piece of ground should, it may be stated, be bastard-trenched—*i.e.*, dug two spits in depth—and, as the subsoil is of a chalky nature, the bottom spit, after being broken up, should be left there. The proper way to bastard trench a piece of ground is, briefly, as follows:—Assuming the plot to be about 50 yards wide and 200 yards long, divide it into two equal portions, each 25 yards in width, and then, with the aid of a line and spade, nick out a furrow deep enough to remain visible from one end to the other. This done, mark off the ground transversely into sections or strips 3 feet in width, on one of divisions resulting from the marking of the furrow just named. To define the position of each strip, drive in stakes on either side—*i.e.*, in the furrow and on the outside—which will save much trouble when the trenching is being done. All being ready, stretch a line across the top end, or where the first 3 feet section is to be operated on, strip off the turf as thinly as possible with a sharp spade, and make a heap of it near by. Then dig out the soil one spit deep, shovelling out the "crumbs" or loose soil as well, and wheel and place it conveniently beside —but not on—the upper end of the adjoining division. This will be needed for filling in the trench when the trenching is completed. By dividing the plot into two portions as advised, much labour in wheeling is saved, because, if trenched in one piece, the soil would have to be taken from the top to the lower end, whereas it has simply to be wheeled but a comparatively short distance by the adoption of the other method. After the top spit has been cleared out, proceed to dig up the next or lower spit to the full length of spade or fork, whichever implement is preferred. Break the soil down fine, and work in a dressing of manure in a half-decayed condition with it. Then strip the turf off the top of the next 3 feet section, and cast it on the top of the latter. Dig up the top spit, shovel up the crumbs, and throw the whole on the turf, and leave the surface fairly level. Then break up bottom spit, and continue in this way until the whole of the plot has been so treated, when, if you are anxious to plant it as soon as possible, level the surface, if necessary, and dig it over, after giving a good dressing of well-rotted manure. By this means you will secure a depth of soil equal to 2 feet or thereabouts, which, if worked and manured as advised, will grow the various crops you mention in a satisfactory manner. It would certainly be a good idea, while the trenching is going forward, to give the soil a dressing of some soil disinfectant. This need not deter you from digging in manure. If well mixed with the soil we do not think the foregoing would prove injurious to the roots of plants; all the same, it would be as well to defer planting as long as may be convenient, if only to allow the soil to settle down into place.]

Potato trials at Wisley

The following awards have been made to the undermentioned Potatoes by the Council of the Royal Horticultural Society after trial at Wisley:—

MAINCROP.

AWARD OF MERIT.

Up-to-Date ..	.. Sent by Messrs.	Garden Supplies
Irish King ..	.. " " "	Barr
Field Marshal	.. " " "	Dobbie & W. G. Holmes

HIGHLY COMMENDED.

Sefton Wonder	.. Sent by Messrs.	Garden Supplies
Arran Chief ..	.. " " "	Dobbie & Garden Supplies

COMMENDED.

Majestic ..	.. Sent by Messrs.	Dobbie, Carter & Co., V. H. Simpson, W. G. Holmes, & D. & W. Croll
King Edward	.. " " "	Barr, W. G. Holmes, & Dobbie
King George V.	.. " " "	Barr
Kerr's Pink ..	.. " " "	Dobbie, Croll, & W. H. Simpson
Victory (Simpson's)	" " "	D. Keir

False description of seed Potatoes

Proceedings for making false statements in connection with the sale of seed Potatoes have been taken by the Ministry of Agriculture in two cases recently. In the one case a dealer of Bromyard sold a quantity of seed Potatoes which he described as being grown in Scotland, whereas it was proved that they came from Cambridgeshire. He also quoted a false certificate number. His defence was that the English-grown seed was sent in mistake, his man loading it out of a truck at the railway station instead of from his own yard. The Bench imposed a fine of £3 for the offence under the Wart Disease of Potatoes Order, and £2 under the Seeds Act, and ordered payment of special costs, which amounted to £14 11s.

In the other case a firm of Potato merchants of Cambridge was summoned in respect of the sale of some seed Potatoes of mixed varieties with which they had given a statement indicating that the variety was true within the meaning of the Seeds Regulations, 1922. The defendant acknowledged

that he had bought this seed as being mixed and took the risk of re-selling it as pure. He was fined the maximum penalty of £5 and £3 3s. special costs.

It is necessary under the Seeds Act, 1920, in the case of a sale of seed Potatoes, for the seller to make a statement in writing containing particulars as to the class, variety, and size and dressing of the seed sold. It is also necessary in connection with the Wart Disease of Potatoes Order to state the number of the relative "clean land" or "true stock" certificate referring to the Potatoes in question issued under that Order.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

ROSES

Cutting-back a Gloire de Dijon Rose

(Dartmoor).—Unless this Rose is pruned back methodically from the time it is planted the trouble you mention is bound to arise sooner or later. Your best course now is to select half of the youngest growths and cut them back to within a foot of the ground, leaving the remainder to furnish the upper space for the time being. This may be carried out at any time during the winter, and the Roses will come to no harm if it is done now. Of course, the shoots which develop from the growths you cut back will not bloom next year, and these may be pruned back to within a dozen eyes during the following winter. Your plant will then have thickened from the base upwards, filling all the available space as it goes, and thus enabling you to remove the remaining old bare growths in the same way. Do not allow any of the strong upper growths to run away, even during summer, from the remainder, otherwise the same thing will occur again. These may be checked without any detriment to the plant by pinching out their tips at any time

FRUIT

Nectarine Early Rivers in cold house

This grew well, fruit attaining full size, then, while still green, it went off at end, slowly rotting. I watered it plentifully, thinking this, on the wall of sloping garden, was right treatment and safe. Other fruits in same house ripened well. Would it be wise to lift tree, root prune to some extent, and improve drainage? EASTMENT.

[The fact of the Nectarine fruits rotting in the manner described points to the conclusion that it is due either to defective fertilisation or to there being a deficiency of phosphate in the soil, or, in other words, lime or calcareous matter. As the other trees have given satisfactory results, we are rather inclined to think the first named to be the cause of the trouble. The flowers when fully open should be fertilised with a camel hair brush, either with their own pollen, or preferably by pollen obtained from the flowers of another variety open at the same time. As the flowers of Early Rivers are small, they would be best fertilised with pollen of a large-flowered variety. At the same time, we think it would be as well to partially lift the roots, and when laying them out again to work in some new fibrous loam, also lime rubbish, if the soil is deficient of lime, with the border soil. Let the uppermost layer of roots not be deeper than 6 inches or 9 inches from the surface. Be careful to make the soil firm by treading it, if not in too moist a condition.]

Own root Apple trees

I have separated and planted an off-set from Peasgood's Nonsuch, sprouted a little beneath soil, but above graft it had formed a good root. Is it of any use, or do these own-rooted off-sets fail to bear well?

EASTMENT.

[Instances of Apple-trees on their own roots being a success are rare. The best example we have seen or heard of is a variety named Burr Knott or Bides Walking Stick. This was in our charge for many years, and it seldom missed bearing good crops of large fruit of good quality. The name is derived from the fact that "burrs" form at the joints of the wood, also branches as they attain age, and if one or more of these branches are severed from the tree and planted they root quickly and commence bearing soon after. We therefore think the rooted off-set you have removed from the stem of the Peasgood's Nonsuch is not likely to do much good, but, at the same time if certain it has emanated from the scion or graft, you may give it a trial.]

Blister moths

I am troubled with an insect on my Apple and Pear trees on the walls here, and have enclosed a few leaves for your inspection. The blotches make their appearance on the leaves about the middle of July, and in each of them is a small caterpillar similar to the leaf miner. I have sprayed the trellis with paraffin and soft soap at short intervals during the early summer, and in the early spring I went over it with caustic alkali. The result has not been satisfactory, and I will be much obliged if you will kindly give me a remedy. The standard Apples and Pears are not affected in any way. W. A.

[The leaves you have sent along for our inspection have been attacked by one of the Blister Moths. We cannot give you the name of the particular moth which is the cause of the trouble, because the caterpillars have now left the blisters. There is a number of blister moths, and the host plants are Apples, Pears, Peaches, Sloe, Hazel, and Ash. Two or three species attack Apples and Pears. The moths appear towards the end of April and throughout May. They are grey in colour and the hind wings are heavily fringed. The moths are tiny when the wings are closed, but when the wings are spread they measure half an inch across. Eggs are laid singly on the under surface of Apple and Pear foliage. The caterpillars their way into the leaf and feed on the ti lying between the upper and lower epider In doing this they cause the definite rou blisters. The caterpillars are a quarter o inch long when mature, and have four p of stiff hairs present. When fully fed caterpillars crawl out from the undersid the leaf, and make their way to crevice the bark, where they spin little sil cocoons in which they pupate. They will shelter in the crevices of a wall, and we inclined to think that they are doing s your case. Pupation lasts throughout winter. The best method of control wil to thoroughly spray your trees and the w with a good soluble tar oil wash at strength recommended by the makers. best time to spray is the last week January.

You can obtain such a wash from good horticultural sundriesman. Watch c fully again next season, because you wil lucky if you get your spray fluid into c tact with all the cocoons.

Before spraying you should remove burn all the old tying material. The ef of the tar oil will depend on your success reaching the cocoons in the crevices of trees and walls. We do not think that spr ing with paraffin and soft soap would be any use against this pest. A good nico wash might reach them, but it is difficult get at any caterpillar which feeds inside leaf. During the caterpillar attack the lea in which they are feeding should be collec and burned.]

Diseased Grapes

(L. O. D., Cornwall).—After microsco examination we have found that your Gra are affected with Botrytis Fruit Rot. T fungus attacks the leaves, stem, and w of the Vine, causing discoloration a rotting of the parts affected. From th affected spots spores are produced, whi when mature, are dispersed to other porti of the affected plant, and so the dise spreads. Many forms of Botrytis are know and many are pure saprophytes, most of forms under certain conditions becomi parasitic. In the case of the Vine Botry it does not differ from many other forms that it often lives as a saprophyte and un certain conditions becomes parasitic on Vine. All the young tender parts of the V are liable to infection, especially if the pl is grown in a warm, moist atmosphe Vine Botrytis is unknown on out-of-do Grapes. You should give the vinery thorough clean out and wash down th winter. The house and the dormant Vin should be afterwards thoroughly spray with a solution of sulphate of iron. T following recipe has been recommended:

Iron sulphate	20 lbs.
Sulphuric acid	1 lb.
Water	5 galls.

Dissolve the crystals of iron sulphate hot water, stir well, and add the acid ca fully, finally make up to 5 gallons. T solution should be made in a wooden ves and used soon after preparation. Spray t Vine rods, glass, and woodwork of the hou with the solution, then damp down the flo of the house with the fluid. We cannot gi you the amount of spray fluid required, we do not know the size of your vinery, b you can cut down or increase the amount spray fluid to your requirements, provid you keep the ingredients in the same rati Look carefully for a reappearance of t disease next spring. You should spray wi potassium sulphide solution if necessar This solution is made by taking 1 o of potassium sulphide and dissolving it in little boiling water. Make up to 3 gallo

old soft water. If the Vine foliage is ender, use 5 gallons of water instead. allons, again decreasing the amount of to 3 gallons later in the season. Try row your Vines as cool as you can next It will help you to fight the disease.

GREENHOUSE

on Carnations

sex).—This is far less dangerous than often supposed to be. It is not easily in fact, many growers do not trouble e it, as under good conditions plants out of it in the spring. Rust is a variety of causes. A fruitful origin sudden change of temperature either ot to cold or cold to hot. Damp, cold, entilated houses are, however, the frequent cause. If these conditions rected plants will grow out of rust, as It should not be forgotten, however, ust is almost certain to come on some s at this season of the year. Some s employ a mixture of equal propor- f flowers of sulphur mixed with slaked which mixture is blown under and over ants. This is an undoubted check to h fungoid diseases, although not an iate cure.

bug on greenhouse Asparagus

ld you kindly tell me what this is on Asparagus growing on the roof in the atory border? The underpart of the s seriously affected.

"IRISHWOMAN."

ur Asparagus is infected with mealy From the specimen you send, the in- on appears to be a bad one. When become so badly affected it is difficult n them. There are two methods of open to you. (1) Cut the plant down ground-level and let it break again. growth should be burned, and you make every effort to thoroughly clean nservatory before the plant is ready to again. The glass and woodwork be thoroughly scrubbed with carbolic nd water, and all the walls well lime- l. All other plants in the conserva- ould be examined, and if mealy bug is it should be removed to a frame or ouse, where it could be fumigated. the conservatory can be shut off from use you could fumigate it with nico- calcium cyanide. You would have to the fumigation several times before t the pest under control. After fumi- the Asparagus should be forcibly d the next morning with clean water. decide to cut the plant down, keep the n the dry side until it breaks again. would probably be the best time to lown.]

Tongue Fern

rner).—British Ferns frequently sport itish Fern growers are always on the t for them. When this occurs they description of the sport on to the name es on to the end of the name the Fern has. In this case we should think it be Scolopendrium vulgare laciniatum. g can be done to alter the Fern, and, ally, in this case we should not try to , as the foliage is very beautiful.

TREES AND SHRUBS

g Jasminum nudiflorum

M. C.).—This Jasmine flowers on the wood, and, if pruned too hard, a good of the blossoms would be cut away the cutting in were done immediately lowering. The best time to prune is the spring. By doing this and allow- e plant to have its own way, long flowering stems will be produced. In mild seasons it often flowers in December, but the usual time for it to bloom is from the beginning to the end of January. It should always have a warm, sunny aspect against a wall if possible. We should not hesitate to cut in your plant, reserving some of the young wood and fastening it loosely to the wall. Cuttings may be put into a cold frame at any time after flowering is over, taking them off the parent plant with a heel.

Rhododendrons for forcing

After flowering in the cool house in the spring of 1924, they were planted out, and have remained out until now. Will you please say when they should be repotted and brought in again for flowering?

RAY.

[The forcing of hardy shrubs in order to have them in bloom while their brethren out-of-doors are still dormant, has been of late years greatly on the increase. When the plants intended for forcing are planted out-of-doors, they should not be allowed to remain there till it is decided to take them under glass, but rather lift and pot them as soon as this can be safely done. If potting is delayed till the plants are about to be forced the flowers in some cases open badly, while many of them will drop much more quickly than those on established plants. Thus, where shrubs of different kinds are lifted from the open ground, this should be done directly the leaves fall, and potted at once the roots will have time to take a hold of the new soil before forcing. In potting, care must be taken to work the soil well around the roots, and give them a good watering. They must also, after this, be well supplied with water when necessary. A good plan is to plunge them in some material such as Cocoanut refuse or ashes, and should the weather be very severe the surface should be covered with dry leaves or long litter. As to the time they will flower, a great deal depends on the time you wish to have the plants in bloom.]

Clerodendron fœtidum

(J. Kennington).—In the open air this can hardly be regarded as a shrub. It is killed to the ground every winter, but sends up vigorous, erect shoots during the summer 3 feet to 6 feet high, bearing large heart-shaped leaves, each about 6 inches long and nearly as wide. In August and September the terminal rounded corymbs densely packed with purple-red blossoms appear. It has lived for many years at the bottom of a wall at Kew, spreading rapidly by its suckers and forming in the summer a mass of stems. The flowers are fragrant, but the leaves emit a nauseous odour. In southern gardens near the sea it grows 5 feet high and is handsome for the several weeks it is in bloom. We have seen some handsome specimens in the Isle of Wight flowering freely.

Dogwoods and Willows

Kindly inform me whether Dogwoods and Willows should be cut severely back. If so, at what time of the year? I have the following varieties, which I want for the colour of the stems when bare of leaves: Salix Britzensis, S. cardinalis, Cornus Flaveriana, and C. sanguinea. DARTMOOR.

[All the shrubs you mention are very handsome during the winter, and should not be cut back until the first week in April each year, when they should be cut down to within 6 inches of the ground.]

Blue Hydrangeas

(E. B. Robertson).—All Hydrangea blueing operations should commence in the summer, mid-July being the best time. Half an ounce to the gallon of water every other week, finishing at the fourth watering. As soon as the flower-buds appear in the following spring give the same treatment once a fortnight until flower-buds show colour, then stop.

Raising Hollies from seed

(A. Reid).—Being slow to germinate, the berries should be mixed with sand and made into a heap, which should be exposed for a year to all weathers and turned occasionally. This rots the outer covering and allows the seeds each fruit contains to separate. They are then sown, sand and seed together, in beds of fine soil made up for the purpose in the open, a few Hazel branches or some wire-netting being placed over them to prevent damage from birds.

Standard Hydrangeas

(A. Reid).—If it is Hydrangea paniculata you refer to, this is usually run up on a single stem until the desired height is reached —all side buds being removed—and then encouraged to form a head, which, under favourable conditions, it does very quickly. We do not know of any stock for grafting Hydrangeas upon.

Standards of variegated Privet

I want to grow standards of variegated Privet, and intend planting stems of ordinary common Privet and budding on them the variegated variety. A. REID.

[The stems for these should be planted in rows at 18 inches apart and encouraged to make three or four growths only. These should be reduced to half their length in July or August and the buds inserted at the same time and as near to the main stem as possible, in exactly the same manner as you would bud a standard Rose, future treatment being the same, care being taken to cut the bud-carrying shoot right back to the bud itself once the latter is growing freely. Ligustrum ovalifolium var. aureum is the best form of Golden Privet. You are probably aware that grafting is often resorted to for this purpose. It is quicker than budding, and should be carried out either in March or April.]

Pruning and the care of Lavender

When and how shall I prune Lavender bushes, so as to keep them compact and not straggly? M. L. C.

[The production of well-shaped, compact Lavender bushes is a matter which needs to be taken in hand very early in the life of the plants. Lavender bushes are best raised from cuttings taken off with a heel in September and struck in sand or sandy soil in a frame. The frame should be so arranged as to bring the cuttings near the glass, otherwise they will draw and become spindly. As soon as the cuttings have "struck" they will begin to grow. The top should then be pinched out. The following spring all the rooted cuttings should be planted out in a nursery bed about 6 inches apart, and in order to promote bushy compact growth they should be frequently pinched and not allowed to produce blossoms for two years. It is far better to sacrifice the first two years to the production of good stocky plants, which will live longer and preserve their compact appearance for 10 years or more, than to strive to obtain flowers quickly, thereby spoiling the shape of the bushes and shortening their life. The young Lavender plants may be planted out in their permanent quarters either in the autumn of the second year from striking the cuttings or in the following spring. It is undesirable to plant Lavender in the depth of winter, as the plants, being really of the temperate or sub-

tropical clan, are liable to injury and are particularly sensitive in the region of the roots.

It is such practice which accounts very often for the wilting and dying off of sections of the plants, which render them very unsightly, although there is also a very serious disease associated with wilting symptoms in Lavender plants.

The pruning of flowering Lavender bushes should be done immediately after the blooms have been removed. Commercial growers usually make one operation do for both harvesting the flowers and pruning. The flowers are cut with long stems, cutting well into the bush at their base. This will cause the production of a wealth of young shoots within a few weeks, and the compact close habit thus engendered will help the bushes to pass through the winter with less risk from frost damage. On no account should the bushes be touched in the spring, as steady growth must be maintained throughout early summer in order to ensure a good crop of flowers.

Where facilities exist for distilling the valuable oil from the flowers, from which "Lavender water" is produced, or where a market exists for fresh Lavender flowers, or dried Lavender, this crop is one of the most profitable and certainly one of the most fascinating that can be grown.]

FLOWER GARDEN

Lilies lifting

(C. F. L. F.).—Seeing your Lilies are in fairly good soil it would avail you nothing to lift them. If they are doing well it would be a pity to attempt moving them. We should advise you to lay over them a top-dressing of Cocoanut-fibre. When growth is starting in the spring a covering of well-decayed horse dung would be beneficial. The varieties you refer to we have had in a London suburban garden, the soil of which was very light with a subsoil of gravel.

VEGETABLES

Dwarf culinary Peas

Owing to the ravages of tits and sparrows I have for the last three years or four years only grown dwarf varieties of Peas, which have not been touched by any birds, but I have two faults to find with them. (1) Their germination, if sown either in boxes under cold frames or out-of-doors before the middle of March, is very unsatisfactory. (2) The haulm has each year, though grown on different ground, been devoured by small green caterpillars. Can anyone suggest an effectual remedy for the latter complaint? I have tried Katakilla, which I have always found most efficacious on other vegetation, but it does not appear to reach the caterpillars in Peas, they are so closely wrapped up in the flower-buds. I suppose the poor germination means that the dwarf varieties are not so hardy as the taller ones. I always moisten the seed with paraffin oil and roll it in red lead before sowing. My soil is a nice medium loam, and I lime it, in small quantities, after every crop. I shall be interested to hear if anyone else has had a similar experience to mine. THOS. ALDERSEY.

The Cottage, Shifnal, Salop.

[After duly considering the information supplied in our correspondent's note we fear the faulty germination complained of has arisen in consequence of the Peas having been dressed with red lead after moistening with paraffin. The latter alone is usually sufficient to deter mice and birds from devouring the seed. We can attribute it to nothing else because, according to our experience, there is no difference between the germinative powers of dwarf or any other class or type of Pea, provided the seed is obtained from a reliable source. With respect to the insect ravages it seems to us that, as the haulm has been devoured by caterpillars, and later that they are enclosed in the flower-buds, there must have been two distinct infestations, the former being in all likelihood the larva of the Silver Y Moth (Plucius-gamma), and the second that of either the Spotted or Striped Pea Weevil. The preparation named would be ineffective in the latter case, but we should have thought it would have killed the caterpillars. A remedy recommended is to spray with a 3 per cent. solution of nitrate of soda in moist weather, or otherwise moisten the ground beforehand. Frequent dustings of the foliage with a mixture of soot and lime are a good deterrent. The spreading of old sheets or strips of canvas smeared with tar on either side of the rows on fine, warm mornings and shaking the haulm over them will also dislodge and capture great numbers of the insects. As the garden is evidently much infested with insects we advise either a thorough dressing of lime now at the rate of 8 ozs. per square yard or to apply one of the advertised soil disinfectants according to directions given with it.]

MISCELLANEOUS

Medoc and Guienne patent secateurs

(Purley).—These secateurs which you have seen exhibited are supplied by Mr. C. A. Jardine, the inventor and patentee, 106, Sutton Court Road, Chiswick, W. 4. The steel cutting-blade is made of the best quality, and we are confident that you will find them very satisfactory for pruning fruit trees, Roses, and shrubs.

NAMES OF PLANTS

S. T. J., Argyllshire.—Elæagnus pungens aureo-variegata. The yellow colour of the leaf is always in the centre, but varies in size. It is liable to revert to the green type, and shoots showing this disposition should be cut away.

E. B. Robertson.—1, Pelargonium Maxime Kovalesky; 2, Decorator, a sport from King of Denmark.

Learner.—1, Chrysanthemum Pockett's Crimson, stop mid-May first bud; 2, Reginald Vallis, mid-May first bud; 3 and 4, Lady Talbot and E. M. Mease, stop mid-March for second crown; Pearce, crown bud.

D. M. Y.—1, Berberis subcaulialata; 2, B. Fortunei, a rare and tender shrub suitable only for mild districts; 3, B. Wilsonæ; 4, B. dictyophylla.

CATALOGUES RECEIVED

James and George H. Matthews, Harold Wood.—List of fertilisers.

Kelway and Son, Langport, Somerset.—Kelway's Gladioli.

W. Smith and Son, Aberdeen.—General catalogue of nursery stock.

Amos Perry, Enfield. — Empire-grown bulbs.

GARDENING APPOINTMENTS

Mr. T. H. BOLTON, formerly gardener to Capt. W. D. HALL, Gwernyfed Park, Three Cocks, Brecon, as gardener to MARION LADY STUCLEY, Hartland Abbey, Hartland, Devon.

Mr. B. JARRATT, formerly gardener to Mrs. D'ISNEY LEITH, North Court, Thorwell, Newport, Isle of Wight, as gardener to CECIL HANBURY, Esq., Kingston Maurward, Dorchester.

Mr. THOS. PRENTICE, formerly gardener to ARTHUR J. TAYLOR, Esq., Formby Hall, Formby, Lancs., as gardener to A. JOYNSON, Esq., Grove Hall, Capenhurst, Cheshire.

Horticultural Societies' N

Aberystwyth Chrysanthemum Soc

The 23rd annual show of the Aberys Chrysanthemum Society was held a Parish Hall on November 10th, and w great success. Considering the cold we in October and the shortage of firing i a surprise to see such fine blooms exhi Several of the usual prominent exhibit the open classes were unable to con owing to the shortage of fuel. Mr. A of the Bridgway Nurseries, was in fine and captured many of the chief p amongst which were the valuable silve for a group of plants given by the Pres the Countess of Lisburne. Mr. Austin won the 10-guinea cup given by Aberystwyth Corporation for 24 Japanes blooms, Mr. W. Hughes being second w good stand. The cup as first prize for m laneous group was also won by Mr. A A keen competition took place for a val cup given by T. D. Jenkins, Esq., of B Street, Aberystwyth, for cottagers and ment holders for six dishes of vegetabl be judged by points, which was won by Mary Jones, of Commins Coch.

Carnations were well shown, the E Lisburne being first and Mr. Austin se Dr. Roberts was first for a group of plants of Begonia Gloire de Lorraine a beautiful basket of single Chrysanthem Dr. Roberts also had a splendid exhib his well-known rare varieties of C pediums and other Orchids. Mr. Austin put up an extra group of Chrysanthem and 24 Japanese, which helped the show siderably. Fruit, especially Apples, very good, and there was keen compet the Earl of Lisburne winning for culin three dishes, and Miss J. Paith Morgan dessert, three dishes. Miss Morgan i amateur and won the first prize for desse that division, also for dish of Pears. amateurs and cottagers showed well through. The entries were more nume than ever. Mr. Llewellyn Hicks was successful in the amateurs. He is a man and an enthusiastic gardener as He won the medal given by GARDE ILLUSTRATED for the third time in succe for most points in the amateurs' divi He was first for a fine collection of vegeta in that division and second in the classes for collection of vegetables, the being won by Mr. H. Austin. E. Hin Esq. (Chairman), Mr. J. Paith Morgan ('s Chairman), Mr. H. Sheraton (Hon. S tary), and Mr. R. C. Williams (Secretary to be congratulated for their efforts in ge together and carrying out such a fine sh

LATE NOTE

Dianthus deltoides Brilliant

This is a delightful little plant, qui covering the ground with shoots from w spring numerous flower-stems, each bea a quantity of deep rosy flowers on st rising very little above the dense foliage. forms mossy tufts of the freshest green, few plants are so useful for carpets of gli ing verdure in winter. It thrives in the garden on the level ground or in fissures tween rocks closely packed with gritty so full sun. It is seen to the best advantag a somewhat raised position, so that its flowering shoots may fall freely down. excellent for the angles of steps in the garden, and where flagstones are usec make paths it is one of the plants that ca dotted about with pretty effect. This var possesses all the charm of D. deltoides, the flowers are richer and deeper in col The plant comes true from seed or it ma increased by cuttings. H. STEVEN

GARDENING ILLUSTRATED

2490—Vol. XLVIII. NOVEMBER 27, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

s parviflora ... 709
nts, the de-of 718
for keeping ... 712
a balearica alearic Sand- 716
the table—on Orchids ... 715
ANDBOOK FLOWERING EES AND RUBS FOR RDENERS" ... 715
the books ... 714
Books on the table—
"A Simple Guide to Rock Gardening" 714
"A Year in My Flower Garden" 715
"Carnations for Every Garden and Greenhouse" ... 715
"The English Flower Garden" 714
"The Gardener's Assistant" 714
"Winter Blossoms from the Outdoor Garden" 714
Barometer's big drop 722
Beech trees, insects on 721
Bruckenthalia spiculifolia 709
Delphinium seedlings, raising 712
Floral decorations, seasonable 713
FLOWERS IN POTTERY, CUT 713
Geranium argenteum purpureum 711
Greenhouse shaded by trees 721
Laurels, cutting back 721
Lawns, renovating exhausted 716
Obituary: Henry Woolman 722
Path, making an asphalt 722
Pears, grittiness in ... 712
Pelargoniums in winter, keeping 721
Perennial? What is a 716
PLANTS AT VINCENT SQUARE, MARKET 716
Potato disease, club root and 710
Plants, tastes in ... 710
Quince, the 712
Reading and District Gardeners' Association 722
RHODODENDRONS, AN AMATEUR'S ... 709
Rhododendrons, lichens on 721
Rhododendrons unhealthy 721
Rhubarb, forcing ... 718
ROSE TRIALS AT WISLEY, THE ... 710
Scabiosa Parnassi ... 716
Schizostylis coccinea 712
Sempervivum calcareum 710
Shrubs, hardy, pruning 720
Tamarisk, cutting down 721
Tamarix 720
Trees and shrubs, transplanting 720
TROLLIUS LEDEBOURI 718
Viola biflora 718
Woodlice, leaf miner, and caterpillars ... 712

An Amateur's Rhododendrons

IINK there are possessors of either a ll or large garden who would like to them beautiful, but who either do not ıow to make them so or are unable to much money upon them. At a very :ost, however, they might have a garıre interesting and beautiful than the s of many large places where they are up" in an expensive, gaudy, and uninteresting way.

y have little idea how beautiful the Rhododendrons are, or how varied ılours, from darkest crimson, brightest the loveliest shades of rose and pink, and creams, some almost self, and blotched with brown or yellow. Anyo has a long border could plant a row e at the back of it, at about 2 yards ınd if they were procured from a good garden, as they certainly ought to te nice, bushy flowering plants would for about five shillings each. At first ɔuld make very little show, but many n would have ıl trusses of on them at lowering sea-ıd as a collec-ıey would be ing from the The more so, cause so few have a collec-f Rhododen-and it would ıly improbable was another re in the ourhood. time this row hododendrons be a really sight, and grow more than is gener-ɔposed. As to , if you have aturally peaty d you can afford it, there is no doubt endrons like peat, and it would assist you added some to that part of the n which they will root. If, however, ıy good flowering, strong-growing they will grow and flower quite well peat, though I am sure they prefer a il (and some old manure added to it with). They grow in a heavy one, anted in a soil which is not peaty one strongly advise—buy them from some nan who grows his plants in ordinary soil without peat in it.

So much depends upon their being well rooted. Some fine kinds are straggling growers, others hardly flower at all, and some have very little constitution, and even with the best of treatment hardly condescend to either grow or flower at all. On the other hand, there are scores which flower and grow as well as one could desire.

There is no way so likely to bring disaster and disappointment as by making a selection at shows, where the plants have been grown especially for exhibition and have had exceptional treatment. A great many people are led into this mistake by the beauty of the flowers they see, but "once bit twice shy," and when I want a collection of any special plant or shrub no shows or catalogues for me! One may see new kinds at the shows and feel interested in them, but take my advice and see those kinds after they have been grown under ordinary circumstances before you purchase them yourself.

Very suitable subjects to plant under the Rhododendrons would be Tufted Pansies, one kind in each bed. And of these for this purpose I recommend Archibald Grant, Duchess of Sutherland, Ardwell Gem, and William Neil.

London Pride is another thing which answers well for this purpose, covers the ground, and looks light and pretty when in bloom. But, if London Pride was used, I should underplant with Snowdrops, Scillas, early Tulips, Grape Hyacinths, Crocuses, and small-growing, early spring-flowering bulbs; and I should keep one kind of bulb in one bed, and another in another. (Indeed, if these beds were mine, I should have them all full of Crocuses or early Tulips, one named kind in each bed, as, personally, I prefer a collection of one thing to a patch here and there of many things. But this is entirely a matter of taste, and either way would really succeed equally well.)

M. J.

(To be continued.)

Rhododendrons under the partial shade of Oak trees

A good effect is produced by planting Rhododendron Pink Pearl in a bold group on sloping ground

NOTES OF THE WEEK

Bruckenthalia spiculifolia

I DO not claim that Bruckenthalia spiculifolia is rare, but it is not commonly met with—even in gardens where Heaths are favoured. At first sight the plant may readily be mistaken for one of the Ericas, but closer inspection reveals that there is a more quadrangular arrangement of the branches, which, nevertheless, are, like the Heaths, compact, spreading, and bushy. The blooms are of a pale purple shade produced on stems rarely more than 6 inches in height. B. spiculifolia will succeed where the Heath family flourishes; and it prefers a rather dry and elevated situation—indeed, such a situation is essential during winter.

W. McG.

Æsculus parviflora

During August, when most shrubs have shed their blossoms, this shrub is covered with its upright panicles of creamy-white

flowers. The dark green foliage provides a pleasant setting to the delicately-coloured blossoms, while the long crimson stamens rise vertically and give the individual blossom a feathery appearance. As a rule, the plants require little pruning beyond the removal of weak shoots, for they dispose themselves in a graceful manner, and in favourable situations will spread into a bush from 8 feet to 10 feet high. In the front of a shrubbery, where the slender branches can grow at will, this shrub is seen to the best advantage.

H. S.

Sempervivum calcareum

This is a noble species, and distinct in rich metallic hue. The leaves are very solid and fleshy, and closely packed, the large rosette pale green, tipped with red. The flowers rise erect from the dense tuft of leaves. It is worthy of a place on the rock garden in some arid position where a plant of great endurance is required, for it will withstand heat and drought with impunity. In winter it may exist on the level ground, but its true position is on old walls in some earthy or mossy chink. The rosettes look as fresh and vigorous when emerging from some dry chink where a drop of water seldom falls upon them as when planted in good open soil in raised beds. It will grow on almost earthless mossy rocks, provided a handful of finely-broken stone is placed about the plants. The plant is best increased by side shoots, which are numerous when the plant is happy.

H. Stevens.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Tastes in plants

On p. 667 (November 6th issue) Col. A. H. Wolley-Dod has some interesting remarks regarding the differences of opinion he has observed among amateurs regarding the descriptions of plants. I, too, have on many occasions suffered from accepting the glowing eulogies of acquaintances concerning varieties that I have been unable to see for myself before purchasing. Of course, tastes differ tremendously, and, so far as I have been able to discover, no amount of trying will really alter one's natural likes or dislikes to certain colours and forms. I know several people who cordially dislike the colour of the famous "Daily Mail" Rose (Mme. E. Herriot), while others consider this the most beautiful of all Roses. Personally I am not particularly fond of it, but, on the other hand, do not, actually, dislike it. I prefer the softer and more delicate tints, and would instance Mme. Melanie Soupert as the most lovely of all Roses, and yet I also greatly admire the brilliant red of Colonel Oswald Fitzgerald and the vivid salmon-pink of Betty Uprichard. Besides the wide differences of taste, as regards colour, there is always the difference caused by soil, culture, and climate, which, of course, we can do but little to change.

As a rule, the soil and climate here give very vivid colouring to such things as Polyanthuses, Delphiniums, Roses, Chrysanthemums, Dahlias, Violas, Pentstemons, and others with flowers of similar shades, while Sweet Peas, for some reason, do not produce such clear and bright tones as are seen elsewhere. Phloxes, too, colour poorly in this district, but one could not condemn them, as a whole, for this, seeing they succeed so well in other localities.

Col. Wolley-Dod's advice to beginners, and I would add to older gardeners, to try to see plants growing before procuring them for their own gardens, is entirely sound, and if always acted on would save much disappointment or annoyance. Those of us, however, who desire to keep well up-to-date with any particular class of plant experience considerable difficulty in following this method, as it is not everyone who can manage to see the plants they are interested in grow in the ordinary way in private gardens, and there is even considerable trouble, usually, in seeing them in a nursery. To overcome, in some degree, this disadvantage, I have hit on the plan of procuring a single plant, or at most two, of a new variety seen at shows or recommended by friends, and am able thus to judge of the suitability or otherwise of such without wasting much space. Later, the unsuitable plant may be destroyed or given away, while the one that gives satisfaction can be increased to any extent desired.

Preston House, Linlithgow. C. Blair.

Club root and Potato disease

Preventives of and possible remedies for these two fungoid diseases are frequently dealt with in the pages of gardening publications. It is generally recommended that crops of Potatoes should not be grown on the same plots in successive years, and growers are naturally warned against planting any variety of Brassica in ground which is proved to contain the fungus (Plasmodiophora brassicæ) of "club" or "finger and toe" disease. Any relation between that and the Potato disease (Phytophthora infestans) may be, to the mind of the expert mycologist, impossible. That being the fact it may be accepted at once, and any such relationship be thus disposed of. But the customary alternate planting of crops of Brassicas and Potatoes in the same plot has led me to ask whether or not it is possible for Phytophthora infestans to give birth to Plasmodiophora brassicæ? That is to say, is it conceivably possible that by some transformation of the fungoid virus of the Potato disease after admittance into the soil by diseased haulm or leaves getting into it such a process would create the existence of the fungus of root? This has been suggested to me b identity of the smell of both the fungi, on the root of the Cabbage or Broccol that of the diseased haulm of the Potato the alternating crops referred to, a plot which Potatoes were grown last year suffered from disease to some extent ha come unaccountably infected with clu disease this year. No imported manu soil has been brought into the ground, for many years has been fertilised solely fowl manure (with peat litter) obtaine the spot. It has also had periodical dres of lime. At any rate, the effect of bac logical developments, possible in va physiological applications, may hav counterpart in the unsuspected action o bacteria of one distinct fungoid diseas veloping, in contact with soil, a diff disease in the physiology of other plants

[The life histories of both the par organisms are now well known, and, from this fact, there is nowhere the slig suspicion of the two being connected. chief reason for dismissing the possibil that they belong to different group organisms. Phytophthora infestans, causes Potato blight, is a characte fungus parasite producing air-borne sp while Plasmodiophora brassicæ, which c club-root, belongs to the Myxomycete group of organisms well separated from fungi and, according to some authorities, side the vegetable kingdom altogether, more resembling low forms of animal The spores of this organism creep abo the soil and enter the host plants throug tender root hairs. By multiplying enorm in the cells of the plant the well-kn cancer-like growths and distortions ar duced, but ultimately the attacked plant up the battle and becomes a rotten, offe mass of putrefaction. It is quite pos that the smell of Potato blight and club may resemble one another, but it mus remembered that the odour is that of p faction set up by the activity of the dis organisms and not of the organisms t selves. The decaying vegetable ma whether it be of Potato or Turnip or would doubtless possess similar od Apart from this, however, there is not known to connect the two parasites w carry on a warfare against our crops eac its own way, often with calamitous resul Ed.]

The Rose Trials at Wisley

A fearless and outspoken criticism of the Rose Trials in the Royal Horticultural Society's Gardens at Wisley, Surrey

When, some three years or four years ago it was announced that the Royal Horticultural Society was considering the holding of Rose Trials at Wisley, and that there was the possibility of collaboration with the National Rose Society, it was felt that a great want was at length to be supplied. Trial Gardens for Roses had successfully been established in other countries; England, whose national flower is the Rose, had none. Every enthusiastic Rosarian felt proud that the greatest horticultural society of the world had, at last, taken the Rose in hand, and there was reason to believe that the Trials would be carried out and managed in accordance with the high traditions one associates with the Royal Horticultural Society. Wisley was, or should have been, the Mecca of every ardent horticulturist. Money has been spent on it in a prodigal manner; the leading scientists in botanical and horticultural knowledge were attracted to the scheme in connection with the development of the Gardens; an eminent Director of undoubted ability was engaged and place command. Lovers of the Rose had e reason to hope that, at last, Roses w have a fair trial in the land that had r them peculiarly her own. A test garden to be established under the most influe and powerful horticultural society in world in its great grounds at Wisley. Su one hoped, the Rose would have justice to it there.

After certain meetings it was evident the Royal Horticultural Society and National Rose Society could not agree certain details, and it was announced the latter would not participate. That a great pity, but the reputation of the R Horticultural Society was so high that it felt that the Trials would be quite safe u the control of its Garden Committee. Chairman—who retired last year owin personal circumstances—was a gentlema proven experience, and his presence on Committee was a certain guarantee things would be done well. Land was s

ROSES AND ROSES

That Roses may be grown well at Wisley is borne out by this illustration of the Rose beds near the main gates. These Roses have been the source of pleasure to many visitors

acquired for the Trials; raisers and interested were, in due course, invited tribute plants of old and new varieties ltivation and observation; a panel of s was appointed, and everything seemed ler. There was a most gratifying re- to the request for plants, and a repre- ive collection marked the initiation of Visley Rose Trials.

writer of these notes has been in touch he Trials from the commencement. It arly evident that something was wrong e management. I am not concerned he administration of Wisley, but I do d that one expected more in the way of cal husbandry there than has been ap- in the Rose Trials. I think one may that there is more of the spiritual than ecular in the control of the Gardens. at as it may, the Rose Trials are not ctory. They have been, for the most a failure so far. I content myself, in eantime, with putting it in that way, need not repeat the adverse comments riticism I have heard from others in espect.

t year, for example, early in the season s evident that Black Spot was threaten- devastate many of the bushes. It ly did so. Why, it may be asked in all ity, was this allowed to happen? That uld occur at Wisley, of all places, with éat traditions and its reputation for ultural science and practice of the high- rder, is all the more deplorable and .. Rosarians believed and hoped that ation in these great Gardens would been an example to be copied and fol- by everyone. There is no excuse for Spot in any Rose garden controlled by dern gardener who knows his craft. It ply lamentable that it should have been allowed to work havoc amongst the Trial Roses at Wisley.

But that is not all. I need not dilate upon the appearance of the Rose beds and the condition of many of the plants. That is well known, and there has been no improvement this year. There has been bad cultivation; that is only too evident to the practical observer. To begin with, I think, the plants have been starved.

Awards have been made to several Roses that survived the conditions at Wisley and were actually in a more or less presentable condition to be judged, and, one is constrained to ask, is this fair in the circumstances? Roses that we know are splendid acquisitions to any garden—old and well-tried favourites—have received no recognition. In many cases they stand in the beds gaunt spectres of poverty, disease, and wretched cultural conditions. At the end of September of this year of grace the Trial Rose beds at Wisley were an awful example of the cultivation of the Rose. Something has gone wrong somewhere. Who is to blame?

Under the circumstances I think that the Wisley Committee should have taken the matter firmly in hand and stated frankly and publicly that the Trials had not been a success. That would have been fair to the Roses, to Rose raisers, and to those who grow Roses. I repeat that many good varieties have never had a chance. It is most regrettable that the Trials should have been so badly done. Such Trials were never expected at the hands of a great concern like the Royal Horticultural Society, and its Council cannot for the sake of the high standing and reputation of the Society permit such things to go on. With the money expended upon Wisley, with all its expensive and vast equipments, with all its costly science, horticulturists naturally looked there for an expression of their craft at its highest and most perfect practice. The Rose Trials call for and require the closest investigation at the hands of the Council of the Society. The society cannot afford, however influential and powerful, for its own dignity and standing, to allow such Trials to proceed. Awards under such conditions are worthless.

Roses can be grown at Wisley. One has only to inspect the beds in the older gardens near the main entrance gates to prove this statement. Contrast these with the beds in the Trial plots in the new ground. What is wrong and who is responsible?

ROSARIAN.

Geranium argenteum purpureum

I am glad Mr. Elliott has replied to my criticism of his notes on the sporting of the above plant. If, as he now surmises, the plant in question is a hybrid I am entirely with him, and agree that such sporting is well within the means of possibility; but, even so, it is more usual, I believe, for a portion of the plant to change, generally a branch or two, from which material the sport can be propagated and thus furnish a new variety for the garden.

Mr. Elliott asks who introduced Geranium argenteum purpureum. If my memory serves me right, Sir Joslyn Gore-Booth had in his notable garden in Ireland a variation from Geranium argenteum which he called, for distinguishing purposes, Geranium argenteum No. 2. I know I procured this from him and found it identical with a plant of Geranium argenteum purpureum, which, curiously enough, I obtained from a friend who at that time had a somewhat famous

garden in Ireland, too, and in the same county. I should not be at all surprised if Sir Joslyn could shed light on the question of origin of this deeply-coloured form that has now started to sport in Mr. Elliott's garden.

It is just possible that the plant was collected by Sir Joslyn during his tour of the Balkans, and it would, no doubt, interest many lovers of hardy plants if Sir Joslyn would, through the columns of GARDENING ILLUSTRATED, enlighten us on this point. I for one should be very grateful to him.

WALTER INGWERSEN.

—— There has been some very interesting correspondence about this plant lately in GARDENING ILLUSTRATED, and perhaps I can help Mr. Elliott on one or two points.

As regards its origin, I believe it was first sent out by Lissadell Nursery about 1912. Mr. Elliott suggests that it may be a hybrid and not a colour variation. My experience in raising seedlings does not support the view of hybrid origin. In 1924 I had a plant growing on a dry bank from which I saved seed. All the seedlings—about two dozen—flowered this year, and all, without exception, were typical argenteum with silvery deeply-divided leaves and lilac-pink flowers. As, when the seed was collected, I had no typical argenteum in the garden, this supports the theory of a colour variation which does not breed true.

E. B. ANDERSON.

Hemyock, Devon.

Raising Delphinium seedlings

Re "The Cultivation of Delphiniums." In your issue dated November 6th your contributor "D.'s" remarks upon the raising of seedling Delphiniums leads me to suggest that his methods are not quite the same as mine, otherwise he would have a different tale to tell. My experience is that if the seed is sown indoors in March in boxes of fairly light soil and treated exactly as Asters or Stocks good results will accrue.

Let me quote my experience this year. I purchased a shilling packet of Sutton's Hybrids, and sowed them thinly in two boxes in April (as I have not much glass and I had no room until some of the bedding plants were placed into frames). In exactly 11 days the seedlings began to appear. In the early part of May these seedlings had their rough leaves, and they were pricked off into four boxes of similar soil, though, perhaps, not so much sand was used. These were eventually hardened off and planted 1 foot apart at the end of July on a well-manured south border where early Potatoes had been grown. Out of 189 plants about 100 have flowered this year. I have carefully noted the blooms and labelled the plants, and there is not one that I shall discard. Single, semi-double, and double flowers in many shades of blue are represented, and some of them are, in my opinion, equal or even better than some varieties catalogued at 5s. each.

Three years ago I had plants with as many as 19 spikes of flowers from seed sown in February of the previous year.

If "D." would like a plant of this year's raising I shall be pleased to send him one (or a dozen), and trust that by adopting my methods he will not in future have to "wait over a year" before his seedlings appear.

ROBERT E. POTTER.

Marnahill, Wantage, Berks.

Grittiness in Pears

That some very fine Pears are, at times, marred by grittiness is well known, but I was surprised to learn from the note over the initials "L. A. L." (p. 684) that Doyenné du Comice is among the offenders. I have grown the variety for many years, but I have never found its excellence marred by grit. Glou Morceau, however, is a confirmed defaulter—a pity, for it is a magnificent Pear when free from this defect. Sometimes, but rarely, I have known Beurré Hardy and Easter Beurré to be gritty. At one time I had a theory that the absence of lime in the soil was, at least, a contributory cause, but I have long abandoned that idea. Imperfect ripening or, perhaps, unequal ripening may have something to do with the matter. Too early gathering and storing in an unsuitable place may also, to some extent, be responsible. The subject is one which might profitably be discussed in GARDENING ILLUSTRATED by those who take an interest in the Pear.

W. McG.

Destroying woodlice, leaf miner, and caterpillars

Some few weeks ago there appeared in the columns of your valuable paper, GARDENING ILLUSTRATED, an article by a contributor on destroying woodlice by using phosphonicotyle, supplied by Messrs. W. Voss and Co., the well-known horticultural chemists. I now wish to add my testimony to his by saying that, after using the above preparation, I see very few of these pests. It is certainly a valuable remedy.

Another remedy I have tried for that well-known pest, the leaf miner, is Richard's XL All leaf miner insecticide. It is the best preventive I have met with. We often hear complaints of caterpillar on Gooseberry bushes. I think if people would use Katakilla they would be saved a good deal of trouble and worry in that direction. Any reliable nurseryman will supply any of the above remedies.

C. F.

Near Scarborough.

Schizostylis coccinea

In the middle of November, and after 17 degs. of frost, it is surprising to see Schizostylis coccinea in good order at the foot of a west wall. It is true that the foliage is a trifle weatherbeaten, but the flowers are good. (I generally find, about this time, some blooms of the Algerian Iris (I. stylosa), but there are not any this year up to their usual time.) S. coccinea can be highly recommended for pots in the cool or unheated greenhouse—in such a place the blooms are clearer and cleaner than those out-of-doors.

A SCOTTISH GARDENER.

FRUIT GARDEN

Apples for keeping

A good word for old varieties

IN looking over the stock of these towards December one is inclined to ask, Where are those huge specimens that occupied the shelves some time ago? Fortunately, however, there are others still remaining that remind us of the past, and amongst these may be mentioned Lane's Prince Albert. This Apple is as sound now as when gathered from the trees, and though it does not possess that enticing colour to be found in some others, it is nevertheless one of the best that we have, taking it all round. Hanwell Souring will compare favourably with many others, though perhaps the name is against it. To my mind this should be classed amongst the best keeping Apples we have. It certainly is one of the most reliable for cropping, for during the last 18 years the trees have never failed to bear a crop, though in some seasons the yield is heavier than in others. Wellington is again first-class, and should occupy a place in every garden, and the same can be said of Annie Elizabeth, one of the best of all late-keeping Apples. Baumann's Red Reinette is a good cropper, the fruit of splendid colour; it is as sound now as when gathered. Hambledon deux ans is certainly one of the best long-keeping A we have, and at the same time a good co This variety is much grown in some o midland counties, and where it does there is not a more profitable Apple t found.

Then, again, there is that good old va Alfriston. Though on stiff, cold soils trees are apt to canker, it is nevertheless worthy of a place in all gardens. York Greening is also one of those that oug command a place in our orchards, for th the tree has a somewhat rambling hab may be kept within bounds without u pruning. Norfolk Beaufin may not be o the most prolific, but it is certainly o the best keepers we have, and on that acc should be accorded a place in every pr collection. Neither should we by any m neglect to plant such old favourites Northern Greening and French Crab, though there may be others with a showy appearance, there are certainly that are more useful in the kitchen du April and the early part of May. We are apt to plant Apples and Pears for their appearance, but it should be remembered fine fruit in October and November will prevent complaints after Christmas if t be no supplies forthcoming.

The Quince

The Quince as a fruit-bearing subjec more generally found in the southern p of the country than elsewhere; but it w without doubt succeed equally as wel other parts, or where the Apple and flourisn if it were only more gene planted. In some parts of Kent Qu trees are numerous; they both grow and well, and the fruits are disposed of wit difficulty and at good prices. The Qu prefers a damp, rich soil, and is for reason often planted in close proximity water. It will also grow and bear satis torily when planted in a good, holdi loamy soil. On a clay medium it will m fairly good growth, but then bears, as a r but sparsely. The situation must in any be open, so that the trees may experience the sunlight possible, to enable them bring their crops to perfection. The t are best grown in the form of a standa whether as a lawn subject or in the orch and garden. When suitable positions be found, the Quince proves very effec when employed for the first-named purpo If allowed to grow unrestrained, it form round-headed tree, and the lower branc in time assume a pendulous habit. W cultivated for the sake of the fruits, so pruning—more particularly in the ea stages of growth, is then necessary. It then needful to keep the wood in the he thinned out somewhat similar to that o Plum tree, spurring back superfluous sho to four or five buds. Once the head formed, and the trees commence bearing, little further attention beyond periodi thinning and the cutting out of dead wo is requisite. Some people never prune trees at all, but if the soil and situation good, the heads will soon be encumbered w a quantity of useless growth.

The three chief varieties grown are Apple and Pear-shaped and the Portug The two first-named are very producti but the last is more shy. The Pear-shap variety is that most frequently seen in chards, and makes the best specimen t for a lawn. In regard to the time of mat ing, this occurs in the order in which t varieties are named above. The fruits a used principally for jelly-making. They a sometimes called for to mix with Apples the making of tarts, the flavour imparted the Quince being much appreciated by son

Autumn flowers in a Majolica drug pot

Chrysanthemums and Stephanandra in grey stoneware

CUT FLOWERS IN POTTERY

THOUGH flowers are always beautiful in clear glass, yet if one happens to have a number of receptacles of foreign wares it is tempting to use them, especially for the rather bold flowers of the late summer. Among such treasures are some large jars of Italian majolica; the ground is a white glaze with belts of painted ornaments of a pale, low-toned blue. The inscription is in a thin blackish-purple. They were evidently chemists' drug jars; probably the one in the picture belonged to the pharmacy of some monastic establishment, because on the reverse side the running ornament takes the form of an upright ellipse encircling the full length figure of a saint, who carries the emblems of a book and a pastoral staff. Although when new the glaze was no doubt strong enough to hold a considerable bulk of a liquid preparation, it would be rash to trust it after a lifetime of from 200 years to 300 years. In the case of the one shown it was fitted with a cylinder of zinc for holding water of such diameter as would pass easily into the mouth, so that no water actually touches the glaze. Those useful flowers for cutting, the white and pale pink Star Dahlias, look well in this jar with flower and foliage of Polygonum molle and the shorter-growing P. campanulatum.

The other picture shows hardy Chrysanthemums, bronze and reddish, with some small branches of Stephanandra flexuosa. This pretty bush is desirable among any choice shrubs. It is attractive at all seasons, with its clear-cut small leaves and gracefully arching branches. The leaves have a way of turning to a reddish colour in the middle summer, some weeks before any other foliage turns colour as a foreboding of autumn. The jar they are in is of that capital hard stoneware known as Grès de Flandre. The ground colour is a pale slaty-grey, with a rather coarsely-painted ornament in dull blue. It is absolutely trustworthy for holding water. G. J.

Seasonable Floral Decorations

'RAYS of the handsome winter-flowering limber Jasminum nudiflorum associate vell with the dark bronzy foliage of eris Aquifolium. A few blooms of China s which continue to open are very useful is end of the season. Chrysanthemums l colours and sizes can still be had in dance, and therefore they should be ly employed in floral arrangements. they are cut they absorb a quantity of r, a circumstance to which attention ld be paid. The vases should be emptied refilled at least twice a week. When is done, the stems should have a trifle ff them, and then be rearranged. Some e very finest flowers look well placed y in specimen glasses, and the Pompones e good coat flowers with the addition of a leaf or two of scented or Oak-leaf Geranium. Occasional stray blooms from Tea-scented Roses in pots, Niphetos, or Mme. Falcot in particular make beautiful buttonhole flowers, more attractive, if possible, at this season of the year than at any other. Of Bouvardias, two of the best and most durable for this work are Vreelandi (white) and Hogarth or elegans (scarlet). About three flowers of Calanthe vestita rosea carefully wired will make a handsome buttonhole; so will one small spray of Euphorbia jacquiniæflora, with its own foliage, a small spike of white Roman Hyacinth being added thereto. Blossoms of Gardenia intermedia likewise make choice coat flowers. Its own foliage should now be used instead of Fern fronds. For the drawing-room an effective arrangement may be made just now with the following subjects. Let us suppose the stand to be filled has one tall cornucopia, with three smaller ones as branches near the base. For the topmost glass use spikes of Salvia splendens and white Roman Hyacinth, with a fringe of Maiden-hair Fern and two or three rather long growths of Myrsiphyllum asparagoides trailing below. In the lower glasses place bunches of Violets or choice bits of Orchids, adding a few Fern fronds.

Among plants that may be advantageously used just now in the house the following will be found serviceable—viz., Pandanus Veitchi, small well-coloured plants of Crotons and Dracænas for the dinner-table, and Ficus elastica, Curculigo recurvata, and Dracæna rubra for the drawing-room or entrance-hall. All these plants will stand well where gas is burned, if ordinary precautions are taken and they are changed every few days.

BOOKS ON THE TABLE

Short reviews of recent books

Among the books

THE flowery souvenirs that reach the Editor daily from gardens all over the country have become fewer this month, but garden books bright with illustrations and colour dispel the gloom, and we visualise the gardens that will be blooming again ere long. Indeed, one most welcome book has cheered us with the tale of the flowers to be culled from the garden all through the winter. This is "Winter Blossoms from the Garden," by A. W. Darnell, an attractive subject and a book to possess just now when planning and planting for a more prolonged flowering season. May it have the wide circulation it deserves.

"The Gardens of Good Hope"—the very title has an irresistible appeal—is a book from that eternal spring, the fountpen of Mrs. Marion Cran, who here, in delightfully blended text and illustration, portrays for us the art of the gardener in South Africa. This author brings to her every subject not only a fresh outlook and charm, but wisdom from a storehouse of rich and practical experience.

The Special Winter number of "The Studio" is one that no garden lover should miss, for its subject is "Modern Gardens," and it is a production beautifully illustrated in colour, tone, and line; well up to the standard we expect from these publishers. The gardens of Austria, Denmark, France, Germany, Great Britain, Italy, Sweden, United States, and Japan are represented, and besides many famous gardens on the grand scale are included many choice examples of moderate size which should prove an inspiration to the average garden owner. Mr. Percy S. Cane is responsible for the introductory essay in which he has captured very happily for us the peculiarities and charms of gardening in these various countries. The book is a work of art and costs no more than a novel. Our readers are familiar with Mr. J. G. Gibson's writings on Carnations in our pages. Many will have introduced into their gardens at least a few of the numerous varieties he has introduced to cultivation. His book, "Carnations for Amateurs," just published, will appeal to every grower of these plants, for much practical advice is given in this well-illustrated volume. Mr. Gibson writes not only with authority, but with enthusiasm, and this is but one more of his many services to the cult of the Carnation.

Mawsons' "The Art and Craft of Garden Making" is well known to every student of garden design. A fifth edition of the work, revised, much enlarged, and brought right up to date, ought to be in the library of all landscapists, architects, and others connected with the making of new gardens. Its chapters cover every aspect of garden design and are richly illustrated from many of the best examples of the art. The publication of the book leaves nothing to be desired, and is worthy of its great subject.

F. Kingdon Ward is far away "somewhere in Tibet" tracking new flora for our gardens, but his book, "The Riddle of the Tsangpo Gorge," is here for those who like to "sit down and travel." This author's books do something to fill the gap since Farrer for those who like flower books spiced with adventure.

A modest but useful little book is "Aspidistras and Other Home Plants," by Cyril Harding, the first of a shilling series for beginners. Foyle's latest list (No. 5/278) contains many bargains in new and old gardening literature.

"The Gardener's Assistant"*

REFERENCE has been made in earlier issues to the merits of "The Gardener's Assistant." So excellent is this work that it is safe to say that we shall have occasion to refer to it again and again in future issues. We are constantly being asked, especially by professional gardeners, for a comprehensive work on gardening that will embrace all phases of the art. Here, then, is a great work that answers the purpose. It is published in six volumes. It was edited by that good plantsman, the late William Watson, Curator of the Royal Gardens, Kew. Mr. Watson did not write the whole of the last edition, but he secured the assistance of leaders in the world of professional gardeners, and with the assistance of a fine team of workers he produced this splendid and comprehensive work on gardening. The names of the contributors are a sure warrant of the trustworthiness of the information which these writers severally impart:—Edwin Beckett on the kitchen garden, James Hudson on fruits, J. O'Brien on Orchids, A. Ward on Vines, Webster on bedding and sub-tropical gardens, W. J. Bean on transplanting, and Professor Sir Frederick W. Keeble on botany for gardeners. Every page is from the pen of one of these or other names no less distinguished.

We regard it as the soundest and best general guide to practical gardening published in our time. Without it the gardener's bookshelf would be incomplete.

"The English Flower Garden"†

The fourteenth edition of a book on gardening is sufficient testimony as to its worth and continued popularity.

This is the position of "The English Flower Garden" to-day, whose author, Mr. William Robinson, places before us a work that is now regarded as a classic, and found on the shelves of all gardeners' libraries. Enlarged by the addition of four chapters, it is of the utmost service to the professional gardener. It is a mine of wealth to the amateur, be he the veriest tyro, inasmuch as it is couched in language, plain and unmistakable, that he who runs may read and understand.

We have in the book some 40 chapters devoted to all phases of hardy trees and flowers, comprehensive in their scope, ranging from the planting of a border for the best effects over the longest time to the selecting of evergreen trees and shrubs, and the best position for them; the planting of bulbous roots; a chapter on colour in the flower garden, bog, and water gardens; the Rose garden and the orchard beautiful.

The information given to the reader is culled from the book of the author's wide and practical experience gained through many years. The letterpress is good, and the many illustrations are excellent. Some of them are taken from his own garden at Gravetye, and from them one is able to form an idea of its beauty and extent. Altogether it is a book that a garden-lover will be loth to put down, once he has delved into its pages, and we can conceive of no more delightful present to anyone interested in a garden and all that it means, where hardy plants are grown, than a copy of "The English Flower Garden."

*"The Gardener's Assistant," by William Watson, in 6 Vols. With preface by Professor Sir Frederick W. Keeble, C.B E., F.R.S., and many specialist contributions. Published by the Gresham Publishing Co., Ltd., London.

† 'The English Flower Garden," by William Robinson. Fourteenth Edition, revised and enlarged. Published by John Murray; 24s. net.

"A Simple Guide to Rock Gardening"*

The author of this little book is an thusiast. Accordingly, he overstates his in his introduction. His very first sente "Of all forms of gardening, that dea with rock garden plants is rapidly assur the premier place," caused me to raise eyebrows somewhat, while a little furthe I positively laughed aloud. "There is branch of horticulture so absolutely suite the needs of all classes, both old and yo rich and poor," I read. But come, James L. Cotter, is not my dinner ra prominent among my needs, and am I n likely to find it in my kitchen garden o your rock garden? Reflect upon that pe and you must needs be convinced that in sentence quoted you have in all good f perpetrated some of the most arrant nons imaginable!

The author must, however, be congr lated on producing a useful book. A g many people do desire a small rock gar and without some such guide very often t ideas on how to set about producing it all wrong. Here we have just the book help them. "First Steps in Rock Gar ing" would not have been a bad alterna title, as there are a number of gardeners would find this little work too brief and elementary to satisfy them. I predict a c siderable sale for it. Some illustrati (especially diagrams) would enhance its fulness, but there are not many publish nowadays who give us even as good hal crown's worth as we have here.

ARTHUR GARNET

"Winter blossoms from the o door garden"†

This is a book of some 300 pages, desc ing in alphabetical order trees and shr and herbaceous plants that flower in the door garden in the British Isles during months of December, January, and Februa and is intended as a guide for the amat gardener. It is claimed for the work tha is unique owing to its being the only one its character setting forth the culture plants that are sufficiently hardy, with slight protection, to supply an abundance blossoms for cutting during the dull win months.

There are eight chromo-litho and 16 coloured illustrations. The letterpress is plain bold type, easy to read. The author an introduction, points out that, apart fr the Winter Jasmine, Christmas Roses, a Laurustinus, comparatively few other win blossoming plants are to be seen out-of-doo

The book is the outcome of notes m over a period of many years, and the c tention of the writer is that, given shelter warm soil, and a normal season, the small suburban garden may be made to yi sheaves of beautiful blossoms for table a room decoration throughout our win months.

He describes in detail the habits of ma shrubs, together with the colour of flowers and approximate time of bloom and propagation, and devotes much space bulbous-rooted subjects like Crocus speci Irises, as represented by reticulata, persi and stylosa, Eranthis (Winter Aconite),

*"A Simple Guide to Rock Gardening, by Sir James Cotter. Price, 2s. 6d. The Sheldon Press, Northumberla Avenue, W.C. 1926.

† "Winter Blossoms from the Outdoor Garden," by A. Darnell. Published by L. Reeve and Co., Ltd.; 21s. net

r Cyclamens, such as alpinum, Coum, græcum, Snowdrops and their several s, Scillas, Chionodoxas, and Narcissi. ones, too, are deservedly given place the earliest forms of A. blanda, patens, ernalis to the later-blooming A. fulgens. plants which come under review—which en too seldom in the average suburban n—Primulas and Gentians are dealt at length, whilst due regard is paid to n members of the Saxifrage family, ethæ, Burseriana, and marginata, for ple. Acknowledgment is also made to olden-yellow flowers that come in the year—Doronicum austriacum and sicum.

vering shrubs that might with ad- ge be more largely taken in hand by the ur, considering how easy many of are to cultivate, are (as was only to be ed) given their rightful place in the from the early-blooming Ericas, like nea, E. Darleyensis, E. lusitanica, and diterranea. Shrubs that bloom before

[*From "A Handbook of Flowering Trees and Shrubs for Gardeners"*
Berberis rubrostilla

eaves appear are taken full account of, as Forsythia suspensa and intermedia, olias like conspicua and stellata, melis mollis (the Witch Hazel), ias (Pyrus japonica), Chimonanthus ns, and Daphnes.

book should prove useful to amateurs, ularly those residing in naturally- ed localities where the winter is least nd should enable them to have more s in their gardens when such are most ne.

Year in My Flower Garden"*

atever may be the general opinion of cal information being given in diary Mr. E. T. Brown, in "A Year in My r Garden," has certainly reached his ve. While the book is primarily n for amateurs, the specialist and the sional gardener will not peruse its in vain. Taking two or three subjects dom it is easy by means of that necessary asset to any book, a good index, to follow the requisite treatment throughout the season. The information contained is very practical, and embraces all types of floriculture likely to be undertaken by an amateur. The work contains several working diagrams and illustrations, and its value is further enhanced by a number of charming photographic views—the results of successful gardening.

Year in My Flower Garden," by E. T. Brown. Pub- y Chapman and Hall; price, 7s. 6d. net.

"A Handbook of Flowering Trees and Shrubs for Gardeners"*

THIS volume is uniform with the "Handbook of Garden Irises," by the late W. R. Dykes, and "A Handbook of Crocus and Colchicum for Gardeners," by E. A. Bowles, M.A., both of which are well known and widely appreciated.

The "Handbook of Flowering Trees," like its two companion volumes, will be received with open arms by professional and amateur gardeners. It is written in a plain, straightforward manner by a grower with a long and successful experience. Even those who know very little of trees and shrubs are able to understand it. Unlike so many books on this and kindred subjects, it deals only with the most useful of the decorative, ornamental, and easily-grown species and varieties. It does not attempt to dabble with the newest and rarest Chinese species, of which very little may be known. Chapter 1, dealing with the planting, pruning, general treatment, and propagating, is most useful and interesting. Each of these subjects is dealt with in a delightful way, concise and full of instruction. Amateurs will probably find this chapter the most helpful portion of the work.

The descriptions of trees and shrubs are comprehensive, there is no unnecessary padding to wade through.

The illustrations of individual flowering sprays are splendid, but we should like to have seen more illustrations of growing specimens in the garden. No matter how detailed a description may be, a picture of the growing plant is a great help to intending planters. It is a work that we thoroughly recommend, and we congratulate the author and publishers on its appearance.

* "A Handbook of Flowering Trees and Shrubs for Gardeners," by R. C Notcutt. Edited by the late W R. Dykes. With a chapter on Seaside Plants, and one on Japanese Cherries by Collingwood Ingram. Illustrated with 24 full page plates. Demy 8vo. Published by Martin Hopkinson and Co, Ltd., London. Cloth, 12s. 6d. net.

"Carnations for every Garden and Greenhouse"*

This is the title of a recent book by that enterprising grower of Carnations, Mr. Montagu C. Allwood. The book is well produced and contains chapters of practical value on propagation; soil, compost, and potting; diseases and insect pests. We are not a little surprised to read in this work that "The Perpetual Carnation is the product of several centuries of hybridisation and culture from Dianthus chinensis, the Indian or China Pink." Dianthus chinensis is generally regarded as an annual, and it has, we believe, given rise to a beautiful and variable race of garden Pinks, including D. Heddewigi. These are extensively grown from seed and are practically annuals, although plants may survive the winter and give a feeble bloom in the spring in mild climates. Is it possible that the Perpetual Carnation is of the same origin? It would be interesting to know on what authority this statement is made.

Mr. Allwood explains that it took nine years of work in crossing the Perpetual-flowering Carnation on to the old-fashioned hardy, fringed white Pink (Dianthus plumarius) to produce the race of hardy plants known as Dianthus Allwoodii, which race is still in the process of evolution.

The work contains a tremendous amount of information and is well illustrated with no less than 99 half-tone illustrations.

A book on Orchids

Which is the most up-to-date book on Orchids and their cultivation? A book with coloured illustrations would be preferable.

BARBADOS.

[Unfortunately, there is a scarcity of books on Orchids. A reliable one of recent origin was Curtis' "Orchids for Everyone," but we believe now out of print. If it can be obtained in second-hand condition we think it worth procuring. Coloured plates are included and the price about 21s. or 25s. James O. Brien wrote a useful little book on Orchids for the "Present-day Series," but this is also difficult to obtain. The original price of 1s. 6d. has risen to 3s. 6d. and even 5s. Probably the most suitable book for our correspondent's purpose is Watson and Chapman's "Orchids." New edition recently published by "Exchange and Mart." Published at 25s. or 30s., and with coloured plates.]

PUBLICATIONS RECEIVED

"Tappan Som Sommarnöje," by Henry B. Goodwin, published by Albert Bonniers Förlag, Stockholm. The book is in Swedish, although, as the author states, "it is chiefly written in the perfectly international language of pictures." There are 76 photogravures, chiefly from photographs by the author, depicting garden views and specimen plants.

"A Selected List of Hardy Fruits," with notes on planting and a fruit-growing calendar, 1926 edition. Published by the Royal Horticultural Society, Vincent Square, Westminster, S.W., price 6d.

* "Carnations for every Garden and Greenhouse," by Montagu C. Allwood. Published by Country Life, Ltd. Price, 12s. 6d. net.

Renovating exhausted lawns

THE chief cause of the wearing out of the grass on lawns is the continual removal of the produce from it by almost constant mowing and sweeping, and bringing nothing back to supply the waste. No crop could long stand the wear of this system without showing signs of deterioration and exhaustion. Of course, where the land has been well prepared and deepened before being laid down in grass, the period of exhaustion will be longer in occurring, but come it none the less surely will, unless some assistance be given in the way of top-dressings. There are two principal modes of improving worn-out lawns—one, by taking up the turf, manuring and improving the soil underneath, and relaying it as soon as the work can be properly done; the other, by giving rich top-dressings. The former usually answers best, but much improvement may be effected by top-dressings in February over the surface of the grass, to be followed by sowing a few fine grass seeds, and about 2 lbs. per acre of white Clover. If the grass be not much worn, the Clover seeds alone will be sufficient. White Clover is an excellent plant for dry soils, as it roots more deeply than most grasses, and, consequently, maintains its colour and stands drought better, but it will not grow under trees. We are accustomed to look upon earth worms as a nuisance, but, were it not for the annual top-dressing which they gratuitously bestow, the condition of many lawns would be worse than it is. The best way of improving lawns that are worn and weedy is to take the turf up, improve the soil, and re-lay it. If new turf can be easily obtained, free from weeds, a preference should be given to it; but if, in cutting up the old turf, it is cut very thin, most of the weeds, such as Plantains, Daisies, etc., being strong-rooted, will be cut through and perish, as the main part of their roots will be left in the ground. When such work is done before Christmas the turf, even when cut thin, has plenty of time to get well established before drying weather sets in in summer. As the season advances, and the grass, from having been closely shorn, loses its first vigour, it is a good plan to remove the collecting-box from the mowing machine and allow the grass to be distributed over the surface for a few weeks. It is astonishing how soon the cut grass withers and disappears, and, if continued for a month or so, it forms such a mulch over the roots of the grasses as to effectually screen them from the blazing sun when drought sets in. There are places in which this plan might be objectionable, but the eyesore is really very little. If the Daisies be numerous, the scattering of the grass mowings should be deferred till they have exhausted their blooming capacity, or some of the flowers may produce ripe seeds, which will grow and still further increase their numbers. A sprinkling of soot and salt mixed with wood-ashes will be beneficial as a top-dressing in February or March for all lawns on which the grass is weakly. Five cwts. or 6 cwts. of salt may be used to the acre with safety; the soot and ashes may be used liberally, and will be most beneficial in strengthening and improving the colour of the grass. Lawns that are kept in good order are seldom infested with Moss to an injurious extent. Of course, where Moss does become established, it ultimately masters the finer grasses; but, where the mowing machine and roller are regularly used, it seldom gets unsightly.

Scabiosa Parnassi

This forms neat tufts of greyish leaves, and is dotted over with mauve flowers in summer, each flower twice as large as the cluster of leaves from which it has risen, and, resting on the mass of glaucous green, produces a fine effect. A good effect will come from planting it where the roots may descend into deep open soil and the shoots fall over the face of a rock at about the level of the eye. The plant is covered with stiff down which gives it a grey hue with finely-cut leaves and a good spreading habit. When in good soil and fully exposed, it forms spreading masses. H. STEVENS.

What is a perennial?

I should be much obliged if you will tell me if the following are generally called perennials:—Roses, Pansies, Gladioli, Dahlias, Clematises, and Carnations? What constitutes a perennial? I always thought that "herbaceous" plants were more of "perennials" than the list I have given, and should like to have your opinion, as these were called perennials at a local show.

A. G.

[Roses, Pansies, Gladioli, Dahlias, Clematises, and Carnations are certainly all perennials—*i.e.*, continuing beyond the usual limits of an annual or biennial. They are capable of living for a more or less indefinite period, and any plant growing and flowering for three or more years must be regarded as of perennial duration. But all plants of perennial duration are not "herbaceous" by any means, and we imagine this is the point you desire information upon. The use of the term "perennials" in any flower show schedule would be exceedingly vague, and, if given without qualification, would open the door for a very comprehensive display, since not merely hardy, but stove and greenhouse, plants could be legitimately shown, whereas, by employing the phrase "hardy herbaceous perennials," or "hardy herbaceous plants," the exhibitors and judges alike know what is intended. In flower show schedules, annuals and biennials are usually catered for in separate classes, while if border perennials of the herbaceous order are required, they should be asked for in these terms: "Hardy herbaceous perennials." These three words are full of meaning, each being clear, absolute, and definite. First, a plant must be "hardy" as opposed to tender; it must be "herbaceous," which at once excludes shrubby and sub-shrubby subjects; and by "perennial" all plants whose duration does not extend to three or more years are shut out. If, therefore, schedule compilers would but take the precaution to employ these definite terms, and until the exhibitors knew and understood the full meaning of them, take the trouble to explain their meaning in a footnote, a good deal of unpleasantness would be avoided.

A class for "hardy herbaceous perennials," for example, may not contain Roses, Clematises, or Dahlias, simply because the Roses are shrubs, the Clematises—save one or two species—are sub-shrubby, while the Dahlias are tender, and not hardy. In the past, and for all practical purposes, the definition may stand to-day, the term "herbaceous" was defined as "a plant producing annual flowering stems from a perennial root," and a class, say, for 12 "hardy herbaceous plants in flower, distinct," might include bulbous things, as Lilies and other such things. If Lilies were not required in the class then a footnote should be added, "bulbous plants excluded." If annuals and biennials were specially provided for elsewhere, then the words "annuals and biennials excluded" would show exactly what was required. In a class for "hardy herbaceous perennials," the Sweet Pea could not be shown, though the Everlasting Pea, so-called, would be quite permissible. Were these ideas more generally followed, much confusion would be saved, and the sh self become of greater value generally the educational point of view.]

Arenaria balearica (the Bale Sandwort)

A small plant, such as is generally s a pot, fails to give even the feeblest i the beauty of this Sandwort when i been allowed to spread and to cover amount of space with its tiny leaves a white, starry flowers. This Sandwort a rather moist position, and does no d on a dry place in full sun. It appre nothing better than a moist freeston limestone block, over which it can r or rather creep, clinging closely to stone little more than rising above it wi leaves. Then, in due course, in spring summer this carpet of tiny leaves is spa over with little white flowers on sl stems and rising well above the fo Like many other plants, it requires planted with some judgment, as it may about until it grows among the crow other plants, to their detriment. I have a collection of good Ramondias smot up in this way by A. balearica.

S. ARNC

Market plants at Vincent Sq

THE outstanding feature of the mo on November 16th was the magni group arranged by the British Flo Federation, which filled one end of the This was the first occasion on which Federation, composed largely of growers salesmen associated with Covent Garden hibited at Vincent Square, and the displayed the finest class of plants flowers now obtainable in the market. were large exhibition Chrysanthemums ably arranged in enormous bronze Jap vases, and small, bushy, well-flow Chrysanthemums less than 18 inches and as much through, the result of struck cuttings. Verily, the Chrysanthe is a most adaptable plant in the hands o market grower. The group demonst the value of the best plants and flower decoration.

The dainty little pot Heaths and a bo ing of Selaginella Kraussiana aurea were the least interesting features of memorable group. The arrangement, which Mr. H. Jolis was responsible, was source of great admiration.

Following his success at the Nat Chrysanthemum Society's Show, Mr. H Jones was awarded another gold medal particularly bright and refreshing grou about 50 varieties of Chrysanthemums. large exhibition blooms included Wil Rigby, General Petain, Mrs. A. Hol Mrs. R. C. Pulling, and Mrs. J. S. Kelly

Chrysanthemums naturally predomin at this meeting, and, in addition to the going, there were interesting collections Messrs. Keith Luxford and Co., Cr Harrison, and Cragg, and Mr. A. G. Vir

Messrs. Stuart Low and Co. had a l group of their new single yellow Chrysan mum named Fragrance. It is certainly sweetly scented than usual for a Chrysan mum.

The new silvery-pink Iolanthe was shown among the Chrysanthemums f Heston.

Winter-flowering Begonias were showt Messrs. John Peed and Sons, Norwood, Mr. G. G. Whitelegg, Chislehurst, had interesting collection of dwarf conifers able for a rock garden.

There were also good exhibits of Ape and Pears, while no fewer than 35 Chrysanthemums were submitted.

MARKET PLANTS AT VINCENT SQUARE, NOVEMBER 16th

With the exception of the pan of Croci, all of the plants illustrated on this page were shown by market growers

The beautifully arranged group of Chrysanthemums, pot Heaths, foliage plants shown by the British Florists' Federation and awarded Gold Medal.

and 3. Erica melanthera and E. gracilis (pink variety), two popular er-flowering Heaths for market purposes.

Crocus niveus (syn. C. Boryi Marathon), a clear white November-flowering species with brilliant orange stigma, shown by Mrs. W. R. Dykes.

5. The new Croton H. G. Cooper (Award of Merit), the leaves of which are bright yellow, orange, and red, shown by Messrs. Cragg, Harrison, and Cragg.

6. One of the dwarf plants of Chrysanthemum Blanche Poitevine shown in the above group by the British Florists' Federation.

Trollius Ledebouri

THIS grows to a height of 2 feet or even more and throws up numerous leafy branching stems each bearing a solitary orange-coloured flower. It is impossible to find anything more worthy of a position where a rich effect is desired. Although doing best in close proximity to water it is quite easily grown in lowland gardens. Whenever a streamlet is introduced to the rock garden it may be planted to form irregular masses. It thrives in full sunshine in soil of a vegetable nature and is perfectly hardy. The plant may be increased by division, which had better be performed every two or three years.

H. STEVENS.

Trollius Ledebouri, an effective plant for the waterside
Flowers brilliant orange, with erect filaments of even brighter hue

Viola biflora

This Violet is a gem for a cool or shady position. It is quite distinct from any other Viola that I know. The tiny flowers are borne in pairs on slender stems 1 inch high. They are bright golden in colour, the lip veined with black. The glossy pale green leaves are heart or kidney shaped. Viola biflora is a very useful plant for clothing some shady moist ledge, or the shady side of the rock garden steps, where it will creep about and brighten up the place with its wee golden blossoms practically the whole summer. It is not fastidious as to soil, but is easily grown in a gritty loam with plenty of leaf-mould. Propagation is easily effected by division.

D. RICHARDSON.

The Rock Gardens,
Dupplin Castle,
Perth, Scotland.

VEGETABLES

Forcing Rhubarb

How to keep up a constant supply from December till the outdoor crops come in

RHUBARB is easily forced; it only needs a temperature from 55 degs. to 60 degs., and nothing can be more acceptable for making tarts and for similar purposes. The stools when dug up may be placed underneath the stage of a stove or that of a warm greenhouse, and covered with ordinary garden soil, keeping them well watered to make the young leaves crisp and tender. If found to be more convenient, the stools may be placed in pots or boxes, when they can be moved from one place to another as may be desirable. When filled the pots or boxes may be set in a vinery or Peach-house, and when forcing commences the Rhubarb plants will soon show signs of growth; they will then need frequent watering in order to keep the soil moist, for if watering is neglected the stalks will be tough and stringy instead of solid and crisp. If space can be spar a Mushroom-house for Rhubarb, that w found to be one of the best structures in v to grow it. If it should be desirable t the crop quickly after being placed in house, put a few barrowloads of hot s manure and leaves under the roots, so form a hotbed about 2 feet in depth. Or place a layer of soil 6 inches in thickness pack the roots of Rhubarb closely tog upon that, covering them with fine soil finishing off nearly level with the crow the plants. For succession crops the may be laid upon the floor of the house, c ing them over in the usual way. In ord keep up a constant supply from Dece till the outdoor crops come in a few s should be put in the house to force a every third or fourth week, *i.e.*, if a supply is requisite. Those who have no advantage of a Mushroom-house or both may be able to get a few dishes earlier they would be able to do out-of-door placing a few stools in a dark cellar, w ing them with tepid water as often as be required. Even if a few stools in po boxes are placed in an empty stall in a s the crop will be ready for use a long before it comes in out-of-doors, especial there are numbers of horses standing in stable. Rhubarb may also be forced in open ground by covering it with earthen pots, which are sold for the purpose wooden boxes furnished with lids will an the same purpose; sometimes, too, the s are covered with old baskets and old ba sawn asunder in the middle, employing p of board to cover the top with. W covered embed them in hot stable ma and leaves, more of which will be requ early in the season than later, when warmth in this way will be required. must, however, be taken to see that the does not get too fierce, or the crowns of plants and the young leaves will bec scorched. Old stools which have been li and forced are not, as a rule, retained planting again; on the contrary, a new p tation should be made annually.

The decline of allotments

From the latest report on the matter number of allotment holders in many of villages is greatly on the decrease, and explanation is not far to seek. With the stitution of pasture for arable land the n ber of hands employed on various farms gradually dwindled until in some parish only represents just about one-third of w it was in former years. Young men whom no work could be found on the fa drifted into neighbouring towns, and eve they continued to live at home lost their terest in allotments. In a field of 32 a ments of 30 poles each I counted, the o day, 10 vacant plots all getting into a plorable condition. The crop of Net Thistles, and Dandelions on these will s plenty of seed next summer on to their ne hours' ground. I am aware there is a against this, but it is more honoured in breach than the observance, and seldom into force on village allotments. I think poles rather too much. It was all right w the majority of cottagers kept their pig grew breadths of Beans and Swedes, but r that the pig industry has declined and holdings are confined to the production household vegetables it is too much fo worker to do satisfactorily after his d toil. The output of Potatoes and all r vegetables has dwindled since a shel method of digging to get over the grou quickly has been adopted. The proport of small Potatoes hardly up to seed size very large this year on all shallow-dug pie

E. BURRELL

REMINDERS FOR THE WEEK

outhern and Midland

ale

s is a very accommodating vegetable, g to its adaptability for being forced gh the winter when choice vegetables carce. Where the roots were lifted as usly advised and placed in large pots xes they may now be taken into the house and placed under the stage, but ose up to the hot-water pipes. The soil l be kept moderately moist, but not ated, and the crowns covered over with boxes or pots to exclude light. When ring the heads they should be cut off with the base of the head, when the root again burst into growth and give a er crop.

slag

s is an excellent product for using in itchen garden during the autumn and r, and is especially valuable for heavy layey soil. It should be dug in at the of 6 ozs. to 8 ozs. to the square yard, it will prove beneficial to the crops g next season. This may be used in nction with farmyard or stable manure.

table crops

ere is not a great deal to do among the un-sown crops at the present other than cting from pests, keeping the beds free weeds; and if the soil is in a fit condi- the Dutch hoe may be used with ad- ge. Spinach may be thinned and used quired, and if the Onions and Lettuce nduly thick these may be thinned and also.

naison Carnations

ers that were put down during summer otted up into 3-inch pots are now ready shift, and the most suitable size of pot nch. Good fibrous loam mixed freely sand and old mortar-rubble forms a good ost for this shift. This should be made around the roots, as Carnations do not ed in loose soil. Keep the plants as the roof-glass as possible in a tempera- of not less than 50 degs. at night.

mens

se plants are now growing freely and r-buds are appearing. To get the best s a little care and attention are neces- Although the plants enjoy a certain nt of warmth they must not be forced bloom. Watering must be done care- when necessary, taking care not to let ttle amongst the flower-buds. Weak -manure and soot-water may be given at every other watering. The blooms d not be cut, but pulled gently away the corm.

santhemums

ere Chrysanthemums are required for ition or large specimen plants it is not early to commence taking cuttings. should be sturdy and about 3 inches in n. Dibble several into a 3-inch pot of soil. A box 6 inches deep with a of ashes in the bottom makes an ideal gating-case. This should be placed on tage in a cool greenhouse and covered sheets of glass.

s

ny amateur Rose growers bud a few each year. In most country districts Dog Rose may be found growing in the rows. This forms an ideal stock if lifted s season and planted in a reserve border. young and healthy Briars that have a few fibrous roots attached are the best to select. They may be cut off to the length required and planted 4 inches deep in the soil. When side shoots appear, two or three of the strongest near the top should be retained, removing the others in the bud stage.

Shrubberies

Most of the deciduous trees have by this date shed their leaves, so a general tidying up amongst the shrubs may be taken in hand. Forking may be done amongst them at odd times during the winter, and if the soil is poor a dressing of manure may be given. This is best applied as a top-dressing when forking has been finished. Any additions or replanting should be done as soon as possible in the case of deciduous varieties.

Vines

Where the leaves have fallen pruning and cleansing the rods should be done at the first opportunity. The walls and woodwork should be thoroughly cleansed and a few inches of the old surface soil should be removed from the border and replaced with good loam, bone-meal, and wood-ashes

Loganberries

Many amateurs fail with these by planting them in soil that is over-charged with manure. From experience I find Loganberries fruit best when planted in loamy soil without the addition of any manure for the first year. When they have borne a crop of fruit they may be assisted with a mulch during autumn, to be washed down with the winter rains. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Plant houses

Where the fuel supply permits of it, certain shrubs may be gently forced for the demand which is sure to arise at Christmas, more especially in Scotland at the New Year season. Deutzias are easily handled, the best of them for the purpose under consideration being, I think, D. Lemoinei and D. gracilis. Prunus triloba, too, forces easily, and Hydrangeas and Azaleas are not difficult to move. Of the latter I prefer the pontic section rather than those of the mollis family, the flowers of the larger sort being unscented and fleeting. Dielytra spectabilis, if potted up a few weeks ago, may be rapidly rushed on in heat, and, of course, Arum Lilies are always available. These, however, may suffer from aphides if the plants are not regularly syringed or vaporised. Chrysanthemums in bloom ought to have sufficient water for their needs, but no more. When too much moisture is given the blooms are liable to succumb to damp, especially blooms of specimen size. The earlier Roman Hyacinths will now be turning in, and a good batch of prepared Hyacinths ought to be moved into heat for a Christmas display.

Fruit houses

The foliage having now fallen from the trees in early Peach-houses and early vineries, the annual cleaning of both trees and structures can be undertaken at once. In the case of Peach trees, if scale is known to be present this should be well syringed with a strong solution of Gishurst Compound and afterwards every branch and shoot must be washed with luke-warm soapy water, to every gallon of which a wineglassful of paraffin has been added. Remove an inch or so of the top soil after cleaning has been finished, and replace it with fresh material. In retraining let the branches be thinly disposed, and if it be considered needful the border may be lightly watered. When, in the vineries, the rods are clean, the loose bark ought to be rubbed off with the hands. No scraping with knives (an unnatural practice) should be permitted, and the rods can afterwards be washed as in the case of Peach trees. If any suspicion is felt about the effectiveness of the drainage of vinery borders test holes ought to be opened which will permit of proper inspection.

Seakale and Rhubarb

Even if there be not any great amount of heat Seakale and Rhubarb will now move if kept quite dark and in an even temperature. Pack the roots with coarsely-sifted leaf-mould, and give them plenty of moisture. In the majority of cases failures with either are usually directly traceable to the fact that, at some stage, the roots have suffered from lack of water.

Cuttings

The season for taking cuttings has almost passed away, but in a sandy bed in a cold frame cuttings of the Euonymus family will still root. So, too, will cuttings of favourite Roses, as well as cuttings of the Tamarix, some of which are very graceful and effective when planted rather thickly and cut well back to bring out their characteristic long feathery sprays.

Furnishing bare places under trees

Everyone likes to see the soil beneath trees furnished, and when grass fails, other things, at times, may meet the difficulty. I have had a considerable amount of success in this direction by using freely the blue Anemone apennina, and if the shade be not too dense the Wood Hyacinth and the Foxglove will succeed. Saxifraga umbrosa (London Pride) is also reliable under trees, and the Periwinkle will grow almost anywhere.

Hardy fruit

If a new plantation of Raspberries is to be made, the canes ought to be planted without delay. The canes of established plantations should now be well thinned and trained in the customary manner. Afterwards a good mulch ought to be applied—of manure if possible, but failing that of half-decayed leaves. This may lie over winter and be forked in when spring arrives—the spade ought never to be used among Raspberries, as the plants form their best roots on the surface. Continue to prune the trees and bushes from which the leaves have fallen. The practice of saving the prunings from Currant bushes and Apple trees to serve as stakes for pot plants ought to be discouraged, for these may perpetuate the race of some pests which, nowadays, worry the fruit grower.

Kitchen garden

The fact that to grow good vegetables requires both labour and manure ought constantly to be borne in mind. Both are less easily obtained and more expensive than was at one time the case, and everyone must make the most of the means at his disposal. All the garden waste, of which there is so much at this season, has a definite manurial value, and it should be fully utilised. The addition of a little lime and a sprinkling of soot, both of which can generally be obtained, increase the good effect of garden waste. Dig or trench as deeply as possible, and improve the subsoil by breaking it up, if necessary, with a pickaxe as the work goes on. W. MCGUFFOG.

Mabie Gardens, Kirkcudbrightshire.

Pruning Hardy Shrubs

(Concluded from page 699)

NEXT to this group come Philadelphi and Deutzias. For these to flower we have to wait a little longer, for they do not bloom right on the previous year's wood as the Forsythias did, but have to make a little growth first, and it is on this that the flowers are actually produced. There is an essential difference, however, between these and the next group, which generally flowers later still, for Deutzias and Philadelphi make their flower buds for the subsequent year in the previous season, so that in the winter, when the plant is dormant, next season's flowers are already there in embryo, and have only to be developed, whereas in the next group there are only wood-buds on the plant in winter, and consequently the flower-buds have to be formed on the shoots while they are growing, so that the crop of flower depends entirely on the current season's growth, and not on that of the previous season. This, of course, is a most important difference, and vitally affects the season for pruning. Incidentally, it is this that makes Deutzias and other shrubs belonging to the present group so much easier to force than those that make their flower-buds in the year in which they flower. The proper time for pruning this class then is immediately they have finished flowering, and no time should be lost after the blooms have faded and the plant has lost its decorative effect, so as to allow the longest possible time for next year's flower-buds to be developed. Pruning at this time will automatically remove all the old flowers, so that no seed can be set, which is, of course, a great advantage.

The Deutzia produces its flower-truss at the end of a short leafy stem, but there will be others of these leafy stems generally at the bases of last year's shoots, which do not terminate in flowers but go on growing, and it is down to three or four of these that each shoot should be cut when the pruning is done. They will then grow to a sufficient length, ripen, and produce the next crop of flower-buds.

It sometimes happens that a neglected shrub has to be cleaned up and brought into good flowering condition in winter. Under these circumstances it is best to remove completely the old flowering branches, and leave only the long, clean shoots of the current year's growth. Even though such treatment may impoverish the crop of flowers borne the following season, nevertheless its value will be fully appreciated in subsequent years. Tall, strong shoots that push up from the base of a plant should be simply headed back a few inches to induce them to throw out strong side shoots.

In this class, in addition to those already mentioned, come Exochordas (Pearl bushes), Jasminum officinale (common Jessamine), Diervillas (Weigelas), Zenobias, and Rambler Roses, though the last cannot be pruned till September, while some people prefer to leave them till winter. The Wichuraiana and Polyantha Roses throw up numerous suckers each year when growing well, and these are preferred to the old branches for furnishing next year's flowers. Rubus species should have their old canes removed as soon as they can be dispensed with, those grown for their white stems having to be left till spring. Genista hispanica may be clipped over with shears as soon as the flowers have faded if it shows any tendency to become leggy. Buddleia alternifolia deserves a note to itself: To get the best out of it, it should be disbudded; that is to say, any young shoots that conflict with the flowers as they often do should be pinched out as soon as they can be seen, leaving only a few towards the base of the branch. When the flowering period is over the branches that have flowered should be cut back as far as these shoots.

PRUNING IN WINTER.—We come now to the group of shrubs that are pruned in winter, in fact any time in the dormant season. These, as we have already seen, make their flower-buds during the current year, for the flowers are produced at the tips of that season's growths, which have to become thoroughly ripened before flower-buds can be made. The pruning here consists in cutting back the flowered shoots to three or four buds, according to strength, during the dormant season, when the foliage has completed its work. The flowers themselves are, of course, best removed as soon as over, if that is possible. In this group come Spiræas and the arborea and japonica types, Hypericums like patulum, Neillias, Clematis Jackmani, Colutea arborescens, Tamarix, and Amorphas. It may be noted here that we have already seen two different ways of pruning different types of Spiræas, while there are yet others like those of the canescens group which only require the annual removal of the old flowers, and discolor which should not be pruned at all. The same applies to the genus Clematis, examples in this case of kinds that do not need annual pruning being found in the varieties of lanuginosa and patens. Attached to this group are a few shrubs that are not perfectly hardy in their young growth. These must not be pruned until March, and the end of March at that, or even the beginning of April in a late year or in a cold district, though the flower-heads are best removed when they are over. By thus postponing the pruning we keep in hand plenty of dormant buds, so that when the frost has taken its toll, as it is liable to do, of the young shoots that have started into growth too early, we may then prune and start the buds that are intended to furnish the flower. Perpetual and Hybrid Tea Roses, Buddleias, Ceanothus azureus, and such hybrids as Gloire de Versailles, Hydrangea paniculata, and hardy Fuchsias should be treated in the same way.

Finally, there are a few shrubs that may, if it is so desired, be cut down to within a few inches of the ground every year, particularly those that are grown for their coloured stems, such as the Dogwoods. Of these, the Cornus alba section may be cut down in April, while others such as C. macrophylla and C. Nuttalli make small trees, and need only be pruned sufficiently to keep them shapely. Among the Willows some species such as Salix pruinosa should be allowed to grow as naturally as possible, but others may be cut down to the ground in March. This treatment will show off the yellow stems of S. vitellina and the red of S. cardinalis to their best advantage during winter. Shrubs that will bear cutting down if they are not growing well, or have become unshapely, include Bamboos, Rhododendrons, Buddleias, Leycesteria, Aucubas, Choisya ternata, Berberis Aquifolium, Rosa rugosa, and many others.

F. C. S. ROBINSON.

Transplanting trees and shrubs

Ruin invariably follows the incorrect treatment of all kinds of hardy trees and shrubs in whatsoever section of the work one may err, but in none more seriously than in transplanting, for the removal of a root is always risky, and it is important to fully consider the best method, time of year, and habit of the subject.

The risk is chiefly in the disturbance of finer roots, and one may safely say that possible to remove a tree or shrub with any ill-effects if the earth can be taken the root. But it is so easy to chop off p of the root, or to drag or otherwise dam the tender fibres when digging around, certainly there is always a tendency to m as short a job as possible of such tasks.

For plants with deciduous foliage method of taking up and freeing the r from all earth is a good one, and ansv perfectly, but the far safer method entails removal bodily; that is to say, earth, r and all just as it stands. This opera can be carried out successfully with any tree or shrub, although, of course, the lar the subject the more difficult the work, a incidentally, the more expensive.

Showery weather is a great asset. work should never be entertained during east winds.

BRUCE HEWITT

Bradford Peverell, Dorchester.

Tamarix

The Tamarisks are not grown to the tent they should be, yet are they remarka pretty, and there are six species well wor of attention, especially for exposed positio preferably in shrubberies and for seas planting. They may be successfully pro gated from cuttings of one-year-old wood a planted about two-thirds of their length de the best time to do so being at the close autumn.

TAMARIX ANGLICA is an evergreen found English seaside places and varying from feet to 9 feet in height. It has bright gr leaves, and flowers each about 1½ inches lo white, fringed with pink, each bloom bei ⅛ inch across. I have seen this particu Tamarisk at Felixstowe in large shrubber during autumn, when it is really at its be In milder localities, such as the Devonsh coast, Tamarix anglica flowers right up December.

T. GALLICA.—This is more correctly a sm tree, growing up to 12 feet in height in t country, and with erect branches. It h racemes of cylindrical formation 1 inch 2 inches long and closely set with bloo pink when open. This species is a native France, but is believed to be grown in Chi and in parts of Africa.

T. JUNIPERINA, also of the small tree ty has pale green branches and is a very der grower. It flowers by no means frequent One of its species can be seen at Kew.

T. HISPIDA is a deciduous shrub some feet in height, identified by the fluffiness its leaves. It flowers in late autumn, t colour being pink, but it does not like o English climate, and it is doubtful whether specimen is to be found. I believe that Ke Gardens has lost its solitary specimen.

T. TETRANDRA, a native of the Medit ranean, is a common species of this shr and is on the Continental market, being o tainable under various names. For massin this shrub can scarcely be surpassed. It a tains a height of 15 feet, flowers very pr fusely, giving bright pink or rose colour blooms.

T. PENTANDRA, also of the same height, wi a tendency to go even higher, is a native South-East Europe and is peculiar to riv banks. Its flowers are clustered, racem some 5 inches or 6 inches long. The peri of flowering is autumn, extending over s weeks.

The Tamarix will be found a very valuab shrub for windy and exposed seaside or i land places. It is incorrect to assert that only thrives by the sea, neither does it r quire a rich or even good soil.

BRUCE HEWITT.

Answers to Queries

tions—*Queries and answers are inserted in* ING ILLUSTRATED *free of charge if corre-* nts *follow these rules: All communications be clearly written on one side of the paper nd addressed to the* EDITOR *of* GARDENING TED, *Bouverie House Fleet Street, London, E. C. 4. on business should be sent to the* PUB- *The name and address of the sender are d in addition to any designation he may to be used in the paper. When more than ery is sent each should be on a separate paper, the name and address being added . As* GARDENING ILLUSTRATED *has to be sent s some days in advance of date, queries always be replied to in the issue immedi- llowing their receipt. We do not reply to by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

TREES AND SHRUBS

dendrons unhealthy

t is the disease of these Rhododendron and its remedy? Parts of the bush een affected like this for the last two

M. L. C.

Rhododendron leaf was examined y with the microscope, but no trace ase was found. The inference drawn the unhealthy appearance of the leaves to unsuitable conditions at the roots. ajority of Rhododendrons are intoler- lime in any form, a fact not always sed, and where soils containing chalk it is extremely difficult to maintain a healthy condition. Matters may riated by supplying peat, clay, loam, other non-alkaline soil to the borders, lly in proximity to the roots. The lendron also objects to badly-drained nd sodden soil may easily cause the to produce sickly foliage. The Rho- on bug, on the other hand, will ruin the appearance of the foliage type of soil. The same may be said leaf blotch disease, caused by the Glœosporium rhododendri, and care- ch should be maintained for both of

on Beech trees

eming).—Your Beech trees have been d by an insect (Coccus fagi), a cousin mealy bug. We should recommend the trees as far as possible and then them with the extract of 8 lbs. of chips, 15 lbs. of soft-soap mixed with ons of water, or paraffin oil 2 quarts lbs. of soft-soap thoroughly mixed to- with a little hot water and then added gallons of water and kept well mixed. and burn all the scrapings.

down Tamarisk

.).—This is not grown so much as it by those who want feathery foliage ting for vases and other cut-flower ments, for it is one of the easiest o grow, and stands continually cut- wn better than any plant we know. at such a large quantity is required orts of floral decorations this shrub commend itself as one of the very that purpose.

back Laurels

. C. Eden).—It would be advisable to uning till February or March. You t be afraid to cut back hard, and pro- e plants are not disturbed at the roots ll grow all the better for being cut You should, when they have begun freely, mulch well with some rotten or give some in a diluted liquid form.

on Rhododendrons

you kindly advise me as to the best of cleaning the stems of Rhododen- rom lichen and fungus? The preparation could be dabbed on with a sponge to avoid injury to the foliage, but spraying would be quicker and more thorough if a safe fungicide were used. The ordinary winter washes as advertised for fruit trees I fear would be too drastic. Not only Rhododendrons, but shrubs of all kinds are to be found with their stems and branches caked and crusted with green, mouldy lichen, which is surely very detrimental to their health. I have thought of trying sulphate of iron and also Gishurstine.

C. S. B.

[The presence of the lichens points to the fact that the Rhododendrons are growing under damp conditions. Could you improve the drainage, or thin the shrubs or their surroundings so that air could circulate more easily? If so, we think that the lichen would not grow so freely.]

GREENHOUSE

Keeping Pelargoniums in winter

(Mrs. Pain).—We take it you have either potted or boxed your Pelargoniums. If so, you should have given the plants a good watering to settle the soil about the roots. They will then need no more water, or at least very little, until the spring. Damp is often more injurious than frost. It would not be advisable to put your plants into the frame, as, should the weather be severe, they will, in all likelihood, perish from damp. We should leave well alone, and, seeing you have been successful in keeping your plants in the greenhouse, you would do well to continue the same treatment.

Greenhouse shaded by trees

(Erin).—If the trees are deciduous, the house in question would be less shaded in winter than in summer, and, moreover, being heated, a good many subjects could be grown in it during the winter. Of these there are early flowering Rhododendrons, Azalea indica in variety, Deutzias, Cytisus, Camellias, retarded Spiræas, Bermuda Lilies, and Lily of the Valley; early flowering Tulips, Daffodils, Polyanthi or bunch Narcissi, and Roman Hyacinths. Towards the end of winter or in early spring the list of flowering shrubs could be supplemented by the addition of Lilacs, mollis and Ghent Azaleas, Tulips, single and double, the same of Hyacinths, Daffodils, early flowering Gladioli, Imantophyllums (Clivias), Arum and Bermuda Lilies, Cinerarias and Primulas if the temperature is not too warm. If the trees are of an evergreen nature, omit the two last named. In summer time, should the shade not be worse than that resulting from the use of heavy roller blinds, or a heavy application of whitewash or "summer cloud," for instance, we think you might venture to make trial with subjects such as Fuchsias, Pelargoniums, Begonias (tuberous), Zonal Pelargoniums, Heliotropes, Globe Amaranth, Trachelium cœruleum, Balsams, Hydrangeas, Francoa ramosa (the Maiden's Wreath), Liliums in variety, Sweet-scented Tobacco (Nicotia affinis), and the red-flowered variety (N. Sanderi), and Primula obconica. If you wish to prolong the season some of the early flowering single and border Chrysanthemums might be grown on in pots for the purpose. Marguerites would also be effective both in winter and summer.

VEGETABLES

Forcing Rhubarb

(C. S.).—An article on this important subject appears on page 718. The forcing of Rhubarb is particularly important in a season such as this, when the Apple crop has been disappointing.

MISCELLANEOUS

Making an asphalt path

(C. J. Ufford).—Sift two parts of thoroughly dry lime-rubbish and one part, also well dried, of coal-ashes. Select a dry day and mix in a dry place. Leave a hole in the middle of the heap, into which pour boiling coal tar. Mix well together, and when of the consistency of mortar spread a coating 3 inches thick over the walk. Rake the surface evenly, then give a uniform dressing of coarse sand. When cool pass a light roller over it, after which it will set firmly and be waterproof. An old gravel path will only require to be swept clean. The edges of ordinary garden paths may be formed with edging tiles ¾ inch to 1 inch thick.

SHORT REPLIES

M. S.—Impossible to say what the trouble is without seeing a piece of the Celery. If you send us a head we will do our best to help you.

Joseph Lee.—See answer to "T. J." *re* "Sterilising soil," in our issue of November 6th, p. 680.

Irishwoman.—(1) The climbing plant which you have purchased as a mauve Clematis is Cobæa scandens. It is, as you say, a very vigorous grower. See illustration and note, issue November 6th, p. 679. (2) The Crinum sent for identification is Crinum capense. In favourable gardens it is sometimes grown under a south wall, but in your neighbourhood we think it will be best to keep it in a pot. (3) Any of the climbing Roses should do well in a corner with south aspect. Why not try the yellow Banksian Rose? Other suitable climbers are:—Clematis indivisa lobata, Solanum jasminoides, Lapageria rosea, or a Passion flower.

NAMES OF PLANTS

J. A. L. A.—*Re* Rhus Osbecki, the specimen sent is not true to name. It is probably Rhus glabra. *Re* Buddleia Nanhoensis, the specimen is not true to type. It is probably a seedling of Buddleia variabilis. The true B. Nanhoensis is much dwarfer, usually less than 4 feet in height. It is the first to commence flowering and the last to finish.

E. A. D.—The Michaelmas Daisy is one named Decorator, a small white with flowers in good sprays and with fine, almost Heather-like foliage.

D., Chelsea.—Gomphrena globosa, an Indian annual sometimes known as Globe Amaranth.

Mrs. B., Sevenoaks.—Anchusa myositidiflora. Yes, it should thrive on heavy soil as well as on shaly soil.

L. B. W.—1, Ceanothus ovatus; 2, C. dentatus.

NAMES OF FRUITS

Miss Blewitt.—Apples: 1, Jolly Beggar; 2, Lane's Prince Albert.

Reading and District Gardeners' Association

Owing to the very inclement weather the attendance at the fortnightly meeting held in the Abbey Hall was not so large as usual, as so many of the "country" members were absent. Mr. F. J. Green, F.R.H.S., presided. The subject for the evening's discussion was "Bog and Water Gardens," and was introduced by Mr. W. Burton, The Gardens, Cleeve Court, Streatley, a representative from the Pangbourne Gardeners' Association. In his opening remarks the lecturer said that bog and water gardens were not one of the most popular sides of horticulture, although they were interesting where position and circumstances permitted of them being made, as water added greatly to the beauty of the surroundings. Mr. Burton gave much valuable information on the formation of tanks for Lilies, ponds, marshes, bogs, paths, and planting. He also gave advice as to the best varieties of flowering and foliage plants, shrubs, trees, etc., and the positions they should occupy in the various sections; altogether a most instructive discourse, especially to those who might occupy in the future a position where they might be called upon to carry out this branch of horticulture. In a competition for six large blooms of Chrysanthemums there was only one entry, but the first prize was deservedly won by Mr. A. H. Dow, The Gardens, Calcot Park, with grand blooms of Louisa Pockett, Mrs. J. Gibson, Thomas Lunt, Thorpe's Beauty, W. Rigby, and Mrs. G. Drabble. Mr. C. J. Howlett, The Yews, Earley, received an Award of Merit for 12 dishes of Pears.

Obituary

HENRY WOOLMAN.

We were exceedingly sorry to observe the name of Mr. H. Woolman, The Nurseries, Shirley, Birmingham, among the eight passengers who were killed in the railway smash near Rotherham, Yorkshire, on Friday, November 19th. Mr. Woolman, who was a well-known exhibitor of Chrysanthemums and Dahlias, had travelled all over the country showing flowers grown in his nursery. His exhibits of Chrysanthemums at the Birmingham Show last week were of a very high standard. In a letter dated November 21st, Mr. Thomas Stevenson writes:—

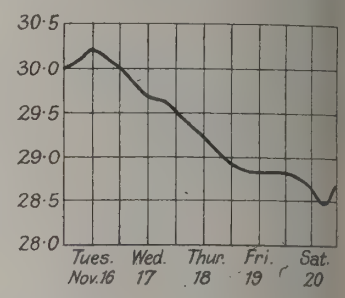
"It is very sad about Woolman. I was judging with him at Hull, and had I not fixed up for a couple of days in the Brighton district I might easily have accepted his invitation to return to Birmingham with him. He probably only joined the train at Doncaster, a few miles only from the scene of the accident." He leaves a widow and a daughter to mourn his loss.

A recent will

The Rev. Joseph H. Pemberton, The Round House, Havering-atte-Bower, Essex, at one time President of the National Rose Society, left £29,430, with net personalty £25,638. He gave to his wife his stock of Rose plants not seedlings or Roses not in commerce, £500 to his gardener, John Bentall, £250 to his chauffeur, Leonard Chaplin, and one year's wages to each of his other servants.

Barometer's big drop

On Saturday, November 20th, the b meter at Tunbridge Wells registered 2 the lowest reading for many years. B sod Bay, Co. Mayo, showed a still l figure of 28.34. On December 20th last the barometer registered 28.54, and this the lowest reading for five years. At and Croydon on Saturday afternoon (No ber 20th) the barometer dropped to 28.5 extraordinarily low reading for the Lo area. The figure below is that recorde the great blizzard of March 28th, 1916, 20,000 trees in Hertfordshire were b down.



Tulips for Easter

Many of the late Tulips do not force v but if potted up now and grown co throughout their season of growth the b will give good flowers about Easter.

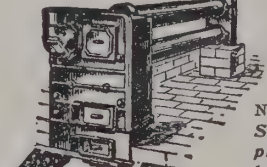
CATALOGUES RECEIVED

Hewitt and Co., Ltd., Solihull, Warw —List of vegetable and flower seeds.

SAFETY FIRST—
FOR ANIMALS AND PEOPLE.
Non-caustic; no smell; kills the roots; superior to arsenical compounds.
TINS, 1/- 2/- 3/6 6/6 12/-
for 4 12½ 25 50 100 gals.
ALSO
LETHORION
Improved Nicotine Cone
FUMIGATOR
Certain destruction to all pests in glasshouses
No. 1 .. For 1,000 cubic feet .. 10d.
No. 2 .. ,, 1,500 ,, ,, .. 1/3
No. 3 .. ,, 2,500 ,, ,, .. 1/9
Sold by all Seedsmen and Nurserymen.
CORRY & CO., Shad Thames, London, S.E.1

ORNAMENTAL TREES and SHRUBS, ROSES, FRUIT TREES
CONIFERS A SPECIALITY
Illustrated Price List free on application.
H. E. W. COOPER
Hayeswood Nurseries
PEMBURY, TUNBRIDGE WELLS

A Simple Guide to
ROCK GARDENING
By SIR JAMES L. COTTER
2s. 6d. net
EVERYONE'S BOOK OF TH WEATHER
By A. FRANCON WILLIAMS, F.R.S.G. With numerous Diagrams and Char 2s 6d. net.
Of all Booksellers
THE SHELDON PRESS,
Northumberland Avenue, London, W.C.


Paying Points about "STOURBRIDGE" Greenhouse Boilers
No. 15
Special protecting plate inside boiler front
Write at once for special price, state size of house. Address, Dept. H.
J. & W. WOOD L^TD Stourbridge

DUTCH BULBS
Obtain your supplies direct from Holland.
Large Stocks. Immediate Dispatch.
Illustrated Catalogue post free on request.
THE FIRST DUTCH BULBGROWER ASSOCIATION,
Ryksstraatweg 215-217, Schoten,
HAARLEM, HOLLAND.

FRUIT TREES
ROSES
Alpine Plants Hardy Perennials
Ornamental Trees and Shrubs
Can be successfully planted NOW.
The Barnham Nurseries, Ltd., offer an immense stock of healthy, well-grown trees in great variety.
Descriptive Catalogue on application.
The Barnham Nurseries, Ltd.
BARNHAM, SUSSEX

Recommended for Roses, Bulbs, all other Flowers & Fruit Trees
The Helichrysa Permanent LABEL
Registered Trade Mark
From 2/- Per doz.
Write for circular and full particulars to:—
THE "HELICHRYSA" PERMANENT LABEL CO.
8, Rusthall Park, Tunbridge Wells
Patent 25407

GARDENING ILLUSTRATED

2491—Vol. XLVIII. DECEMBER 4, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

ents, the decline 724
s, diseased ... 734
s, keeping late, m shrivelling er they are ered 730
trees, American ht on 730
rotundifolia lescens 728
tree covered lvy 736
Chrysanthe- Society, the ... 736
Campanula garganica 729
Carnations, Border ... 728
CEDRONELLA TRIPHYLLA 725
CHRYSANTHEMUMS, THE NEWEST 731
Clematis, how to propagate 736
DAISIES, MICHAELMAS, THE LATE ... 729
Echinops trouble .. 735
Eucalyptus citriodora 724
Ferns, twelve good ... 735
Frames, seasonable work in 723
Fruit trees be root-pruned? should ... 724
Garrya elliptica, how to propagate 736
GLADIOLI, NOTES ON SOME NEW, OF 1926 733
Gloxinias, treatment of 735
Grevillea rosmarinifolia in bloom 726
Hydrangea, pink ... 735
Heath, the Prickly (Pernettya mucronata) 724
Hedge-clipping machine 724
Leaf mould 736
Lily of the Valley, the 728
Lindelofia spectabilis 735
Mr. H. Woolman, the late 724
Narcissus forcing ... 735
NOTES FROM A WEST SOMERSET GARDEN 727
Nothofagus obliqua ... 726
Pears, a succession of 730
Pear trees, overgrown 734
Pea stakes and Birch brooms 729
Phlox amœna 728
PRIMULA BERNINÆ 724
Raspberry beetle, the 734
Reading and District Gardeners' Mutual 736
Report on condition of horticultural crops on the 25th November 730
Royal Horticultural Society Wisley trials, 1926 736
Rhododendrons, an amateur's 726
RHODODENDRON WILLIAMSIANUM 726
Scabious, the Sheep's (Jasione perennis) ... 728
Shrubs, height of ... 736
Shrubs, pruning ... 735
Soil burning 736
Thunia marshalliana 735
Toothache tree, the (Zanthoxylum americanum) 735
Violas, growing 735
Violets 735

Seasonable Work in Frames

Auriculas, Border Carnations, and Chrysanthemums

HOSE who have glasshouses will be ure to find plenty to do in autumn and inter, but there are others who have glass frames in which they shelter the tender of their flowers. Auriculas are ently hardy to resist frosts, but the eableness of our climate does them . Sleet, snow, rain, and frost often ed each other in the course of a week, he delicate organisms of the plants are y sorely tried. What we require to e the health of the plants in winter and erfect development of their tissues in is light and dryness. These are amply led for in a cold frame. Auriculas l now be arranged on a stage near the and the plants should be perfectly free insect pests. Green fly must be re- l by fumigating. The woolly aphis, is to be found attached to the roots, nly be destroyed by turning the plants their pots and washing it off the roots soft soapy water. It is not desirable to s in winter, but I fancy if the plants are ut in the frames to be frozen through rough, it is possible that the aphis will e able to resist the nce of the frost. such insects can- live after being . They evidently t like frost, as they underground on first appearance. r Carnations and es are also win- in cold frames; do not sustain in- from the most e frosts, but it is sary to have the well established n a healthy condi- They were potted e first week of er. Placed in cold s at that time oon became estab- under close treat- Except to at- to watering them ey require it, no attention will be l until December; look over the , remove dead and ng leaves, stir up il, and if they re- the ordinary at- n of removing the lights in fine weather and watering only when water is required, they may remain quiet until potting time, which is about the end of February or the beginning of March. In bad weather the plants can be carried into the potting shed or any spare room where the work may be performed leisurely. It does not answer to be in a hurry, as valuable specimens may snap over with rough handling.

THE FRAMES containing Auriculas and Carnations may also include the stock of laced Polyanthuses. These old-fashioned favourites seem to baffle the skill of the most careful cultivators. It is a good plan to grow two sets of plants, one in pots and another in the open ground. When planted out in a frame the lights can be removed night and day if necessary, but they can also be placed over the plants at a moment's notice. The plants when grown in ordinary frames and planted out in rich soil are possessed of extraordinary vigour. If it is intended to exhibit any of the plants they are taken up and carefully potted when in bloom. Seedlings grow with greater vigour than named varieties, and it is always interesting to have a small quantity of them. They will flower out-of-doors, and can be selected from the beds on which they were planted the previous summer.

CHRYSANTHEMUMS may also be included in the class of hardy florists' flowers. I do not intend to say much about their culture out-of-doors, but it is certain that, with good cultivation and careful training and disbudding at the right time, the results will be very satisfactory. This year I noticed in the middle of November a good show of Chrysanthemum blooms out-of-doors, and the sight was all the more remarkable because a small collection of Dahlias was flowering in conjunction with them. They are too easily grown; therefore they are allowed to take their chance in borders, remaining in the same position year after year; under such conditions the flowers are very poor indeed. The plants exhaust the ground the first season, owing to the large masses of roots which are formed by them, and require renewal by means of cuttings annually, and here we arrive at winter work in frames. The cuttings should be put in some time during December, root suckers being the best. Each cutting should be inserted in a small pot, and they ought all to be plunged in a frame until the end of January; any of them not rooted by that time should be plunged in a hotbed, where they will soon form roots. It is often difficult to obtain cuttings of some varieties owing to their shyness in forming root suckers. Those that do not start into growth should be placed in a hotbed, which will accelerate the production of cuttings. It is necessary to keep the frames rather close where the cutting pots are placed, and this favours the production of mould and decay of portions of the leaves. These decaying spots should be removed before they quite destroy the young plant or cutting.

C. T.

Primula Berninæ, a native hybrid between P. hirsuta and P. viscosa. (See page 724)

NOTES OF THE WEEK

Primula Berninæ

A NATURAL hybrid between P. hirsuta and P. viscosa, this handsome free-flowering plant has been collected in many widely-separated localities in the Alps. Piz Nadis, Müsella, Val Bevers, Engelberg, Malvja, Val Seriana, and Mte. Grabiasca are some of the stations from which the plant has been reported between 1865 and the present time. The plant has long been known in cultivation, and repays any little extra attention by increased freedom in the production of its rather rosy-lilac, somewhat funnel-shaped flowers, carried in erect umbels on a strong stalk slightly longer than the leaves of the rosette. Plants in small pots plunged in sand in full sun and carefully watered flowered last spring more freely than ever before. Full exposure to sun, with its ripening effect upon the growth, is of advantage to this and many other alpine Primulas. Certainly P. hirsuta and P. pedemontana und r similar treatment have flowered exceedingly well. Good strong loam, a little leaf-mould and sand, and firm planting seem to suit all three.

The late Mr. H. Woolman

We have received the following from Messrs. H. and J. Woolman, of Shirley, Birmingham, with reference to the lamented death of Mr. H. Woolman, Junr., recorded in our issue dated November 27th, page 722 :—

"Mr. H. Woolman, Senr., and Mr. J. Woolman take this opportunity of thanking all kind friends and customers for their many expressions of sympathy in the tragic loss of Mr. Harry Woolman as a result of the terrible railway accident at Rotherham.

"They feel that a deep debt of gratitude is owing to all for their kind expressions and floral tributes, and would ask all to accept this intimation of our sincere thanks.

"The business will be carried on as before by Mr. H. Woolman, Senr., and Mr. J. Woolman, who will endeavour to give the same satisfaction as hitherto."

Eucalyptus citriodora

This species of Eucalyptus is very different from the Blue Gum (E. globulus). In both of them the young leaves are totally distinct from the mature foliage, those first produced by E. citriodora being covered with glandular hairs, which, when gently rubbed, emit a very pleasing odour, like that of the Lemon-scented Verbena (Aloysia citriodora). As the specimen develops, smoother leaves are produced, in which the fragrance is much less pronounced. In its young state this Eucalyptus grows quickly, and it is then much appreciated in the greenhouse by reason of its agreeable perfume, but in the neighbourhood of London it is terribly affected by the sulphur-laden fogs which often occur during the winter months. After 24 hours of such fog I have seen thriving specimens look as if they had been exposed to a fiery blast, and soon all the leaves drop, while most of the plants quickly succumb. Eucalyptus globulus is, in a young state, also much injured by these fogs. T.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Hedge-clipping machine

WILL you allow me the hospitality of your columns to say a few words in connection with the article in your valued paper of November 20th so excellently describing the hedge-clipping machine, of which I am the sole vendor? Your correspondent points out its only slight drawback, namely, that a single part of the machinery protrudes slightly on the "cutting side," but he should bear in mind that the machine should be held at an angle against the hedge, which tends to make the offending part "clear" the hedge. This, however, is already under consideration by the manufacturers. I am, of course, in favour of making the machine in this country were it not for certain patent rights. It is the first successful venture of its kind, and the thousands already in use have amply proved the value of the machine, not merely as a labour-saver, but it encourages users to keep their hedges in proper order, and many users are now planting new hedges without fear of the expense in connection with upkeep in years to come, fully realising the truth of your correspondent's remark that well-kept hedges are the backbone of the garden.

JOH. HANSEN.

The decline of allotments

Mr. Burrell (issue November 27th, p. 718) has struck a true note in his letter to you regarding "The decline of allotments." He is one of the very few (apparently) who appreciate the fact that shallow digging always has its effect on the results. I have seen large crops of Parsnips, Carrots, Beet, and other things simply ruined through this same glaring fault, and one is surely to be forgiven if the question occurs as to what effect ploughing has upon crops in general. Ploughing, it seems to me, provides for the turning over of the ground on the surface only, and that to a depth of about 9 inches or so. Of course, for crops with limited root requirements little can be said, yet, even so, some evil effect must result from the soil underneath which is never turned. Is world without a machine which could with this imperative requirement? I convinced that, if some means could be vised whereby the soil underneath could dealt with, larger and better crops wo follow.

The ploughing in of Potatoes, altho one often has to resort to it, is certainly to be recommended. In the first place, seed has to be put in far too deeply, and the next the seed rests upon hard-as-r soil. Referring to allotments in general do not think we need regret their disappe ance, for in most cases they are, at b serious disfigurements to the landscape, very few are properly managed. I th there is a common failing with allotm holders, namely, that they attempt to prod far too much stuff from their limited area.

BRUCE HEWITT

The Prickly Heath (Pernettya mucronata)

Mr. Markham's note (see GARDEN ILLUSTRATED, November 13th, p. 692) on valuable and ornamental shrub is interest reading, and I agree with all he says w regard to its effectiveness when laden w fruit during the winter and early spring. experience of the Prickly Heath has b largely derived from the growing of it o sandy, peaty soil, and I always found fruiting capacity all that could be desi In the pleasure grounds at the King Edw VII. Sanatorium, Midhurst, the Pric Heath was somewhat extensively planted effect, and during quite six months of year the bushes, when loaded with berries they usually are, form a conspicuous and tractive feature and are always greatly mired. The colours varied, as is the c with Mr. Markham's, and ranged fr creamy-white through various shades to d crimson, those of a scarlet tint rivalling berries of Cotoneaster Simonsi in colo Birds do not seem partial to the berries of Prickly Heath, but that they do take som evident by the number of seedlings found the adjoining woods. A. W

Should Fruit Trees be Root-Pruned?

A conflict of opinion among experts

In the issue of GARDENING ILLUSTRATED, dated October 2nd, I read that Mr. W. E. Wright, Tregarth Gardens, Creigiau, near Cardiff, tells us that "it is well to keep ahead with the work" (of root-pruning) "during autumn," and that where there is root-pruning to be done, this can be done at once. Root-pruning is not only fatuous, but it is absolutely barbarous and dangerous. When, I ask, is root-pruning done? In 99 cases out of 100 when a tree which has borne well begins to fail; in other words, when, in the course of Nature, it enters on its old age. The root-pruner gets to work. Let me quote Mr. Wright. "A good trench should be dug at a fair distance from the stem of the tree and deep enough to sever all roots that descend into the subsoil. These should be cut from underneath. Preserve all fibrous roots and work in amongst these a mixture of good loam, bone-meal, and old mortar-rubble." For vagueness this advice is noteworthy: "A good trench." "A fair distance." So on and so on. Why not indicate more specifically the distance and the depth? It avails not to say that circumstances alter cases. If one gives (presumably) authoritative advice, that advice must be such as can be "understanded of the people" for whom it is intended. I say, in all earnestness, that root-pruning ought not to be necessary; that it is against the welfare of the unhappy trees which are operated upon; and that those who advocate the practice are labouring under a mistaken idea. Mutilating the roots of fruit tree, any shrub, any plant whate will not restore it to fruitfulness or to hea Even granting that such a course were be ficial, it ought not to be necessary. Eve one who has the slightest knowledge of fr trees knows that the time to regulate the r growth is within the first four years a planting. I need not explain why or ho experienced fruit-growers will grasp the po at once. The unmeaning and uncraftsm like practice of mutilating the roots of fr trees was, I had thought, tacitly relegated the limbo of old, forgotten things, but, parently, it still persists. I observe, w interest, that Mr. Wright, who gives the vice, has recently moved from Rugby Wales. He says: "We usually comme with the Peaches, Cherries, or other ea stone fruit on the walls." Does this m that, without knowing what the "early st fruit on the walls" is like he means to be to root-prune the trees? I am perfectly w aware that calendar writers must cater the general public. I am not without perience as a writer of these weekly minders, but I have (when writing such) variably refrained from touching upon m ters such as this, which are, really, not c unnecessary, but positively misleading.

A SCOTTISH GARDENER

—— At the present time many garder may be thinking of root-pruning those their fruit trees which have shown a tende

nal-e wood at the expense of fruit spurs. uch simpler method of inducing bushes ower is the operation known as "ring- " A complete ring about ⅛ in. deep and ame in width is cut round each branch a distance away from the main stems. cut checks the flow of sap for the season causes that part of the shoot beyond the g" to form fruit instead of leaf-buds. he case of Plums and Cherries, which apt to grow when cut, a piece of copper can be twisted tightly round each shoot, ciently tight to constrict the bark. This check the flow of sap nearly as much as incision were made. This operation ringing" should be performed in early ; by the following autumn the severed will have united. Where wire has been this should be renewed in October. teurs should try this experiment by ging" a certain number of branches on en tree and note the result the following In nine cases out of 10 the "ringed" ches will show a marked increase in the ber of fruit-spurs over the "unringed"

L. Bigg-Wither.

ells.

— Root-pruning and the planting of all s of hardy fruit are again with us, and hoves all who contemplate such work to n it in suitable weather. It is folly to pt it if the soil is wet unless a good of dry compost is at hand to mix with Trees seen to in early autumn have a better chance of recovery from the while the foliage remains intact than stponed until the trees are leafless and action more or less at a standstill. When e has a fair percentage of fibrous roots need be no hesitation in shortening back all extra strong fibreless roots. equently most of the mischief is found diately beneath the seat of the tree, a g root striking in a downward course to ubsoil, so that a thorough examination cessary and its entire removal. In re- ng the soil every care must be taken of e roots, laying them out in tiers, the s given an inclination to grow upward, ing the fine soil in between the fibres the hand, pressing moderately firm, with al covering of 4 inches or so, which needs made quite firm with the feet. The al planting of fruit trees until every leaf ically has fallen is a mistake. A few often hang on from growth made late in eason. These are better cut off as not of any service to the tree. The hole he reception of the roots should have a foot all round, the soil in the centre a inches higher for the tree to rest on, a stout stake driven in for all that re- support. This will prevent any roots damaged. Use a piece of shred to pre- the bark getting damaged, finishing off a strawy mulch.

ees are frequently planted much too ly, which means, after a few years' th, that restriction to keep them clear ach other is often the cause of root- ing becoming necessary later on. Bush of the Apple need 10 feet or 12 feet . Pears on the wilding, whether nids or bushes, a similar distance. The on the Quince may be 3 feet less, while lards that eventually form big heads ld not be less than 20 feet, assuming that are worked on the Crab.

is pretty generally known to-day that of the primary causes of certain Apples g to fruit is on account of their being le to fertilise themselves by their own n, but are a success when foreign pollen troduced; hence the advisability of freely ing varieties that are known to be good n bearers, such as James Grieve, cester Pearmain, Allington Pippin, and Christmas Pearmain among dessert varieties, while Bramley's Seedling and Worcester Pearmain are only considered partly self-fertile. It is seldom either fail to crop, so should be planted between and along with Cellini Pippin, King Pippin, Lord Derby, Golden Spire, and Stirling Castle as an aid to such shy-bearing varieties as Northern Greening, Gascoigne's Scarlet, Norfolk Beauty, and some others. Pears and Plums require similar placing, always introducing a free-bearing variety or two among those usually found shy. J. M.

—— During the next few weeks, while the weather remains open, the above operation will be engaging the attention of fruit-growers. It is practised, perhaps, more by private growers as a means of administering the needful check when trees begin to exhibit signs of making too much growth and bearing sparse crops, or when rank wood is produced and the crop is nil. In such cases the outcome of lifting and laying out the roots afresh is beneficial, and whenever possible it should be resorted to rather than practising the more drastic method of root-pruning. It is of all methods the best to adopt for dealing with wall-trained trees of a description. It is also of equal value, where necessary, when applied to young trees in the open garden or plantation. After they become too large or old for lifting to be conveniently carried out, then root-pruning must be substituted for root-lifting.

The difference between the two operations lies in the fact that in root-lifting a trench of sufficient depth is opened some distance from the tree—in wall-trained examples this varying according to the age of the trees. The older they are the further away from the stems should the trench be taken out. Once this is done the soil can then, with the aid of forks, be carefully removed from between the roots to as far as it is necessary to do so. As a general rule, when the starting trench is taken out 7 feet or 8 feet away from the stem, lifting may cease when it has reached a point within 3 feet of the stem or wall. When the trench is opened a further distance away than this then stop lifting at 4 feet, 5 feet, or 6 feet, as the case may be, from the wall, and shorten back all the strong roots before laying them out again. There are, of course, cases where it is imperative to lift almost or quite all of the roots, especially when tap roots exist, and many of the main roots have taken a downward direction.

In regard to trees in the open, the trench with which operations are started should be opened at a distance not less than from 3 feet to 4 feet from the stem, and all round the tree. The larger the tree the farther away should the trench be taken out. The same care should be exercised in tracing and liberating the roots, also with respect to tap roots and roots which have got down into the subsoil, as when dealing with wall-trained trees. In root-pruning it may be observed that a trench about 18 inches wide is opened at a distance of from 3 feet up to 6 feet from the stem, the distance varying according to age and size of tree, when all roots met with are cut clean off and the portion of soil or "ball" remaining has to be tunnelled under if there is a suspicion of a tap root being present or of any roots taking a downward direction. This has the effect of preventing unsatisfactory growth in future and inducing the trees to become fruitful. The opportunity should be taken when laying out the roots again and in refilling the trench in the case of root-pruning to mix some good sound loam with the soil; also do not omit, with respect to stone fruits, to provide either lime, lime-rubble, or old plaster for their future needs. Before the roots are covered up, all broken and severed roots should in all cases be cut back and pared smooth. A. W.

Balm of Gilead (Cedronella triphylla)

Cedronella triphylla

It appears that this good old plant, with its pleasant, popular name of Balm of Gilead, is not so generally grown as it was 50 years ago. As an ornamental plant it has little to recommend it; its merit is in the good scent of aromatic and cordial qualities that is given off by the leaves and the whole plant when it is touched or slightly bruised. To those who knew it long ago it has a memory of delightful association with the garden joys of earliest youth. It was formerly known as Dracocephalum canariense, a native of the Canary Islands. When inquiring for it last year, among many kind answers the plant offered was in all but two cases the common Balm (Melissa officinalis). This has nothing to do with Balm of Gilead (Cedronella) except that they both, with a number of the sweet herbs, Sage, Marjoram, Mint, Horehound, Savory, Thyme, with Lavender and Rosemary, all come within that large order of labiates with scented foliage known as the Lavender order. This sweet old plant should be more generally grown. It is not quite hardy, though it may survive the winter in a warm, sheltered place with some protection. It is easily propagated by cuttings. G. J.

An Amateur's Rhododendrons

(Concluded from page 709)

ARABIS is another of the things which could thus be used and underplanted with bulbs of this kind. In one way, Arabis is preferable (especially if Crocuses, Snowdrops, or Scillas were selected). It would flower after these were over, and yet before the mid-season or late-flowering Rhododendrons were in bloom, and the London Pride sends up its feathery pink spikes at the time the Rhododendrons flower. The colour of the London Pride harmonises well with the red and pink shades of the Rhododendrons, but by planting Arabis instead there would be a longer season during which the beds were gay with flowers.

Forget-me-nots would make a cover for the soil, look well when in bloom, and could be thus underplanted with bulbs. It is of small matter which of these plants is chosen. The Arabis and London Pride would be permanent, the Forget-me-nots would replace themselves by seed and thus also give a permanent effect; but the Pansies want replanting in the autumn, pulling to pieces, and firmly planting again well up to their crowns.

It is not wise to disturb the soil in which shrubs are planted, although it is a common practice to turn over the surface of shrubbery beds. It is an easier way of treating such beds, of course, than to lightly stir them, and occasionally top-dress with manure; but the latter is the better way, and if a little of the care which is bestowed upon an ordinary garden Cabbage or Onion was given to valuable and beautiful shrubs there is no doubt they would benefit by it in quite equal proportion.

So I think Arabis, or London Pride, or Forget-me-nots are perhaps better for the Rhododendron than Pansies. The bed, having been well manured to start with, will get on very satisfactorily for some years without further nourishment. I know by experience that this kind of planting of the surface round them does them no harm; but as the roots of the Rhododendrons would be below the Pansies (if the latter were planted in a prepared soil slightly raised above the level of the bed, and this soil, which ought to be a mixture of leaf-mould, good soil, manure, and some sharp sand, was renewed every autumn when the Pansies were replanted) I do not think the Pansies would do any harm to them, and if anyone who had not a large garden wished to combine these two plants the effect would be good.

As to the size of the bed, I should let it be about a yard across and round in shape. The Rhododendron would only be a small shrub with from five to seven or eight little stems at first, and if the bed was dug and liberally treated for about a yard deep there would be plenty of good prepared soil for it to flourish in for some years—indeed, until it had obtained a thoroughly good start.

In recommending Rhododendrons I shall name first those which I think most highly of, though I shall not name one which I have not seen growing sturdily and flowering freely in ordinary garden soil. The colours are good (or, at any rate, are so in my opinion).

Lord Ongley is a good dark crimson, with a large truss of flowers which are freely borne. Mrs. W. Agnew is pale rose in colour, and beautiful in every way. The Queen is a free-flowering white, with a yellowish blotch, and Fair Helen is another white which is especially good. Helen Waterer is very bright crimson, and so is B. W. Currie, though the latter bears rather small flowers; there is a profusion of them, and their colour is a brilliant shade of red. Fleur de Marie is bright rose, and Sigismund Rucker is a beautiful crimson with a dark blotch. Lalla Rooke, a darker one, is of a more plum-coloured shade, and Lady Frances Crossley is a rose-coloured one and very pretty. Lady Rolle, creamy-white with a dark blotch, is another I can very highly recommend; and Marie Stuart is a mauve, which has beautiful flowers of a lovely shade; it does not resemble the old ponticum in the least. Michael Waterer is a good crimson, and so is H. W. Sargent. Barclayanum, Alexander Dancer, Achievement, Baroness Lionel Rothschild, Henry Bohn, Lord Derby, Mrs. Fitzgerald, Mrs. Milner, Sir William Armstrong, and Sir Charles Napier are all good, in shades of rose or red, and Sherwoodianum is a beautiful and desirable light rose variety. Old Port is a peculiar shade of plum, and flowers quite as freely as the others I have named, and Baron Schroeder is another very desirable plum-coloured variety, though of a different shade. Baroness Lionel Rothschild has rather smaller flowe of a bright crimson colour, and is in eve way good; and concessum, though it do not flower so freely as the others, grows w and is a very pale pink. Stella is anoth pale one, very good; it flowers freely, but h a smaller flower than concessum. T Bride and Snowflake are both fine whit and so is Sappho; and Mr. George Har and Mrs. Russell Sturgis are both excelle white ones with dark spots. Manglesi another very good white, and Barone Schroeder, Countess of Cadogan, Evere ianum, fastuosum flore-pleno, Lady Elean Cathcart, Lady Greville, Lady Howe, La Tankerville, Mrs. Charles Leaf, Sir Thom Sebright, and Sir William Armstrong flower freely and are of robust habit.

I have only mentioned those which I kno to be really satisfactory. M. J.

Rhododendron Williamsianum

The nodding flowers are like open bells of pure rose-pink

Rhododendron Williamsianum

THIS is one of the most distinct and the same time one of the best of t Rhododendron species from China. is of low, prostrate habit and loves to cre over rocky boulders—in size and habit it ideal for the rock garden. Visitors to Ke never fail to admire the fine hummock this species in the rock garden, and we sha always remember the sensation created by well-flowered plant of this species shown the Hon. H. D. Maclaren at the Rhododendron Show last April. This specimen, whi was not less than 2 feet 6 inches across, w awarded the special prize offered for the be plant in the show.

There are about 1,000 species of Rhod dendron, but it is safe to say that Williamsianum would find a place in the fir dozen.

Capt. F. Kingdon Ward tells us that th interesting plant in nature is confined to o particular mountain named Wa-Shan, Western China.

There is a good deal of character abo this trailing plant; the leaves are orbicul and the nodding flowers are like open bel of pure rose-pink. H. C.

Grevillea rosmarinifolia in bloom

Growing on a southern slope and in rather sandy loam, the most sheltered bush of this pretty evergreen from New Sou Wales are already in bloom, the deep ros red racemes of flowers forming a pleasir addition to our collection of winter-floweric shrubs. Here, in the south, it requires protection and retains its fresh green Ros mary-like appearance throughout the yea Once it becomes established it forms a goo sized bush in quite a short time, its averag height here (Sussex) being about 4 feet, b with a much greater spread of branches. Th only other hardy species is one with pa yellow flowers, G. sulphurea, and a ve pretty shrub it is, although of the two I pr fer the former. G. sulphurea is later bloom, the flowers usually appearing durir April or May. In growth it presents a mo erect habit than the foregoing species ar shows less tendency to branch outward Both enjoy a warm, sandy, well-drained soi and should not be planted within 5 feet paths, as they require a good deal of spac for free development. If this is not provide at planting time cutting back must be r sorted to eventually. E. M.

Nothofagus obliqua

This, one of the few South America Beeches, reaches 100 feet high in its ow country, its attraction here at the preser time being the rich red and brown of i leaves, which remain upon the trees for considerable time. E. M.

FRUITING SHRUBS FROM A WEST SOMERSET GARDEN
The berry crop is exceptionally rich this autumn
From left to right: Pernettya, Dianella, and Berberis

NOTES FROM A WEST SOMERSET GARDEN

By Norman G. Hadden.

HE unusual heat and drought, which lasted from the middle of June till the middle of August, seem likely to leave lr impression on plants for many months come. On the days when most plants ked parched and scorched one comforted eself with the thought of the splendid ening the dormant bulbs of Amaryllis were eiving, and sure enough, before August s out, the fat red buds full of promise gan to appear through the soil. The first vers opened early in September, and conued until heavy storms in mid-October tered the last blooms of the laterwering varieties. The bulbs are growing in ed in a warm corner of the garden, but y a few are actually close to a wall. By the finest variety is that known as var. rkeri, really a hybrid with Brunsvigia ephinæ for the other parent. This is er than other Belladonna Lilies, and the wer-head is larger. The colour is a richer k with a most beautiful yellow shading in interior. The blooms have more subnce than other forms and remain in uty for several weeks. This is the first son A. B. Parkeri has flowered in my gar-, and it doubtless requires a hot summer ripen it, but it is well worth waiting for.

No doubt the hot weather is also responsifor the profusion of flower on Rhodochiton ubile, which has been wreathed with hunds of its bright rosy-purple calyces surnding the velvety black tubular blooms. is one of the most striking climbers for a ltered wall that can be found, and many ple have mistaken it for a Bougainvillea a short distance. Even up to the time of iting (November 18th) it is gay and showy, calyces retaining their colour, although seed is already ripe. In greenhouses odochiton is usually treated as a biennial, where it will succeed outdoors it thrives at least three years. It will stand several grees of frost without injury, but is essentially a plant for mild localities only. That rampant climber Araujia sericifera has revelled in the extra sunshine, and, besides being a mass of flower still, there are several of its curious large fruits, shaped not unlike sheep's heads, which seem out of proportion to the comparatively small white blossoms.

It takes a deal of sunshine to persuade Oleanders to flower in the open in this country, and it was unfortunate that bad weather at the end of August rather spoilt the efforts of a bush of the beautiful double pink variety. That magnificent relative of the Salvias, Leonurus leonitis, kept up a brave show of bloom until battered down by the late October gales. It has formed a shrub fully 10 feet high, and as it flowers on the young wood I find it responds to really hard pruning. Its brilliant orange flowers are so showy throughout the autumn that one wonders why it is not planted more frequently in the southern counties. The best of all the Salvias is S. fulgens, which rapidly attains a height of 10 feet here and bears its vivid scarlet flowers for fully six months on end. I have never known it to be killed by frost, and as cuttings put in a cold frame in spring make bushes 3 feet high by the autumn it is easy to keep young plants in reserve. After three years or four years the bushes become rather leggy and top-heavy, and are better replaced by vigorous young ones.

The uncommon Japanese Ginger (Zingiber Mioga) has flowered for the first time here this year. It is by no means a showy or beautiful flower, but one of great interest, as it comes up several inches away from the foliage and suggests a large cream-coloured Roscœa dropped on the ground with no stalk at all. It is much more like some queer parasite than the rightful blossom of the Canna-like leaves. The flowers are said to be eaten as a salad by the Japanese. A very different member of the Ginger family is Hedychium Gardnerianum, whose noble raceme of yellow flowers is quite as heavily scented as Lilium auratum. But the Hedychium flowered better last year, and I think it is a plant which enjoys ample moisture at the root. The long-continued drought seems to have had the effect of retarding Iris unguicularis, which generally gives us a few flowers before October is out. This year, in spite of all the ripening, there were no blooms till late November. Nor have any of the Bearded Irises produced second flowers, not even Mrs. Alan Grey, which can generally be relied on to carry a small crop of bloom in autumn. The only Iris which has flowered out of season is I. Wattii, which yielded one flowering stem in September.

As was to be expected, all the smaller autumn-flowering bulbs responded well to the sunshine, notably Nerine Bowdeni, Sternbergia lutea angustifolia, Crocuses, and Tigridias. Cyclamen neapolitanum has been extraordinarily lavish with flower, and shows how much it enjoys a thorough baking when dormant. Cypella platensis is certainly a very charming and refined flower, but one does wish it were not quite such a fleeting beauty! Tigridias are comparatively long stayers, and, at any rate, they go on opening fresh buds day after day. But Cypella platensis seems to spend months in producing a slender yard-high stem and then suddenly expands a very lovely lavender-blue flower which dies after a few hours of glory. One hopes this performance may be renewed next day, but alas! Cypella platensis has none of the generosity of bloom of C. Herbertii or the Tigridias.

The berry crop is exceptionally rich everywhere this autumn; the Barberries and Pernettyas in particular are carrying unusually fine crops. But of all berry-bearing trees I have seen so far, Pyracantha Gibbsii is the most noteworthy. The arching branches of this small tree are gracefully bent with hundreds of bright red berries, and

so far the birds have made little impression on them. On the other hand, the yellow-berried form of P. Rogersiana, which ripened several weeks earlier, was stripped by birds in a few days. P. Gibbsii is easily increased by seeds or cuttings and is a plant which deserves to be grown on a large scale. Groups of it on the outskirts of woodland would be most effective.

A very interesting and little-known New Zealander is Dianella intermedia, whose charm lies in its turquoise berries borne on very slender branching stems 2 feet tall. Its berries are not so large as those of the Tasmanian D. cœrulea, but they are much more abundantly produced in my garden, where the larger species is a shy bloomer.

It is a surprise to me to find Tricuspidaria dependens covered with seed vessels following an exceptionally lavish crop of dainty white flowers; indeed, it is still carrying a number of flowers in November. It is a shrub which deserves to be grown in a good position, and has no doubt had to suffer for the more striking charms of its red kinsman, T. lanceolata.

Flowering shrubs in November are none too plentiful, so that Buddleia auriculata is invaluable. My finest plant has rambled through an old Apple tree and smothers it with wreaths of deliciously fragrant creamy flowers. It will, of course, grow as a bush in the open or against a wall, but is naturally a shrub of semi-scandent habit.

Another legacy of the hot summer is a flower-bud on the Tea Plant (Camellia Thea), which has not deigned to flower here hitherto.

Amaryllis Parkeri
It flowered well during October in the warm corner of a Somerset garden

The Lily of the Valley

MANY amateurs are under the impression that the Lily of the Valley will grow and flourish anywhere. Thus it is often found lingering at the foot of a Laurel or some other hedge, whose roots had taken every particle of nourishment out of the soil. True, the plants enjoy shade, as is proved by the many colonies of the wild Convallaria majalis that are to be found flourishing in our English woods. These are usually found beneath tall-growing Oaks, whose roots are deep in the soil. They are provided each year with a natural top-dressing of leaves, which, as they become rotted, form excellent material for the Lilies.

To grow Lily of the Valley well it requires a depth of at least 1 foot of good light loamy soil. The bed may be made up in any position so long as it gets some shelter from biting winds. A westerly position at the base of a wall is an ideal position. If the natural soil is wet and cold it is wise to raise the bed by means of planks placed around them. If the soil is of an ordinary vegetable nature it may be dug deeply and a good dressing of sweet leaf-mould and well-rotted manure added. If it is of a heavy nature it is well to replace a large portion of this with good loamy leaf-mould, manure, and sand, mixed well together and made firm. When new crowns are planted these may be set 4 inches to 6 inches apart and 9 inches between the rows, but if renovation is taking place the crowns may be placed much nearer together, say, 2 inches to 3 inches apart. To grow them really well they should be lifted about every four years, divided, and after the beds have been well prepared replanted singly. When planting it is wise to draw out wide drills with the hoe 3 inches to 4 inches deep, and when finally covering the tips of the crowns should be just level with the surface, the roots should be spread out and not bundled in together, as if planted properly during October or the early part of November many of them will flower the following year. The soil should be worked in well around the roots as the work proceeds, and towards spring the bed may be given a light top-dressing of leaf-mould and manure with great advantage, repeating this each year and supplying the beds with liquid manure and ample water from the time the spikes commence to show until growth has finished during summer.

A succession of flowers may be had where space is available by planting in three different positions—south, west, and north. The largest and best Lilies I have ever seen in the open were grown in South Wales, beneath a large Walnut tree on a north border. The variety was Fortin's Giant, the best of all. Beautiful bunches of flowers were picked from the middle to the end of June each year. The bed was top-dressed and regularly fed, wi astonishing results. Now is the best time f the year to do this work, and beds propel constructed and planted as advised, with go crowns of the variety mentioned, will amp repay the grower. Beds that have been u disturbed for years may now have attentio

W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Phlox amœna

The dwarf alpine Phloxes, when well c tivated, add much to the attractions of t garden. Undoubtedly the most popular f these are the varieties of P. setacea and allii species. Yet the fact that they are so chari ing need not prevent us from adding some f the other species of less moss-like hab Such is Phlox amœna, a delightful plan with stems 6 inches high, and bearing May and June large flowers of brilliant ro It is of trailing habit, and, where happy, wi soon increase, rooting as it grows. There no great difficulty in growing P. amœn provided it receives a moderately light soil.

S. ARNOTT.

Bellis rotundifolia cœrulescens

This beautiful little Daisy from Morocco unfortunately, not quite hardy in the colc parts of the kingdom, but here in the sh tered west it withstands any but the sever winters if planted in a sunny position on t rock garden and provided with a well-drain gritty soil. A little protection from excessi winter damp is advisable and may take t form of a sheet of glass, thus allowing for free passage of air over and around the plan The plant, given congenial surroundings, almost always in flower and quickly forms good-sized clump. The flowers vary fro white to pale mauve. The leaves are mo or less hirsute, with slender stalks from inch to 3 inches long, and the whole pla has that delightfully fresh appearan reminiscent of our own familiar Daisy: an alpine-house this little plant is happy. is easily propagated by division, and has be known in English gardens since 1872.

RALPH E. ARNOLD.

The Sheep's Scabious (Jasion perennis)

This is a neat plant with slender flow stems 6 inches or more high, bearing a han some head of blue flowers in late summ and remaining in bloom for a long time. is well adapted for the rock garden, pr vided a good depth of sandy loam be giv for its underground shoots to ramble int The plant flourishes on the level ground an being a moderately strong grower, it shou be associated with the strongest plants on on the less important surfaces of the ro garden, where a plant of enduring habit required. In addition to being free flowe ing, it is one of the easiest plants to manag and thrives where many plants fail. It very easily increased by cuttings or di sion, but as a few tufts may be divided in many pieces and quickly form plants, it scarcely worth while to increase it cuttings.

H. S.

Border Carnations

Where beds of Carnations were planted o last month the plants will now be pretty w established. At the same time, it will found beneficial to give the surface a lig sprinkling of soot, afterwards applying mulch of good manure and loam in equ parts. This mulching need not be a hea one; a couple of inches or so will be useful.

The late Michaelmas Daisies

HE perennial Asters are now so many, and their blooming covers so long a time —a good eight weeks—that it is a great ntage, if space allows, to have separate ers for them for September and October ctively. The illustrations show a ral view and some details of the double er for the October Daisies. Until this they had been planted more closely to- er, but their last replanting had been more thinly, much to the advantage of general effect, for it allows the graceful, ard springing habit of the plant to be , a quality that is lost when they are crowded. The kinds are, on the left, llus, Blue Gem and White Diana to- ls the front, with the old and always il Robert Parker and the more modern Adams and Magnet at the back; strong le and small, starry white. Then the ring changes to slightly warmer tones— . Edith Gibbs and Combefishacre, with a ing of a good pink Novæ-Angliæ—a ous plant preferable from its tender ring to some of the newer and stronger e-Angliæ. The pink Lady Lloyd fol- . All this is grouped with the fine old e Daisy, Pyrethrum uliginosum, which sed rather largely in the Aster borders. colouring then returns to the strong les, the grand N.-A. Ryecroft Purple and ax, and beyond these the greyish tint of ceus and a front mistiness of elegans. other side is treated in much the same including a few other kinds, among a useful home seedling Margaret, an ge coloured purple N.B., very full of r and precious on account of its very rate height. Here is, again, a group e tall grey puniceus, a plant that cannot drought and is grand in some swampy quite away from the Aster garden. It ld be remembered that Aster Amellus is divided in the spring. It is a European , whereas the taller kinds are nearly all orth American origin. The borders have dging of Stachys lanata broken at inter- with a yard or two of Megasea and of good autumn-blooming plant Ophio- n Jaburan, with its dark, glossy, linear s and spikes of purple bloom, looking thing like a Grape Hyacinth on a larger . The Asters are well seen against a mass of Portugal Laurel that forms an over the path at the end of the picture.

G. J.

Campanula garganica

is forms a neat spreading tuft of soft foliage, and is densely covered with flowers with a pale rim at the base of ube in June and July. It is one of the st plants to grow on the lower ledges of in a sunny position. It is quite free ndy or gritty soil in the fissures of rocks e the roots can obtain plenty of moisture. g of a slender and wiry nature, it is well ork in a top dressing of small limestone ings, loam, and sand about the plants ring. This, besides providing the plants nourishment, will help to protect the g growth from slugs. H. STEVENS.

ea stakes and Birch brooms

is is the time to overhaul the existing of Pea stakes and to make arrange- s for a fresh supply. All worn-out or n stakes ought to be burned, and the lot should be pointed and graded as they to hand. Birch brooms are indispensa- and where ample supplies of Birch can d for the trouble of cutting, a good sup- ught to be laid in. During bad weather rooms can be made in varying sizes for us purposes.

1. The south border of October Asters. 2. Aster puniceus. 3. Asters thinly planted, bordered with Ophiopogon Jaburan

Report on condition of horticultural crops on the 25th November

Broccoli.—In Penzance area present cuttings are poor, later varieties more promising; in Kent larger acreage than usual planted and plants look promising.

Cabbage (winter varieties).—A very good crop.

Cabbage (autumn-planted).—Plants are very promising generally in spite of wet weather.

Celery.—Crops good, though diseased.

Leeks.—Plants satisfactory.

Parsley.—Progress is slow owing to weather.

Savoys.—Crop somewhat above average, quality good.

Sea Kale.—Crowns are good, but forcing has been delayed through shortage of fuel.

Spinach.—Crop reported plentiful in Kent, but disappointing in Middlesex.

Parsnips.—A good crop.

Carnations, Perpetual (under glass).—Good.

Chrysanthemums (indoor). — Flowering well.

Roses (under glass).—Good.

Preliminary Statement showing the Estimated Total Produce and Yield per Acre of the Potato and Turnip Crops in England and Wales in 1926, with Comparisons for 1925, and the Average Yield per Acre of the Ten Years 1916-25.

Crops.	Estimated Total Produce.		Acreage.		Estimated Yield per Acre.		
	1926.	1925.	1926.	1925.	1926.	1925.	Average of the Ten Years, 1916-25.
	Tons.	Tons.	Acres.	Acres.	Tons.	Tons.	Tons
Potatoes	2,763,000	3,214,000	492,419	493,241	5 5	6·5	6 1
Turnips and Swedes..	10,976,000	9,198,000	766,502	805,486	14·3	11·4	12·4

Potatoes.—The detailed estimates of the yield per acre of Potatoes confirm previous forecasts that this year's crop is well under average in most parts of the country. Over the whole of England and Wales the yield per acre is only 5½ tons, or three-fifths of a ton below the 10 years' average, and 1 ton less than in 1925. The worst crops are in the Isle of Ely, where the yield averages only 3½ tons per acre, or a little more than half the 10 years' mean for that county, while Huntingdon, with a yield of only 3¾ tons, has a deficiency of 2¼ tons per acre. Yields are more than 1 ton per acre below average in Norfolk and Lincoln (Holland). In the north and south-west of England and in Wales about average crops have been obtained on the whole, but results vary a good deal in the different counties. Lancashire, Cheshire, and the West Riding of Yorkshire have lifted crops a little above their respective averages.

The total production on agricultural holdings in England and Wales is estimated at 2,763,000 tons, or 450,000 tons less than in 1925, and much the same as the short crops of 1923 and 1924, when the total production in England and Wales was 2,758,000 tons and 2,696,000 tons respectively. There was a good deal of disease among the crop in the eastern counties, and the tubers are generally small throughout the country, but the crop was clamped in clean and dry condition.

Turnips and Swedes.—In practically all parts of the country yields per acre of Turnips and Swedes are well above average, the only exceptions being Devon and Cornwall, and a few counties in Wales and the extreme north-west of England. The northern counties on the eastern side of the country have exceptionally heavy crops, each county from Northumberland to Lincoln (Lindsey) growing from 3 tons to 4 tons per acre more than their 10 years' averages. The yield per acre over the whole country is estimated at 14.3 tons, or nearly 2 tons per acre above average and, apart from 1920, when a similar yield was obtained, is the heaviest since 1910. The total production of 10,976,000 tons is 1,780,000 tons greater than in 1925.

FRUIT GARDEN

A succession of Pears

THE interesting article on the Pear, which appeared over the initials "J. M." (p. 677), in the issue of November 6th, ought to be studied by everyone who intends during the present planting season to take up the cultivation of this choice fruit, or to add to his present collection. "J. M." confines his remarks to the important work of training and planting, and it may be permissible to supplement the notes by a list which will show how it is possible, by making a careful selection, to have Pears from the end of July—in favoured climates—till the spring of the following year. The earliest variety to mature its fruits is Doyenné d'Eté, a small Pear, certainly, but turning in when even a small fruit with a moderate flavour is appreciated. This variety is closely followed, early in August, by Citron des Carmes, which beats Doyenné d'Eté in point of flavour, but which lasts in perfection but for a week or so. Next comes Jargonelle, which needs no recommendation from me. Unfortunately, like Citron des Carmes, its season is a brief one; and it is succeeded, not unworthily, by Beurré Gifford—a Pear excellent in most years, but which unaccountably (to me, at least) is occasionally almost devoid of flavour. It is a sure and regular cropper. This carries us to the end of August, when Williams' Bon Chrétien begins to ripen. Too well known to need any description, it is a great bearer and ought always to be included. Next in order comes that very excellent Pear, Louise Bonne de Jersey, which, from my own personal point of view, I always maintain to be the very best Pear which I have grown. Its vinous flavour is unique, and does not give the surfeited feeling which many other Pears do if a heavy crop has to be consumed. Almost at the same time Thompson's begins to ripen, and it is an exquisite variety. Shortly afterwards Marie Louise turns in, surely one of the best—if not the very best—raised by Van Mons. Unfortunately, the blooms of this choice Pear are very tender and suffer to a greater extent from frost than those of the majority. In October we get Pitmaston Duchess in perfection. A noble fruit, it is sometimes stigmatised as being "all size and no flavour," but when grown on a wall I consider it to be, if not quite in the first flight, of more than average quality in point of flavour. Close upon the heels of the Duchess come Beurré Clairgeau and Beurré de Capiaumont. The former is a trifle coarse, but a great bearer; the latter is very hardy and seldom fails to give a heavy crop. The next in rotation of ripening is Doyenné du Comice—a Pear which has been often described as the most delicious variet i cultivation. Like Louise Bonne de Je it possesses an individual flavour wic I have heard compared to that of new il in which sugar has been melted. In tu is succeeded by General Todleben, anc most excellent variety. Passe Crasa Beurré Superfin, and Beurré Diel follo close succession. All are good, althe Beurré Diel is uneven. When these past, reliance may be placed upon the but good, Chaumontel—not a very Pear but, when wall-grown, one of choicest.

We are now approaching the en November, and yet the choice is not limited, for Glou Morceau and Josephin Malines are coming to maturity. It pity that the former is, at times, marre small pieces of gritty tissue which de from its undoubted value. Josephine Malines is what I may term a district —in other words, in certain neighbourh it is, as regards flavour, everything w can be desired, while in other places no better than a Turnip. Then follows delicious Winter Nelis—a small insignifi fruit, common looking and ugly in app ance, but in the very first flight for qua At, or about, the same time, comes Ne Meuris which, in my experience, is a shy and a not too reliable bearer. Bo Rance succeeds this variety, and it is excellent keeper. Then follow Passe Col with its distinct and rather peculiar flav and Easter Beurré (which, however, c sionally ripens long before Easter) concl my sequence.

There are, in addition, many other ca Pears, among which may be menti Beurré Bosc and Beurré d'Ama Autumn Bergamot, which is pleasantly fumed; the shy-bearing Gansel's Berga Durondeau, a very fine Pear indeed; the Green Chisel; the "Trout Pear" (Fore Beurré Van Mons; Nouvelle Fulvie, a licious Pear but, in my experience, the capricious of all. Knight's Monarch is c sionally worth its place, but I would, hesitate to plant it. W. McGuffo

Mabie Gardens, Kirkcudbrightshire.

Keeping late Apples from shri ling after they are gathered

There is often a great loss arising from Apples and Pears shrivelling after ha been gathered. Sometimes the cause ma gathering too early; in other cases the f room may be unsuitable for keeping fruit; and there are some kinds of Ap such as Court Pendu Plat, that will sh almost under any circumstances, if man in the ordinary manner. The best wa keeping late Apples that show a tendenc shrivel is to pack them in jars, boxes barrels, and strew dry sand amongst th taking care, of course, that both in gathe from the trees and in packing no bruise bird-pecked fruits are placed amongst t which are sound. They should be store a dry, cool place, and not disturbed until quired for use. F

American blight on Apple trees

(J. H. Robinson).—Your Apple tree been attacked by American blight, and st now that the trees are dormant, must taken to rid your trees of this pest. G little paraffin and daub it in wherever can see the insects. A little later wash t out with strong soapy water or Gish Compound. Then mix a little soap, and paraffin to the consistency of paste well daub it into any cracks or wounds in bark where the insects are secreted. If appear later daub each one with s methylated spirit.

A magnificent display of Chrysanthemums at Hesketh Park, Southport

The Newest Chrysanthemums

BOUT 30 first-rate novelties were submitted for adjudication to the Floral Committee of the National Chrysanthe- Society at the R.H.S. Hall, Vincent re, Westminster, S.W., on Monday, 5th inst., and nine excellent new sorts ed recognition, as follows:—

A.—This is a very excellent single- red variety about 6 inches in diameter, g about three rows of fairly broad s evenly arranged around a nicely pro- ned golden disc; colour, light chestnut golden-yellow zone around the disc. imously awarded a First-class Certi- From Mr. H. Shoesmith, Junr., ord, near Woking, Surrey.

NADIER.—Another good single-flowered about 5 inches in diameter, having at three rows of fairly broad florets of good ance, neatly disposed around a golden colour, bright reddish-chestnut. F.C.C. from Mr. Shoesmith.

Y BRUNTON.—This is a large decorative ese bloom suitable for market. The rs are from 7 inches to 8 inches in dia- and have florets of medium breadth reflex in even fashion, building a bloom d form; colour, golden-bronze. F.C.C. n by Messrs. Keith Luxford and Co., w, Essex.

UMN TINTS.—A huge Japanese flower hibition standard and quite a new ak" in flowers of this character. The are broad and long, and build a flower ooping form and of good substance; , fawn, changing to rose at the ends of florets. F.C.C. Also from Messrs. Luxford and Co.

RENSHAW.—This is an attractive large-flowered Japanese decorative bloom some 7 inches to 8 inches in diameter. The florets are of medium width, slightly curling and recurving at the tips; colour, rosy-apricot with golden-buff reverse. F.C.C. Shown by Messrs. Keith Luxford and Co.

RED MAJESTIC.—This is a bronzy-red sport from the well-known and reliable exhibition variety, Majestic, and, as such, is sure to be largely grown. It was shown growing on single stems in 8-inch or rather smaller pots, and the blooms were large, full, and of pleasing drooping form. F.C.C. Shown by Mr. H. J. Jones, Ryecroft Nursery, Lewisham.

MISS DOROTHY CAPP.—One of the best single-flowered novelties of the present season. The blooms are each about 6 inches in diameter, having several rows of broad florets evenly arranged around a well-proportioned greenish-gold disc. Pure white. F.C.C. From Messrs. H. Woolman, Shirley, Birmingham.

GOLDEN SEAL.—Undoubtedly one of the most beautiful single-flowered novelties of the present season. The flowers are about 5 inches in diameter, having three to four rows of fairly broad florets very evenly disposed around a disc of ideal size; colour, the richest buttercup-yellow. Unanimously awarded F.C.C. Also from Messrs. Woolman.

SCYTHIA.—Another huge exhibition bloom of refined character. The florets are of medium width and of great length, curling and incurving in loose fashion, building up a bloom of splendid depth; colour, amber with golden-amber reverse. F.C.C. From Messrs. Woolman. The Committee wished to see again.

PATIENCE.—A dainty Anemone-flowered bloom about 5 inches in diameter. The colour is golden-yellow and both ray florets and disc are well proportioned. The flowers are borne on rather thin, wiry stems.

Some 25 new Chrysanthemums were submitted to the Floral Committee of the National Chrysanthemum Society at its meeting on Monday last, November 29th, at the Royal Horticultural Society, Vincent Square, Westminster, S.W. As usual a high standard was observed by the Committee, quite a good proportion of beautiful novelties failing to obtain the coveted First-class Certificate. The following new sorts were recognised:—

MRS. W. TURNHAM.—This is an interesting single Chrysanthemum about $4\frac{1}{2}$ inches in diameter bearing a large number of rows of florets medium to broad, evenly arranged around a golden disc of moderate size; colour, crimson. This should prove to be a useful decorative sort. Commended. Shown by Mr. W. Turnham, The Gardens, Greenlands, Henley-on-Thames.

GUARDSMAN. — Another excellent large single Chrysanthemum about 5 inches in diameter. There are three to four rows of florets of medium breadth evenly disposed around a golden disc of useful size; colour, bright velvety-crimson. F.C.C. to Mr. H. Shoesmith, Junr., Mayford, near Woking, Surrey.

VALERICE.—A free-flowering single Chrysanthemum some 3 inches to $3\frac{1}{2}$ inches in diameter. When grown in disbudded spray form it is an attractive flower. Florets fairly broad; colour, reddish terra-cotta. Commended. Shown by Messrs. Keith Luxford and Co., Harlow, Essex.

(Continued on page 737)

REMINDERS FOR THE WEEK

Southern and Midland

Jerusalem Artichokes

There is no advantage in leaving the tubers in the ground after this date, as they are apt to become badly infested with slugs. They should be lifted on a dry day, and the medium-sized ones placed in boxes for seed. The remainder will keep quite firm and sound if covered with ashes or sand in the cellar or Potato store.

Carrots in frames

Where seed was sown in August or early September in frames the plants are now approaching maturity, and to encourage growth they may be assisted with liquid-manure given once a week. All decaying foliage should be removed and the soil stirred amongst the plants. If slugs are troublesome keep the soil dusted with soot. Air should be given freely on all favourable occasions.

Chives and Tarragon

In some gardens there is a demand for both these during the winter and spring. A few roots lifted now and placed in boxes of soil may be kept in a cold frame until it is necessary to introduce them into heat, when they will in a few weeks throw up young green shoots.

Hardy Azaleas

Azalea mollis and the Ghent Azaleas in their charming shades of colour are both hardy and can be recommended for all but very wet and cold gardens. In beds, borders, or as dot plants they are attractive when in bloom during early summer. There is little difficulty in getting the plants established as their roots are usually encased in balls of fibrous peat. If the soil is on the heavy side it is well to add some peat and leaf-mould when planting.

Mulching Roses

Some people believe in mulching during autumn each year. For my own part I find Tea and newly-planted Roses benefit from a mulch of littery manure given about this date, but for the majority of established Roses I find decayed manure forked in between the plants at pruning time the most advantageous.

Lawns

Returfing should be proceeded with as fast as possible, and where the grass needs nourishment a mixture of decayed manure and old potting soil spread evenly over the grass and well raked in is the best top-dressing for the purpose. Newly-sown lawns should be rolled frequently when the soil is dry and does not adhere to the roller. It should be borne in mind that this must not be done during frosty weather. A light top-dressing of old potting soil may be given with much advantage to the young grasses.

Pruning Clematises

Many plants of Jackmani and other varieties that bear their blooms on growth made the same season are ruined yearly by not being pruned. Now is a good time to do this work, and the long, straggling growths should be cut back to within 9 inches of the old wood. A little lime-rubble forked into the soil among the roots and a mulch of manure will help the plants immensely.

Bay trees

Where these are growing in tubs or boxes on terraces in bleak positions they are apt to be damaged by severe frosts and winds, and it is advisable to remove them to the shelter of an open shed or to a corner that is sheltered by the house or building from the north and east winds.

Amaryllises

These plants have now completed their resting period, and in the course of a few weeks will be showing signs of growth. When this is discerned the plants must not be neglected, but brought to a sunny shelf in the warmest part of the greenhouse. Water should be given sparingly until free growth is being made, after which they must not suffer at the roots.

Gooseberry sawfly

This fly was prevalent among the bushes last season, in many cases more so than in previous years. Much can be done at the present time to prevent the pest during next season. Remove the soil to the depth of 3 inches or 4 inches and wheel away to a part of the kitchen garden that is being trenched, and replace with good loam to which has been added a good dusting of fresh lime.

Fruit trees on walls

The soil at the foot of walls where fruit trees are growing soon becomes exhausted, especially where this is cropped with vegetables or other subjects. To encourage surface roots it is advisable to remove the top soil until the first layer of roots is found and replace with good loam to which have been added some bone-meal and wood-ashes, while for all stone fruit the addition of lime in the form of rubble is beneficial.

Red and white currants

Like the Black Currant, these require more drastic pruning, as they produce the best fruit on spurs formed the previous season. The young shoots should be pruned back during winter to within two or three buds of the old wood, removing a branch or two if the trees are overcrowded. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Stove

It ought to be remembered that, in the stove, this is the season of rest for many plants, and if these are kept in a state of excitement by too much heat and lavish supplies of moisture their constitution will suffer. Bulbous plants, particularly, may be damaged in this manner. Amaryllises, Gloxinias, Gesneras, Caladiums, the Achimenes and Tydæas, and plants of a similar kind should now be gradually dried off and placed in a lower temperature for a time. Insect pests in the stove can now be dealt with by vaporising or by sponging. If mealy bug be present a determined effort must be made to get rid of it—and it can be done. This pest appears to be partial to Stephanotis and Gardenias, and these plants, when being rested, must not be permitted to enter the vinery, or trouble will follow. Regulate the inside thermometer by that out-of-doors—in weather which, for the season, is normal, 65 degs. at night with a fall of a couple of degrees in the early morning will be quite sufficient.

Fruit houses

The cleaning of fruit-houses, the occupants of which are now dormant, should be pushed on irrespective of weather. At times this work is reserved for wet and stormy weather, but it is much more satisfactory to undertake it now and to make a speedy end of what is always a sloppy and disagreeable item.

Outside work

This has, to some extent, been interf with by early and somewhat severe fr but the soil at the moment is in excel condition for planting. New Roses fruit trees should, therefore, be got ou once, and before the soil becomes thorou chilled. Turf will now go down well w there is any patching or relaying to be un taken. Weedy lawns can be cleaned as as possible and a dressing of fine wood-a and basic slag in mixture will help to fres the turf for another season. This mix can be thoroughly recommended. Of cou its effect is not immediate, but it will be ble next season, and more so in the cours the second year after the application.

Christmas Roses

Clumps of these should now be covere some way. Wine cases with their bott knocked out are useful for this purpose, when they are in position sheets of glass be laid over the tops. Strong pieces, may be lifted and put into large pots baskets, which can be placed under gl where the blooms will, naturally, be a earlier and purer than those from the o while the danger from slugs is elimina Such pieces can be put out of doors imm ately after the flowers are cut.

Cyclamens

Old specimens will now be in bloom, such are useful for rooms, corridors, and house decoration generally. Coolness essential, and watering must be care done. Younger plants for spring flowe will be quite safe in a cold frame if sashes are well covered with mats du frosty nights. Late-sown seedlings will be ready for pricking off into boxes. I th these seedlings make headway much m quickly and satisfactorily if the boxes con a mixture of old leaf-mould and sand on that is to say, without any loam whatever

Calceolarias and Regal Pelargonium

Herbaceous Calceolarias, as well as the creasingly popular hybrids, should now b 4-inch pots and placed on a shelf near glass in quite a cool house, such as, for stance, a Peach-house at rest. Any p which develops a flower-stem at this sea ought to be thrown out. If the stem is pressed and the plant retained the latter never be satisfactory. A similar plac suitable for Regal Pelargoniums, now 5-inch pots. Both should have suffic moisture to prevent dryness, but no m and an occasional light vaporising will h neither.

Cold frames

While it may be needful to mat up frames during frosty weather, the cover ought to be removed on every occasion which it is possible to dispense with pro tion. Damp is much more deadly than f at this season, more especially when th combined with semi-darkness.

Vegetable garden

If not already attended to, Asparagus ought to be cleaned down without delay. is a matter for individual judgment whe the beds be mulched with manure at time or whether the mulch is applied spring. Globe Artichokes, while fairly ha relish a top-dressing of litter, and this prevent damage from severe frost. If t be a good bed of garden Turnips (as dist from Swedes) a few of the larger bulbs m with advantage, be lifted and stored.

W. McGUFFO

Mabie Gardens, Kirkcudbrightshire.

Golden Swallow

NEW GLADIOLI

Sunnymede

Notes on Some New Gladioli of 1926

HE number of new varieties put on the market each year has become so large that the amateur has a difficult task in ting what to add to his collection. her, the catalogues of some growers are te in arriving that it is impossible to ob- the bulbs early enough to ensure good ts. Then the prices of new varieties, ugh they have descended from the high- r mark of a year or two ago, still appear nd the figure which many care to go. e of the American and Australian varie- lo not take kindly to the English climate, he soil is, no doubt in some districts, too and I would advise that some of the s should be potted the first year, rather planting them all in the open. In sub- ng the following notes on flowers grown r my own eye, it may be as well to state my soil is on the heavy side. The list means includes all the varieties planted, me failed entirely and others were in r when I was away from home. Of the varieties mention may be made of n L. Smith, Capt. Boynton, Chameleon, F. E. Bennett, Dr. R. T. Jackson (late), J. Shaylor, Elizabeth Tabor (early), ude Errey, Giant Nymph, Golden low, Henry C. Goehl, Jap Lady (new), Jasper, Jewel, Joe Colman, King , Mary Pickford, Mrs. F. C. Peters , Mrs. Willard Richardson, Mrs. W. , Nancy Hanks, Purple Glory, Rose Scarlet Princeps, Sheila (early), Sweet nder, Twilight, Snow Glory, Dr. van , and Neoga among the many large- red varieties that gave an abundance of spikes.

the Primulinus section the following gave alth of bloom:—Alice Tiplady, Altair, Arlon, Butterboy, Dorothy Wheeler, Elberton, Ethelyn, Firefly, Firecrest, Linton, Glow (this is an American variety which reminds me of one of the earlier Dutch kinds, it appears to be very free and a strong grower), Nopal, Nydia, Roanoke, Salmon Beauty, Sedan, Ada de Poy, Pansy, Priscilla Alden, Revue, Topaz, and Woodcote.

The figures in brackets after the names are the dates of flowering.

Bengal Tiger (27.8) is a very large flower well named, and should prove a welcome addition to the fancy class.

Carnival (17.8), a Primulinus bearing 12 to 14 pips on a spike is fairly tall and slender. The colour is described as henna. It is not a self-colour, but after the style of van Limburg Stirum.

Carrara (20.7), a good white Primulinus of medium height.

Copperhead (10.8).—Its name gives a hint as to its colour, and the flowers (nine) are borne on tall straight stalks. It will no doubt become a favourite.

Elvira (18.8).—This is a tall grower with nine to 12 pips well spaced on a strong stem. The flowers are white and of good Primulinus form. Some bulbs of this came to me last year mixed with another variety, and I was much struck with the flower, and on writing to the vendor he suggested that it might be Elvira. This year I proved that his suggestion was right.

Fortuna (20.9).—This, as the reader will observe, is a late variety.

Freckles (25.8).—This is another of the van Limburg Stirum type with large open flowers, the "freckles" of a salmon shade more fully developed.

Gregor Mendel (22.7) introduces a new shade in the purple class. It is a Primulinus carrying 12 pips on a straight spike of medium height.

Heavenly Blue.—This I have not grown, but I was much struck with it at the Burton Show, and promptly put it on my list for next year. The name appeared to be particularly appropriate.

Heliosa was another which attracted me at Burton. It appeared to be a good yellow, but whether it will prove easy to grow, time alone will show.

Gold is a good yellow, sometimes, and I hear that some growers are discarding it because of its uncertainty. There is room for a good yellow as

Golden Measure and Schwaben are regarded as being on the coarse side. Most yellows are unreliable.

Golden Dream and Sidney Plummer are sometimes good. While on the yellows it would be as well to mention

Norma Talmadge (25.8), a clear sulphur-yellow. This appears to be a good grower, having large, well-formed blooms, with many open at a time, on a straight spike. Its growth and carriage appealed to me as being superior to those of any of the other yellows I have grown.

Helen Wills is a very promising white, but as one was only permitted to purchase a single bulb, perhaps final judgment had better be reserved.

Los Angeles (14.8) is said to send up new spikes from the cut stem. As many as 10 branches have been produced from a single bulb. How true this may be when grown in America, its country of origin, I do not know. None of the bulbs planted by me showed this tendency. Some threw up three growths in the same way as most Primulinus varieties do, but I failed to trace any secondary growth. It may be that the bulbs require to

be planted early—say the end of March. Mine were planted much later. As to the flower, it will no doubt appeal to the florist. The colour is shrimp-pink, tinted orange, with a carmine throat.

JACOBA VAN BEIREN (5.8).—This was a startler in every sense—height, size of flower, and perfect setting of each bloom. It is far ahead of anything I have ever seen in its colour (violet). Its nine open flowers out of 17 pips caught the eye a long way off.

MISS T. ROSE (19.8) is a nice coloured Primulinus form.

MARIGOLD (20.8).—The first flower to open was a disappointment; no trace of yellow in the flower. The bulb which bloomed on 13.9 certainly had a trace of yellow in the bud stage, but this disappeared as the flower developed.

PRIMADONNA (20.8) is a very pretty Primulinus of pure yellow. It is perhaps a little on the small size, but very dainty, and excellent for table decoration.

PRINCELY (19.8).—This variety was raised in America, but came to me from an Australian admirer of the flower. The colour is white, slightly tinted pink. It is of good form and shapely.

STAR BRIGHT (25.8).—Having the coloured plate of this variety in mind, the real flower was a huge disappointment.

STARLIGHT (5.9).—This variety was planted rather late, and I withhold judgment until another year. In

TIFFANY (16.8) we have a good spike of 20 pips with fine white flowers. In

PFITZER'S TRIUMPH we have one of the outstanding flowers of the year. A most brilliant scarlet; many blooms open at the same time, well placed on the spike. No exhibitor will be able to do without this.

PAUL PFITZER is a new purple-violet which promises well. These last two were grown in pots, so date of flowering would be no guide for blooming in the open.

ROSEMARY (8.8).—This is a pretty and unusual flower. The ground colour is white, marked with fine hair-lines and stipplings of lavender-rose. These markings are carried through the petals, so that the back of the flower looks much the same as the front. It has 14-16 pips.

TYCKO ZANG (10.8) is an American variety of which it was said: "This grand new variety will add beauty and distinction to your garden." Well, it failed to do so in mine this year. It may have been the season's fault, and another year it may come up to expectation.

TWIN FIRES (28.8), another tall variety, the scarlet spots on two of the lower petals standing out very distinctly on a pink ground.

THAIS VALDEMAR (30.8) is a striking red.

TO-DAY (10.8), a Primulinus of good shape and a pretty shade of red; medium height.

VIRGINIA LOU (15.8) is a good Primulinus carrying 12-15 pips on slender stems; colour, rich old rose-pink.

ZEALOT (24.8) is a little out of the common. The spike carries up to nine flowers of a velvet scarlet colour with yellow medial lines.

SMILAX.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House Fleet Street, London, E. C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FRUIT

Diseased Apples

I am enclosing pieces of wood and spurs off a Cox's Orange Apple tree. Please could you tell me what disease this is and what is the best cure for it? I have four trees growing together. Three trees have made their usual amount of season's growth and the other one has hardly made any growth except for a few at the top of the tree. All the four trees are attacked by this disease. I have been cutting some of the affected spurs off.

A. F. W. T.

[The prunings you have sent in are affected with Apple scab, which is caused by the fungus Venturia inæqualis. The fungus is perennial in the tissue of the wood and gives rise to spores in the spring, which start the disease in the young wood, leaves, and fruit. Spores are also produced in the spring from the old affected foliage of the previous year. You should remove and burn as much of the diseased wood as is practical. When the spurs are attacked like those you send it is difficult to remove all the diseased wood without cutting the trees about badly. The cutting out of diseased wood should be followed by spraying next spring. The best fungicide for you to use will be soluble lime sulphur. The first spraying should be given in the spring when the buds are pushing, but before the flowers open. The second spraying should be given when the petals have all fallen, and the third spraying is best given three weeks later. The stock solution of lime sulphur can be obtained from any good horticultural sundriesman and should be used according to the maker's directions. The foliage of Cox's Orange Pippin is very liable to scorch with lime sulphur, and so for the second and third sprayings half summer strength should be used. Some varieties of Apples are very prone to Apple scab, and should always be carefully watched. Hard pruning during the early years of the tree's life helps a variety like Cox's Orange Pippin to stand up against Apple scab. There was a trace of American blight present on some of the twigs.]

The Raspberry beetle

During the past season Raspberries and Loganberries were spoiled, especially the latter, by being attacked by moths, which produced grubs in almost every berry. Could you advise me as to the best preventive to use for this?

R. F. Y.

[The Raspberry-beetle at times does an immense amount of injury to the fruit, resulting even in the destruction of the entire crop. The beetles do a considerable amount of damage, but it is the grubs that are the cause of the chief injury, as they feed on the fruit itself. This insect also attacks the common Blackberry. The beetles may found on the canes as early as the beginr of May, feeding on the young shoots. females lay their eggs in the flower-bu these hatch when the fruit is formed and on the juicy portions, which they either tirely destroy or else so injure that they rendered useless. When full grown, wl is generally before the fruit is quite ripe, t descend to the ground or the lower part of stems and become chrysalides, either in ground or among grass or weeds, or in sc sheltered place on the stems. The in passes the winter in this condition, and pears as a beetle in the following spri when it at once begins feeding on the b and young shoots, and in due time lays eggs as before mentioned.

The most effective way of destroying pest is to kill the parent insects. This is done by shaking the beetles on to canvas sacking soaked in paraffin oil, or on to nev painted or tarred boards, as soon as they pear. This operation should be underta in the morning early, as the beetles are t more sluggish. Later in the day, part larly if the day be warm, they fly away soon as they are disturbed. After a crop been attacked, when the canes are be thinned, those cut away should always burnt, as they may have some of the chr lides attached to them. As regards kil the grubs, the only thing to do is to pick the infested berries and burn them, as i impossible to use any insecticide with spoiling the rest of the fruit. The Raspbe beetle is quite a small insect, not measur more than 1-6th inch in length. It is c dark brown colour and is covered with a down. It flies remarkably well, so that i of great importance to keep a neighbourh free from it, for if one person's Raspber are attacked and proper care is not taker destroy this pest, all the gardens near r become infested. The grubs, when grown, are about ⅜ inch in length; they long and narrow, and are of a yellow colour, with brown heads, and a large pa of the same colour on the back of each j of the body. They have only three pairs legs, one on each of the first three joints the body. The body terminates in points, beneath which is a kind of leg wh though not jointed, serves to prop up the of the body.

We do not know the particular remedy mention, but from its name we gather tha is a caustic egg-destroying wash which only be used when the trees are quite mant. We cannot talk of it from exp ence. There are a number of well-kno similar winter washes on the market wh we could confidently recommend—Abole Mortegg, Carbokrimp, etc.]

Overgrown Pear trees

Would you kindly help me about two P trees, Pitmaston Duchess and Williams' Chretien? My garden is small, and th trees have now grown so big that I thou of cutting them well back to reduce the s They bear splendidly in a good Pear year are about 16 years old. If they can be and pruned just like Apples I shall kn what to do, but my husband is not sur the same treatment will do for Pears, and would be glad to know if the new grov should be pruned back hard. It will be v kind of you to advise us.

M. A. PILKINGTON

[Yes, you may cut back the Pears in way you suggest to reduce them to more c venient dimensions. Do this now and precisely the same way as if dealing w Apples, painting the largest of the wou afterward to prevent wet getting in a setting up decay. Perform the cutting b

uch a way that when finished both trees , as far as possible, present a symmetri- appearance. With respect to the treat- t of the young growth you mention, we it to be the growths which will, no ot, seeing the trees are of the age men- ed, be produced in abundance as a result e cutting back, and, if so, we advise you eal with them as follows:—As soon as growths, wherever they appear to be con- ed, are sufficiently developed to enable to discriminate between them, cut out weakest and the strongest and stop the ainder about the end of July or early in ust at the fifth leaf, counting from the . In due course secondary growths will out from the top buds of the stopped ts. These should be cut back to one leaf early September. Then at the winter ing cut back the stopped shoots to three ur buds to form the bases of future fruit- spurs. Where there is no congestion of ths stop them as already advised. Pro- in future on the lines laid down, and in course the trees will become clothed with hy fruiting spurs. Should the trees in second season after being cut back seem sed to make too vigorous growth the course then will be to subject them to pruning, which will have the effect of ucing a more even balance between root branch. Doing this to one-half of the of each tree will suffice for the first The other half can then be dealt with r the following or the year after just as be deemed necessary.]

GREENHOUSE

lve good Ferns

Osmunda").—The principal require- s of Ferns grown under glass being a l heat and sufficient moisture, the tem- ure mentioned (60-65 degs.) will be suit- for a wide range of varieties. Adian- —with the possible exception of A. yense—would be a feature. A. cunea- A. gracillimum, A. Williamsi, A. m, and A. decorum may be relied upon. there is a wide choice among the mem- of the Nephrolepis family—N. exaltata, uperba, N. todæoides, to mention only od trio. The Pteris group will provide nerable useful forms. Some of the llias, notably D. canariensis, would be ctive as basket plants. In the warmer of the house a specimen or two of the (or Silver) Ferns (Gymnogramma) t find a place. Your nom-de-plume sts two Ferns which are not frequently l in ferneries under glass, but which are mely useful and ornamental. These are nda javanica, a very distinct variety handsome dark green foliage, and well growing for decorative purposes under and O. palustris, a form of O. regalis, rom which it is abundantly distinct, the fronds of which are of a vivid red when first unfolded and which, in pots, makes a very handsome decora- plant. If you care for tree Ferns the f-growing Brainea insignis will succeed the treatment accorded to Adiantums, the climbing Lygodium scandens will sh a trellis, a pillar, or wires with its and twining stems. There ought to be fficulty in making a selection suitable our purpose. Ferns, during summer utumn, must be shaded from the direct of the sun, and the atmosphere ought to oderately humid. Most varieties ap- te a little peat in the compost in which are grown, but if this is not procurable good leaf-mould will do almost equally Two parts good loam, one part leaf- l, a little lime-rubble or brickbats n quite small, with sufficient sand to the whole porous will suit Ferns admirably. During the growing season water occasionally with soot-water or with weak liquid-manure. Repotting is best done in spring when growth is just on the move.

Treatment of Gloxinias

(Canon E. Grose-Hodge).—We should advise you to discontinue the watering a little, gradually drying off to ripen the bulbs. Lay them on their sides in a dry, frost-proof place until the spring when they start into growth. They should then be watered, potting on the same as in the previous year. When the bulbs are well rooted and growing freely weak doses of liquid-manure will be beneficial.

Narcissus forcing

(Ross and Son).—All the varieties mentioned are suitable for your purpose. They are not so early, however, and therefore less likely to be profitable from a market grower's point of view as, for instance, Narcissus obvallaris, N. Tazetta (the Paper-white variety), and others of the Polyanthus-Narcissus type, N. Poetaz, and others of the earlier sorts. These, with even the limited amount of heat at your disposal, would naturally bloom at an earlier date and would, therefore, be of more value, coming in at a time when flowers are scarce. As your bulbs are well rooted they may now be introduced into the house, keeping them as near the glass as possible and giving them plenty of moisture. N. Golden Spur, N. Sir Watkin, and N. Emperor under such treatment ought to bloom about the middle of January. N. ornatus will be later, and should be ready for cutting a month after. If, by chance, more heat can be given, now that fuel is obtainable, the period of blooming will be advanced.

Violets

(W. P.).—Marie Louise Violets should have all the air possible by drawing off the lights whenever the outdoor thermometer indicates 40 degs. or upwards, except during heavy rains, when the lights should be tilted at the back. They should always be arranged close to the glass, and in severe weather they must be securely protected from frost. If in a sunny position mildew will not affect them, and they will continue to bloom freely from autumn to spring.

Thunia Marshalliana

(Mrs. A. Tattersall).—(1) Potting medium: Loam, peat, and Sphagnum Moss in equal proportions, giving good drainage, half filling the pot with crocks. (2) Time to pot: As soon as the new growth commences (March). (3) Temperature: Over 60 degs. during the growing period, and after flowering, until new growth commences should be removed to a cooler temperature. Growing hints: The success depends largely upon the amount of light afforded the plants, and the lightest position in the house near the glass should be reserved for them. During the growing period the plants should have an abundance of water, and, after flowering, a period of rest.

FLOWER GARDEN

Echinops trouble

(Mac).—There is no sign of parasitic fungi on the specimen leaf of your Echinops. All the markings present have been caused by insect attack. We could find two distinct types of markings present, and it would appear that two kinds of insects have been at work. (1) A leaf hopper. (2) An insect which has been making tiny round holes in the upper surface of the leaf. Both types of insects have now left the leaf, and we are unable to say actually what they were. In any case the trouble is now over for this season. We should advise you to cut off and burn all the foliage because we found eggs present which appeared to be those of a leaf hopper. These eggs will give rise to a new generation of the pest for next season. You should look out then for the first appearance of the trouble. Spraying the plants with a nicotine wash would kill the larval stage of the leaf hoppers.

Lindelofia spectabilis

(Captain E. A. Saunders).—This is the plant you refer to. It belongs to the Boraginaceæ. It is perennial and quite hardy, and can be freely increased from seeds or by division. The flowers are bright blue and appear in the summer. It comes from the Himalaya.

Growing Violas

(R. Blackburn).—The best time to plant Violas is undoubtedly mid-October, but as you cannot do that now, we would advise you to prepare your bed without delay and put in the plants as soon as the bed is ready for them. Violas are perfectly hardy, and therefore no greenhouse is necessary, but if your desire is to grow and flower a few under glass, then they may be boxed or potted up and grown cool, the ventilators being kept slightly open at all times and the surroundings moist. One of the greatest enemies of these plants is drought, either at the root or in the atmosphere. To prepare the bed it should be dug deeply—18 inches will not be too deep—working into the soil a good quantity of farmyard manure and leaf-soil. That you possess will do quite well, also 1 oz. of nitrate of soda to each square yard, this latter to be applied to the surface, and pointed in with a fork after the other digging is completed. A little sand may be used in the top 6 inches if your soil is heavy. Your aim should be a rich, open, and friable soil, with plenty of leaf-mould and short manure worked into the top 6 inches. Choose a day when the soil works kindly for putting out your plants, and plant firmly.

TREES AND SHRUBS

The Toothache tree (Zanthoxylum americanum)

(Captain Saunders).—This is a native of the Eastern United States, and was introduced during the middle of the eighteenth century. It was said to have been very common at one time, but is not so now. The bark and capsules have a pungent acrid taste, the popular name of Toothache-tree being given because they were used to alleviate toothache. The flowers, crowded at the joints of the previous year's shoots, are very small and yellowish-green. The fruit is blackish and fragrant. It is summer-leafing.

Pink Hydrangea

(S. C. R.).—As you have not given us the name of the Hydrangea you refer to, we cannot say for certain how it should be treated; but from your meagre description we should say it belongs to the Hortensia group. If so, the growths may be cut back now and the plants grown on in a mixture of rough fibrous loam and leaf-mould, to which a little peat might with advantage be added. Good drainage and an abundance of water during the growing period are essential if the best results are to be obtained. A sunny position should also be chosen, as the plants delight in a good share of sunshine, so that the shoots may become properly ripened.

Pruning shrubs

(M. B.).—All the shrubs you mention are spring and early summer-flowering sorts—consequently, pruning should be deferred until after the flowering of each is over. The

straggling shoots should be shortened and the thin growths in the centre of the plants thinned out so as to allow a free circulation of air, as it is of the greatest importance that the shoots should be well matured to ensure a good display of blossom. The Polygonum may be cut down now.

How to propagate Garrya elliptica

(H. E.).—This favourite winter-flowering shrub can be propagated in various ways—*i.e.*, by cuttings, by layering, and by seeds. The first-named method is the one most generally adopted. Cuttings of half-ripened shoots should be taken off during the summer and planted in well-drained pots of light soil, and placed in a warm, close case. They should be watered two or three times a week, and shaded from the sun on bright days. If a warm case is not available they will root, though not so readily, in a cold frame, or under a hand-glass on a warm border. Layering is simple, and can be done successfully in July or August. Shoots of the current or previous year may be selected. The part that is layered should have the leaves removed, and a slit an inch long should be made through a joint. A peg should then be driven into the soil to keep it in place, and the whole covered with soil and well watered. When seeds can be procured they are best sown in sandy soil and placed in a gentle heat to hasten germination.

How to propagate Clematis

(N. A.).—There are several methods by which the Clematis can be propagated, but only three are in general use—*i.e.*, by seeds, by cuttings, and by grafting. The seeds should be sown in shallow pans of light soil and stood in heat, and the soil kept moist by watering with a fine-rose watering-pot. Cuttings of the young shoots taken off before they get too hard, and inserted in sandy soil and placed in a gentle heat, root readily. Grafting is the method adopted where large quantities of plants are raised. Cleft and splice-grafting are very successful, and April is a very good time for the operation. Fleshy pieces of the roots of C. Flammula or any of the commoner sorts should be cut up into lengths about 5 inches. When the scions have been secured by matting, the roots should be planted into small thumb pots and plunged in a bed of tan in a warm, moist propagating-case.

Height of shrubs

(E. A.).—Corchorus grows to a height of about 4 feet, Cydonia 6 feet, Althæa 5 feet, and Cerasus Chamæcerasus from 2 feet to 4 feet. They are all quite hardy shrubs, and would grow well and flower freely in pots provided they get proper treatment. See that the pots are well drained and the mould sweet and good. Plenty of water must be given them while growth is being made, and the plants stood in an airy, sunny position.

Birch tree covered with Ivy

(M. N.).—It is now a struggle for the survival of the fittest, and as your Birch is in such a bad state and the Ivy so full of health and vigour, it seems to us that the best plan would be to let the Ivy have its way. If the Ivy were removed from the stem and branches of the Birch, what would the last-named look like? If, by so doing, its health and beauty could be restored, then by all means take it away; but not otherwise. Ivy should never be allowed to climb up the stems of good trees.

MISCELLANEOUS

Soil burning

I have a garden which is heavy, and I have been told that burning the soil is a good way of improving heavy clay land. Is this true? What quantity of the soil should be burned, and what is the best way of doing it?

MINER.

[In the past the burning of a portion of heavy clay land was often carried out. It is not often done now, because of the increased cost of labour. Under farming conditions the usual practice is to pare off the top of the soil of heavy clay land, together with the weeds and the roots of the previous crop. These parings are dried as much as possible and then gathered into heaps and burnt. The ashes are then scattered and ploughed in. If this is repeated several times it lightens even the heaviest of soil. March is a good month for the work. Clay-burning is often carried out in much the same way in garden practice. A fire is made of garden rubbish and the top parings of the soil to be treated are then added, the ashes afterwards being dug in. Burning part of a clay soil and then mixing the burnt material with the rest of the soil improve the texture and drainage of heavy land. This is due to the fact that water ent s into chemical combination with clay particles and the particles become sticky. Burning the clay destroys this chemical property, and water cannot again enter into chemical combination with the particles, and so the stickiness cannot return. Brickdust is only burnt clay, but no matter how much water is added or how much it is puddled it cannot be made sticky. The quantity to burn will depend upon the soil in question; just enough should be treated so that when it is mixed with the soil the drainage and texture are improved. The clay should be heated to dull redness to make sure that the chemical properties of the heated clay are destroyed.]

Leaf mould

In regard to leaf-mould, I have always heard it stated that the leaves of Oak and Beech, with the possible addition of lime, are the only leaves that should be used, and I have always acted on this. At the same time, I have never heard any scientific reason for this statement. Obviously the leaves of coniferous trees, containing turpentine, are unsuitable, but whence is the advantage of Oak and Beech leaves over those of other deciduous trees? No doubt you can favour me with the explanation.

H. DOWNES, F.L.S.

[The leaves of Beech, Oak, and Spanish Chestnut are used for this purpose and make the best leaf-mould. They are also the best for hotbeds on account of their heat-retaining qualities. Other kinds of leaves will, of course, make quite good leaf-soil, but in most instances the quality of the latter is inferior, and on account of the thick fleshy leaf-stalks they take longer to decay. Another point is that slugs and worms are very fond of leaves containing green and fleshy particles, and, adhering to them, are carried into the garden. If you have available space to form a large stack which could be left undisturbed for two years you might employ any kind of leaves which would ultimately be available for practically any purpose. The Maple, Tulip Tree, Plane, Poplar, and Ash are fine leaf-mould producers, but all the leaves have fleshy stems, and the resulting leaf-mould is not of the same rich character as that made from Beech and Oak. The leaves of the Pines may be used in small quantities among other leaves where bulk is desired, but their value is not great. The leaves of many of the Cypresses, of which Lawson's Cypress is an example—and they may be found lying 2 inches thick beneath the trees at times—are quite good for mixing where the bulk is to be used in the open, but for leaf-mould intended for potting and choice indoor work we would not include them.]

Royal Horticultural Society

Wisley trials, 1926

The following awards have been made the undermentioned Dahlias by the Counc the Royal Horticultural Society after tria Wisley:

DAHLIAS.

AWARD OF MERIT.

SMALL FLOWERED PÆONY.

Yellow Queen	J. Cheal & Sons
Cintra	A. J. Cobb
Mrs. H. C. Scrimgeour	J. Cheal & Sons
Gloria	J. Burrell
Clara Hart	J. Burrell
Diophen	J. Burrell

DWARF FLOWERED PÆONY.

Hermia	J. Burrell

DECORATIVE.

Mrs. A. R. Mountain	J. Cheal & Sons
Menny Carlée	M. Carlée
Evelyn Hancock	J. Stredwick & Sc
Macdonald	Geysendorpher
Henry B. May	J. Stredwick
Secretary Voors	J. G. Ballego
Tally Ho	J. Stredwick
John Mensing	Topsvoort
Phaon	C. Turner
Jersey Beauty	H. J. Jones

SMALL FLOWERED DECORATIVE.

Rose Elegance	Carlée
Cheal's Pink	J. Cheal & Sons

DWARF DECORATIVE.

Preston	Dobbie & Co.

CAMELLIA FLOWERED.

Prudence	J. Burrell

POMPON.

Mavis	J. Cheal & Sons

CACTUS.

Alice Amos	J. Stredwick

MIGNON SINGLE.

H. J. Jones	Carter Page & Co. / H. J. Jones
Kingcup	J. Cheal & Sons
Lady Aileen	H. Woolman

The Bolton Chrysanthemum Society

The Chrysanthemum Show was a gr success. The late H. Woolman won for blooms in 18 varieties. He also won challenge cup outright for table of Japan and Incurved, coming in second with a ta of singles. The local cup winners were B. Hardy for group of miscellaneous pla R. Tyrer with table of singles, Thos. Ma with one of plants and cut flowers, Lloyd for six vases of Japanese and Incurv and H. Southam for three vases large-flow ing. J. B. Adamson, Blackpool, won in Orchid classes, and A. J. Keeling, Bradfo put up a very nice table of Orchids not competition, which was much admired. GARDENING ILLUSTRATED medal was won w a splendid exhibit of three vases of sin Chrysanthemums, disbudded, by H. Heap

Reading and District Gardeners' Mut

The usual fortnightly meeting was held the Abbey Hall on Monday evening, Nove ber 22nd, when there was an excellent atte ance presided over by the President, Frank E. Moring. The subject for the ev ing was "Fungoid Diseases," and the turer Mr. W. Budden, M.A., Department Economic Mycology, Reading Univers who gave a most interesting and instruc discourse on this very important subj especially as this season many of the disea have been so prevalent. Although runn on scientific lines, the lecture was easily lowed as every point was made thoroug clear. Diseases such as blight and wart Potatoes, finger-and-toe and club-root cruciferous crops, downy mildew in Onio Celery rust, damping off, black mole, stri and blotching in Tomatoes, Apple and P scab, silver leaf, etc. These were fully plained and remedies suggested for their p vention. A lengthy and animated discuss followed. At the conclusion of the lectur hearty vote of thanks was tendered to Budden for his very instructive lecture,

proposition of Mr. Townsend and onded by Mr. Fulker. In the competition thre winter-flowering Begonias the first ze was awarded to Mr. J. Wynn, The Gar- ıs, Hammonds, Checkendon, for three ıutiful plants of the variety Optima, and second to Mr. A. H. Dow, The Gardens, lcot Park, for well-flowered Gloire de raine. In the non-competitive section ards of Merit were granted to the follow- for exhibits of Chrysanthemum ɔms:—Mr. E. Cooper, Conisborough enue, Caversham; Mr. C. J. Howlett, The ws, Earley; Mr. G. Tovey, The Gardens, e Red House, Earley; Mr. A. Terry, Haw- rn Cottage, Earley; and Mr. R. G. Taylor, ghgrove Street, Reading.

TRADE NOTE

wers and music

happy combination of these is provided he latest in loud speakers—the "BECO" bowl—which will appeal strongly to those ɔse attitude to the usual types of ɔeaker," from an æsthetic point of view, been one of toleration rather than ap- ciation. The "Beco" is 7½ inches high, inches in diameter, with the usual mesh and good reception is said not to be rfered with when the bowl is filled with ers and water. It is well finished, either nickel plate, oxidised silver, or antique ıze, and would prove a handsome and y acceptable gift for radio enthusiasts. ssrs. W. Darlington and Sons, Ltd., 110, ıdon Fields, E. 8, are the sole horticul- ıl agents.

SHORT REPLIES

V.).—The yellow flower is Rudbeckia ata fl.-pl. var. Golden Glow. The long ery leaves belong to Centaurea Cineraria candidissima, a half-hardy herbaceous nnial from Italy often used for summer t in beds and borders. You should take ings now and keep under glass for the ter if you wish to preserve this plant for ther season.

NAMES OF FRUITS

Harrison.—Apple Minchull Crab.

Chiverton.—Apple Duck's Bill of sex.

Newest Chrysanthemums

(*Concluded from page 731*)

LOMA.—This is a welcome addition to the rved Chrysanthemums and is a flower should be much in demand by exhibitors. blooms are fully 7 inches or more in dia- er and are of deep build. The medium road florets are of good substance and rve in even fashion, building a large, , globular flower; colour, straw-yellow, ed fawn. F.C.C. Also shown by srs. Keith Luxford and Co.

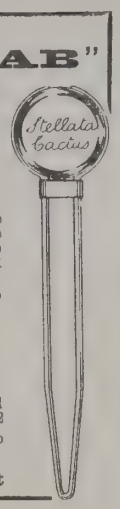
UDDIGORE.—A large-flowered decorative nese Chrysanthemum of ideal form for ket. The florets are rather narrow and evenly arranged in reflexed form, building loom of slightly drooping form about ches to 7 inches in diameter; colour, ing chestnut. F.C.C. Shown by srs. Cragg, Harrison, and Cragg, on-Hounslow.

RIMSON DAWN.—This is a large-flowered e Chrysanthemum of undoubted merit, ng crisp florets of good length and ium to broad, which reflex in even ion and build a beautiful flower some ches to 7 inches in diameter; colour, -crimson. F.C.C. Shown by Mr. H. J. s, Ryecroft Nursery, Lewisham, S.E. Committee wished to see again.

LIGHT.—A rather small-flowered single. blooms remind one of Mensa, but in this nce they are evidently much more free- ering. Shown by Mr. H. J. Jones.

D. B. CRANE.

THE "LEGILAB" PLANT LABEL



Always Legible.
Name Instantly Changeable.
Absolutely Weather-Proof.

A high-grade label of most pleasing appearance for hanging on tree or staking. Can either be conspicuous or unobtrusive. Reversible name disc, white or green, suitable for special cultural notes.

If unobtainable from Seedsmen or Nurserymen, apply to manufacturers.

Staking.	Suspending.	Post.
1 in. 3/9	2/9 doz.	4d.
1½ in 4/9	3/9 doz.	6d.
2½ in. 9/6	6/9 doz.	1/-

Wholesale from—
CORRY & CO., Ltd., Shad Thames, S.E. 1
GEO. MONRO, Ltd., Tavistock St., W.C. 2

Send 2/3 for sample ½-doz. 1 in. & 1½ in sizes to
LEGILAB PLANT LABELS,
5, Lychett Road, Bromley, Kent

ORNAMENTAL TREES and SHRUBS, ROSES, FRUIT TREES
CONIFERS A SPECIALITY

Illustrated Price List free on application.

H. E. W. COOPER
Hayeswood Nurseries
PEMBURY, TUNBRIDGE WELLS.

"BECO" ROSE BOWL HORNLESS LOUD-SPEAKER

Of beautiful appearance. Gives perfect tone whether empty or filled with water and flowers.

Nickel Plate.	Oxidised Silver.	Antique Copper.
£5 : 5 : 0	£5 : 17 : 6	£5 : 17 : 6

Full particulars on application to
W. DARLINGTON & SONS, LTD.
110, LONDON FIELDS, E. 8

ROSES — DAHLIAS — GLADIOLI
and other Autumn and Spring Plants

Obtain your supplies direct from Holland.
Large Stocks. Immediate Dispatch.
Catalogue post free on request

The First Dutch Bulbgrowers Association
Rykstraatweg 215-217, Schoten, HAARLEM, Holland

BIRDS' NESTING BOXES, BATHS
SUNDIALS, VASES, and all GARDEN ORNAMENTS

Have BLUE TITS instead of GREEN FLY in your GARDEN.

NESTING BOXES

are intended for WILD BIRDS that build in holes. Provide the birds with lodgings, and they will board themselves off your garden pests, and give you constant entertainment with their pretty ways.

Price 4s. 6d. Postage 1/3.

They like a BATH

It need not be h. and c.

CORMORANT BIRDS' BATH
(*In Imperishable Artificial Stone*)
Height 27 ins., Diameter 16 ins.
Price £2 : 15 : 0

Catalogue (No 10) of Birds' Baths, Sundials, Vases, Nesting Boxes, etc., post free.

Arthur H. Moorton, Ltd.
17, Eccleston St.,
Buckingham Palace Rd., S.W. 1.

Watch this Series No. 2.

Six Hills Great Autumn CLEARANCE SALE

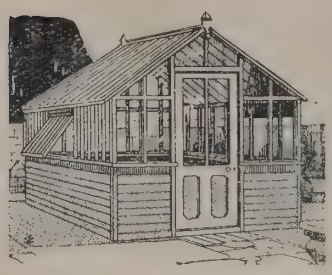
ALPINES

All Plants in this section are
9d. each

3	of one individual sort	for		1s. 6d.
6	"	"	"	3s. 0d.
12	"	"	"	6s. 0d.

Achillea Lewisii. Soft sulphur flower heads, all Summer, 4-5 in.
Allium cyaneum. Powder blue flowers, 4-5 in., July
Androsace Chumbyi. Silver rosettes, rosy flowers, 4-5 in. May-June
Anemone sylvestris. Large nodding white flowers, 9-12 in., Spring
Arenaria purpurascens. Low mats of pale lilac, 2-3 in., June
Arenaria verna. Rare native, dainty white flowers, ½ in., May
Armeria Vindictive. Deep red variety, very handsome, May-June, New
Bellis rotundifolia cœrulescens. Pretty lavender-blue Daisy, 3 in., all summer
Bellum minutum. Dainty miniature red and white Daisy, 1 in., Summer
Campanula barbata. Lavender-blue bells, 9 in., June-July
Cerastium alpinum lanatum. Intensely silky silver leaves, 3 in., flowers white, March
Cyclamen europæum. Dainty miniature, deep rose. Fragrant, August, 3 in.
Dianthus Ella. White with deep maroon centre. Fragrant, June
Gypsophila cerastioides. Dwarf, white-purple veined, June July, 2-3 in.
Gypsophila fratensis. A pale rose trailer, neat and dainty, June-July
Hypericum olympicum. Large golden blossoms, tufted habit June-July
Mayrgyricarpus setosus. Prostrate shrublet, pearl white berries, September
Œnothera missouriensis. Trailing Evening Primrose, immense soft yellow flowers, July-September
Oxalis magellanica. Carpeting species, ivory-white flowers, ½ in., Summer
Polygonum vaccinifolium. Dainty trailer, rosy pink, 3 in., September-October
Potentilla nepalensis Willmottiæ. Rich cherry red, 6 in., all Summer
Primula bulleyana. Lovely bog species, apricot, May-June
Primula farinosa. Dainty pink species, 3-4 in., May
Primula japonica sanguinea. Strong bog species, flowers crimson, 18 in., May-June
Primula sikkimensis. Fragrant amber yellow flowers, 2-3 ft., May-June
Raoulia glabra. Dainty carpeter for pavement
Saponaria ocymoides alba. White variety of S. ocymoides
Saxifraga Caterhamensis. New. Flowers with fine central zone of red, 2 ft., May-June
Saxifraga rocheliana coriophylla. Choice, white, compact, March-April
Saxifraga scardica obtusa. Another white dwarf, April
Scutellaria Brittonii. Violet-headed flowers, 6 in., April-May
Sedum spathulifolium purpureum. Perhaps the best of all Stonecrops, plum-purple foliage with a heavy bloom and golden flowers
Silene acaulis saxatilis. Emerald cushions and almost stemless rosy blossoms
Silene alpestris fl. pl. Dead-white flowers, 2-3 in., June-July
Teucrium chamædrys. Attractive sub-shrub for rock garden, Autumn flowering, pale claret, 1 ft., June-July
Thymus Silver Queen. A very bright variegated Thyme, 4-5 in.
Viola blanda. A miniature Dog Violet with white flowers, Summer, 1 in.
Zauschneria californica mexicana. Brilliant Autumn rock plant. Intense scarlet, 12-18 in.

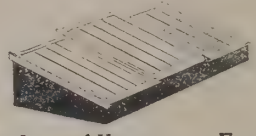
CLARENCE ELLIOTT
(*Dept. G.*) **Ltd.**
Six Hills Nursery, Stevenage, Herts.



WE specialise in Greenhouses, Conservatories, Portable Buildings, Bungalows, Garden Frames, and Furniture - in fact in every type of Horticultural Building and Equipment, Poultry Houses, etc. Our "Priority" Intensive House won the *Only Gold Medal* at Olympia in 1922

Send for 90-page Catalogue No. 35, Post Free. If interested in Poultry request Catalogue No. 33.

THE *Villa*, made in complete sections and easily erected as tenant's fixture without skilled labour. Base of our Patent Duple-Jointed board, the only board that is proof against heaviest weather; note sturdy combination of tongue and groove. A better joint has never been invented as a protection against the elements. "The more it rains the tighter it grips." Prices from £14 10 0 Carriage paid



Garden Allotment Frames

Extra strong, tongued and grooved, 21 oz. English Glass, two coats white lead paint, from 21/-

A *Portable Building* by Pratt is a sound investment! Eve care is taken in choice of high gra timber and in its final treatme Shipped in sections and easily erect Prices are the lowest consistent wi our standard of workmanship. Fr £4 11 0 Carriage paid.

For your Dog

Kennels for every type of Dog. Note hinged floor with outboard and ease with which cleaned.

F. PRATTEN & CO., LTD., 16, MIDSOMER NORTON, *Nr.* BAT

IF you are a new reader of GARDENING ILLUSTRATED and are interested in its pages, please fill up the accompanying form and hand it to your nearest Newsagent or Bookstall

Please Deliver
GARDENING ILLUSTRATED
(Two Pence Weekly)
Till Further Notice

to .....

Address.....

.....

Should you prefer to receive copies by post it will be necessary to send the form to the Manager, "Gardening Illustrated," Bouverie House, Fleet Street, London, E.C. 4, with remittance for 13/- to cover twelve months' copies.

ILLUSTRATED LIST Post Free

Greenhouses from £4 17 6

Poultry Houses from £1 12 6

Huts from £3 12 6

Bungalows, Garages, Rustic Houses, and Poultry Appliances of every description.

T. BATH & CO., Ltd., Savoy St., London, W.C. 2

BOILERS & HEATING SETS FOR EVERY REQUIREMENT

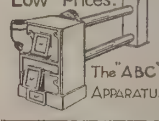
Quality with Low Prices.

ALL MAKES OF BOILERS & HEATING GOODS

MEET-ALL HEATING SET 68/6 CARR PAID

PRICE LISTS FREE

State size of Greenhouse, Garage, etc



12 HOURS' STOVE SYNDICATE LTD
CENTRAL AND DOMESTIC BOILER WORKS,
258, Vauxhall Bridge Road, S.W.1.

ORSETT BASKET WORKS

BASKETS & HAMPERS

WICKER CHAIRS & TABLES

Write for Catalogue—

ORSETT BASKET WORKS, Orsett, Grays, Essex

SEND FOR THESE BOOKS "ON APPROVAL"

These practical little books, by Mr. F. J. FLETCHER, F.R.H.S., will help every Gardener, whether working for pleasure or profit, to get the best results from his plants. They are issued at the uniform price of **2/6 each**

GLASSHOUSES AND THE PROPAGATION OF PLANTS

CONTENTS IN BRIEF.—The Nurseryman—Greenhouses—Propagation—Seedlings—Cuttings—Practical Cutting Making—Potting—Index.

SPECIAL GLASSHOUSE CROPS

CONTENTS IN BRIEF.—Tomatoes—Cucumbers—Melons—Grapes—Sweet Peas—Forcing Bulbs—"Lifted" Chrysanthemums—Catch Crops—Index.

ROSES FOR MARKET

CONTENTS IN BRIEF.—Some Business Considerations—Propagation by Cuttings—Stocks—Budding—Propagation by Grafting—Rose Cuttings under Glass—Roses in Pots—Roses Planted Under Glass—Things that Matter—Marketing—Index.

CARNATIONS AND PINKS

CONTENTS IN BRIEF.—The Perpetual Flowering Carnation—Propagation by Cuttings—Potting and Growing on—Summer Treatment—Enemies—Cutting and Packing the Flowers—Older Plants and Indoor Planting—Border Carnations—Raising Border Carnations from Seed—Layering—Planting or Potting?—Perpetual and other Border Carnations—Dianthus Allwoodii—Garden Pinks—Index.

CUT FLOWERS FOR MARKET

CONTENTS IN BRIEF.—Annuals—Biennials—Herbaceous—Roses (outdoor)—Carnations and Pinks—Chrysanthemums—Glasshouse Flowers—Bulbs—Asparagus Fronds and Smilax, etc.

DECORATIVE PLANTS, TREES and SHRUBS

CONTENTS IN BRIEF.—Hedge Plants—Flowering Shrubs—Conifers—Window Box Evergreens—Hardy Climbers, etc.

EACH VOLUME DEMY 8vo. PRICE **2/6** net each. (Postage 2d. extra or 6d. for four.)

ERNEST BENN LIMITED, Bouverie House, Fleet Street, London, E.C. 4

GARDENING ILLUSTRATED

). 2492—Vol. XLVIII. DECEMBER 11, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

tments, the de-ne of 741
e Allington Pip-s 750
e aphis 750
e Bismarck 742
le Blison's ange 749
e French Crab ... 742
e Laxton's Superb 740
e tree, mussel le on 750
e trees and Pear es for regrafting 752
e trees, own root 740
Beech hedges 743
Buddleia alternifolia 744
Carnation, the Perpetual-flowering, the parent of 741
Cherries 749
Christmas flowers ... 742
Christmas gift solved, the 740
CHRYSANTHEMUMS FOR CUTTINGS, PREPARING 739
Chrysanthemums—when to insert the cuttings 751
CLEMATIS FLAMMULA 744
Delphiniums, dividing 751
Fowls' manure 752
Fruit trees be root-pruned? should ... 741
Fruit trees, pruning 750
Gentiana sino-ornata 747
Gesnera macrantha ... 747
Grapes Gros Colman and Gros Maroc ... 750
Heliotrope in cool greenhouse 751
Hot-bed, making up ... 752
Hypericum coris ... 744
Iris reticulata 747
Leaf-mould 749
LILIES, ORIENTAL, IN SOUTHERN SCOTLAND 747
Lilium Harrisii ... 742
Medlars, ripe 741
Mr. Martin Audley F. Sutton 740
Netting, preserving .. 752
Orchids—watering ... 751
PLANTS AT VINCENT SQUARE, NOTEWORTHY ... 743
Plants, dwarf edging 751
Plumbago capensis, pruning 751
Potting 746
Question night at Dundee 752
RAPHIOLEPIS JAPONICA 744
Remodelling Preston Park, Brighton ... 752
Roses and black spot 740
Roses, autumn pruning of 746
Roses for pillars, some good 746
Roses, climbing, in shallow soil, planting 751
Rose trials 740
Rose trials at Wisley, the 740
Salvia uliginosa ... 747
Saxifraga Macnabiana 747
Seakale for forcing ... 749
Shrubs, autumn flowering 744
Vines, resting 750
Yucca pendula (Syn. Y. recurva) 742

Preparing Chrysanthemums for Cuttings

S soon as the plants have done flowering they should be cut down and the cuttings prepared for supplying the ts which are to flower next season. re a collection is grown on what is ed the large bloom method the plants generally packed closely together previous oming into flower, so that as many as ible can be got into the smallest space. consequence of this is that the suckers h are to supply the stock for another on are weak and unable to produce ible cuttings. Directly the flowers are d cut the stems down close e soil in the case of those ties that produce cuttings y. Sorts that are shy-ing, or new or scarce ties of which it may be ult to obtain a sufficient of good cuttings, should be cut down lower than in 2 feet of the soil. Cut-produced from the stem not nearly so good as those n at a distance from the , but stem cuttings must ome cases be secured, or -at all may be available. objection to stem cuttings at plants so created are to show flower-buds pre-rely, in some instances as as the plants commence ow.

e best position for the s is any cool house where plants can be placed as to the glass as possible to nt the growths becoming ly. No situation is better them than a vinery or h-house at rest where y of light can be had now the foliage of the Vines eaches has fallen. Make ver the vinery border a orary stage, on which the s are placed, and get an dance of light and air, induces a stocky th. Some growers place old roots in cold frames, answer very well, ex-in the case of severe frost, the plants need protec-or the young growths will jured. It sometimes hap-that some varieties throw cuttings very freely, so so that they become crowded, and if allowed to remain so the cuttings become very weak, and consequently not at all desirable for stock. In this case thinning the cuttings should be resorted to, removing the tallest and weakest, and retaining just enough for the purpose required.

Some varieties will refuse to throw up a single cutting. In this case loosen the surface soil, and if the roots are bare through the continued drenchings of water given previous to the plants blooming, cover the roots with light gritty soil composed principally of leaf-mould and sand. Examine the drainage to make sure that the plants are not water-logged, and give occasional waterings of weak liquid-manure, which will tend to strengthen the growths. Water must be given carefully, as too much causes a yellow, sickly growth which must be avoided. Those plants that do not show signs of any cuttings at all must be placed in a gentle bottom-heat, and the stems syringed occasionally. Those starting freely into growth will not require any heat, but merely protection from frost, with plenty of air on all favourable occasions. Green-fly occasionally attacks the points of the shoots, and can easily be got rid of by fumigating with Tobacco, or, if not convenient to fumigate the house, dust the shoots affected with Tobacco-powder, and afterwards syringe the shoots to clear them from both fly and powder.

A capital method of securing a stock of cuttings of any new or scarce variety is to strike the side shoots that are often produced in excess during May and June when the plants are grown for large blooms. Many side shoots that are produced at that time and are generally thrown away do well if inserted singly in small pots in sandy soil, placed in a gentle bottom-heat until rooted, and afterwards removed to a cold frame. As soon as the pots are well filled with roots shift the plants into 5-inch pots, using moderately rich soil and pressing it down firmly, thus inducing a short, stocky growth. Stand the plants out-of-doors, allowing one stem only to grow from each plant. According to the variety, the plants will grow from 1 foot to 4 feet high and produce one bloom. They will be useful for side stages or where dwarf plants are required. Directly the blooms have faded cut the plants down close to the soil, and cuttings of a short, stocky nature will be produced. As the main object in growing the plants in this manner is to obtain good cuttings rather than large blooms, any side shoots are removed during the time summer growth is being made.

The new Japanese Chrysanthemum Mrs. R. F. Felton, which has been so well shown this season

Colour rich crimson and of medium size. It bids fair to be one of the most popular of all new Chrysanthemums

NOTES OF THE WEEK

The Christmas gift solved

THERE is one Christmas gift that is welcome to all garden lovers, and that is a year's subscription to GARDENING ILLUSTRATED. Readers who are at a loss to know what to purchase their gardening friends for Christmas would do well to follow this suggestion. Such a present would be a useful and constant reminder of friendship throughout the coming year. All that is necessary is for the donor to send us the address of his or her friend, with a subscription for 13s., and we will see that GARDENING ILLUSTRATED is stamped, addressed, and posted each week for the whole year.

Mr. Martin Audley F. Sutton

We have received from Messrs. Sutton and Sons, The Royal Seed Establishment, Reading, the following announcement, dated December 1st:—"It is with much pleasure that we inform you that we have, as from the above date, taken into partnership Mr. Martin Audley F. Sutton, the eldest son of our Mr. Martin H. F. Sutton. Mr. Martin Audley F. Sutton has studied scientific agriculture at one of the leading British Agricultural Colleges, and he has also spent nearly three years going through the routine of every department of our business. Since then he has passed several months in Canada and the U.S.A. studying American business procedure, and it is with much satisfaction that we look forward to his assistance. Mr. M. A. F. Sutton is the eleventh member of the family to be admitted into partnership and the first representative of the fifth generation since the foundation of the firm."

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Rose Trials

An Appeal for a National Garden

THE National Rose Society has recently celebrated its year of Jubilee, and during its existence it has prospered and has done much to foster the cultivation and love of the Rose. To-day it is a really influential institution with a vast membership second only to that of the Royal Horticultural Society. All institutions like the National Rose Society must conform to the times and adapt themselves to ever-changing circumstances as the years roll on if they are to merit and retain the confidence and support of their members, and during the 50 years which have elapsed since the Society was formed there have been immense changes in the Rose world. The National Rose Society, in all fairness let it be granted, has done noble work in popularising and extending the cultivation of the noblest of flowers. The institution of a gold medal for new and meritorious varieties was a step in the right direction, and for many years the awarding of this distinction held the interest of everyone who grew Roses. The gold medal, however, has had its day. New Roses are now introduced in large numbers, and it is not possible to judge the merits of these simply by cut flowers with a specimen plant exhibited alongside the blooms. At one time the gold medal was regarded as a mark of distinction, to-day it is not so.

It is necessary for me to qualify this assertion in all justice to my many friends upon the Executive of the National Rose Society. Criticism, especially that of a destructive character, is cheap and easy, and is not, of course, always received appreciatively. I am in touch with many growers of Roses and I have a unique opportunity of hearing opinions in all matters appertaining to the cultivation of the flower and to the influence of the National Rose Society. There is, undoubtedly, a very high opinion of the work done and being done by the National Rose Society, and its literature is ever welcome. But there is a feeling, rightly or wrongly, and a most widespread feeling, that the gold medal awards to new Roses are made upon an obsolete and worn-out system. Many a good Rose is passed over unhonoured; many an unworthy one receives unmerited recognition. In other words, the gold medal has lost its distinction.

As already stated, the number of seedlings staged at the Summer Show of the National Rose Society at Regent's Park is very large. At a first glance at many of those Roses one is inclined to wonder if raisers have lost all sense of proportion, all knowledge of what is already in commerce, and all idea of what a new and improved variety ought to be. It is granted that many seedlings are of mediocre calibre and quality, but there are others which, although they may appear no advance upon varieties already in existence, when grown may be of better constitution, more floriferous, less prone to disease, and of easier cultivation than the particular variety already in commerce which they seem to resemble.

Under present conditions and methods of judging, how can such Roses—and we need such Roses—receive the recognition they merit and require? Is it not impossible? On the other hand, too, how is it possible to know that a particular seedling is thoroughly reliable in the garden? Is not a good and well-conducted Trial Garden the remedy? Awards granted under fair trial would certainly merit the confidence and restore the faith of many who are now chary of honours that are bestowed under the existing conditions.

The Royal Horticultural Society has, as we know, established a Trial Garden at Wisley, but the results have not been satisfactory. The National Rose Society in its present affluent circumstances—and continued prosperity is the wish of every lover of the Rose—should now step into the breach and begin a National Trial Garden under its own management. Such is its obvious duty. The establishment of such a garden would earn for it fresh enthusiasm, renewed confidence, and an increased support. The time is opportune. Will the Executive of this now powerful organisation grasp the opportunity and advance from strength to strength?

ROSARIAN.

The Rose trials at Wisley

On reading "Rosarian's" letter in your issue of the 27th ult. it occurred to me that, however badly the Rose Trials at Wisley may have been managed, it would have been fairer for him to have represented his views in the first instance to the Wisley Garden Committee and/or the Council of the Royal Horticultural Society before sending his complaint to the Press, and have afforded one or other of those bodies the opportunity of putting matters right. Both of them have an enormous amount of important work to do without remuneration, and it can hardly be expected that they can devote much of their time to the Rose Trials unless their attention is specially directed to them. As "Rosarian" states that he "has been in touch with Trials from the commencement" it was c to him to make his complaint either verb or in writing long ere this to the Rose Tr Committee, who could have passed it on either the Wisley Garden Committee or Council, both of whom I have found read all times to put matters right. It was o also, to "Rosarian" to have addressed Director of Wisley on the subject. Consi ing how loyally and zealously the Wi Garden Committee and the Council do t work, I think that "Rosarian" should h complained to one of them, so that inq could have been made, whether his acc tions were well founded or otherwise. It pears to me an ungrateful way of trea those who give their time and thought to Society's work without reward.

FAIR PLA

Roses and black spot

I note that "Rosarian" says, in his le in your issue of the 27th ult., "that ther no excuse for Black Spot in any Rose gar controlled by a modern gardener who kn his craft." He will, I am sure, be giv all growers of Roses infinite help if he kindly tell them what they should do to w off this pestilence. I have tried many called remedies, but found them all worthl

B. NEWBUR

Own root Apple trees

"Eastment" (November 20th, p. may be interested to know that I have a handsome tree of Bramley's Seedling in gardens here 25 feet to 30 feet high, wit much larger spread of branches and from years to 35 years old, which is on its roots. There are three main stems from ground-line, and the tree is not only vigor but during the present year has produ some of the largest and finest fruits of tree in the garden. I think that the rea why many fail to get good growth from root trees is due, in the first place, to wrong class of wood being used.

The cutting should be made of young, c growths a year old, and not old spur grow which make little progress. Of cou Apples may be obtained upon their own r by means of layering with the greatest e the method employed here with scarce va ties being that of tilting a young tree over its side in February, and after digging ground and placing a layer of sandy soil the surface of the space intended for branches the latter are secured firmly stout hooked stakes to the ground and layer prepared exactly as for Carnations. is essential that a stake should be fixed steady each shoot as soon as it commence grow, otherwise rocking to and fro oc during stormy weather, which, if permi to continue, will destroy the tender yo roots.

E. M

Apple Laxton's Superb

As I am pointedly appealed to by G. H. Dalrymple, in your issue of Novem 20th, for my opinion of the above, I h great pleasure in giving it. So far a know it now I unhesitatingly place it in first half-dozen for quality and flavour, a with further experience of it, it is very po ble that I may place it pretty high up in half-dozen.

It is a delicious Apple, very juicy, and v a pleasant aromatic (but not too aroma bouquet and flavour. It has that pleas briskness which is so desirable, as dist from the flatness of certain dessert variet It is not so showy in appearance as so but that, with me, is the very last desid tum, and I should give that attribute low points in an Apple. It is one of the m bountiful and regular croppers here, and

merit of carrying a full flavour even be- it is quite ripe, so that even now or r Christmas it is fit for dessert.

rom Mr. Dalrymple's note I rather er that he wishes me to make some com- ison between Superb and Cox's Orange. ll, I am only going to be "drawn" so as to say this, that there is plenty of n for both, and when my Cox's Orange past their best the dreariness of winter be relieved by the consumption of erb. In passing, I may just say that the in favour of Cox's Orange of which Dalrymple appears to suspect me never ny time went to the lengths of his, for tells us that until he tasted Superb he ways thought it (Cox's) was the only le worth eating." That is rather a tall r, to which I should never dream of sub- ping. I think American Mother in a l year runs Cox's very close, and then, of se, there is Ribston, but that is rather hard for my teeth.

F. HERBERT CHAPMAN.

parent of the Perpetual-flowering Carnation

the review of my book, "Carnations for ry Garden and Greenhouse," your re- er expresses surprise that I state that nthus chinensis is the parent of the Per- al-flowering Carnation, and asks on what ority I make this statement. I am aware earlier writers have claimed Dianthus ophyllus as the parent, the same as the der Carnation, but undoubtedly this is ng. However, those who have done the tical hybridising work that our Experi- t Department does, raising as many as o special hybrids each year and dealing all the species of Dianthus, will have no culty in satisfying themselves on this t, viz., that Dianthus chinensis was the ominating parent, the same as it was in development of the Marguerite Carnation. horticulture we all are tempted to accept ements instead of proving them, but we in a position to verify our statement.

MONTAGU C. ALLWOOD.

The decline of allotments

cannot allow the remarks of Bruce itt, in your issue of December 4th, to unchallenged in reference to the above ect. I have had some considerable ex- ence of allotments and of the men who vate them, as well as of gardeners who charge of private gardens, and some knowledge of nursery gardens in this h-west corner of England. Taken on the le (if anything), I think the amateur er of 300 square yards, more or less, is keener man.

grant that some of the areas used as ments are not pretty—may in some cases gly. But we must not forget that such ments are often held with, at most, a ly tenancy, and working men cannot d expensive fences to their plots on such s. For cleanliness and careful working e ground I know he will compare favour- with his professional brother. As to ping the ground, well, who can say what earth will produce and bring forth? In ly 50 years' experience I have never met man who dare say what a plot of land capable of growing. T. O. WALKER.

rnforth.

Ripe Medlars

our correspondent's remarks on Medlars e November 20th, page 697) reminded me hen I was living near Chelmsford, Essex, years ago. We had two trees in a grass ard which invariably carried a good crop ne fruit yearly. It was not often I got ripe for a collection of fruit till in Novem- ber I accidentally discovered an artificial way. Having some fine fruit in my pocket when selecting some plants for dinner-table decoration I threw the Medlars into an evaporating trough on the pipes under a stage. In less than a fortnight I took up one of the Medlars. To my surprise it was soft, eatable, and of fair flavour. After this I always managed to have a fine dish of ripe Medlars when wanted in collections of fruit at the Chrysanthemum Shows in November.

58, *Blandford Road, Beckenham.* S. P.

Should Fruit Trees be Root-pruned?

IN the issue of GARDENING ILLUSTRATED dated December 4th, under the above heading, "A Scottish Gardener" states that everyone who has the slightest knowledge of fruit trees knows that the time to regulate the root growth is within the first four years after planting. Here he finishes, relying on all experienced fruit-growers to grasp his point. It is certainly good practice to lift and replant fruit trees that are making too much growth during the first three or four years, but that will not prevent them from making too much wood in later years. I quite agree root-pruning is an old-fashioned method, but can "A Scottish Gardener" give any more up-to-date method that will answer the purpose and do away with this laborious work?

If "A Scottish Gardener" will turn back to the pages of GARDENING ILLUSTRATED during the summer months he will see how many readers have asked why it is that their fruit trees make so much wood year after year and bear no fruit. He will find many answers that the trees should be root-pruned during autumn, and details given in full in more cases than one. Thus my "reminder" on the subject when the time has arrived for the work to be done.

If the writers of calendars had to give full details of all work that should be done at a certain time it would take up much more space than that which is allowed them for the purpose.

W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

—— I feel that I must have a word to say about the article on this subject by "A Scottish Gardener" in your issue of December 4th. He says, "In 99 cases out of every 100 when a tree which has borne well begins to fail; in other words, when, in the course of Nature, it enters into its old age, the root-pruner gets to work." If this be the case there must be more stupid people in the gardening world than one thought possible. I think the general course pursued in root-pruning is to tackle young trees which persist in making gross growth and produce little bloom and no fruit. Then the above-mentioned writer complains of Mr. Wright's vague directions as to depth of trench, etc. But surely it would be impossible to give exact data on these points unless one knew of the species of tree, its size, etc. He then goes on to condemn the practice of root-pruning *in toto*. Now, for many years I looked upon this operation somewhat in the same light as "A Scottish Gardener" views it, but I was going entirely upon theory.

Some 25 years ago I had a new garden to deal with, and planted a variety of Plums, Apples, and Pears in it. The soil, being old pasture land, caused the trees to grow in a most astonishing manner—without any manure being applied to the trees. This was very disappointing. One likes to see trees growing freely, but not at the expense of fruit. In talking to a workman he said, "If them trees were mine I should dig a trench half-way round 'em, chop through the thickest roots and the tap root, shoving 'em over as far as possible, then straighten up and ram the soil well into what roots were left." I said, "Joe, you and I will do it this very next winter; if it kills the beggars it will be no worse than having no fruit." That winter the deed was done, and in no very gentle or scientific manner either. No tools were used but spades, and there was no trimming of the remaining roots as is generally advised. The results were far better than I had even hoped for; nearly all the trees treated bore the first year and have continued doing so ever since, *i.e.*, when the bloom escaped spring frosts. Since this somewhat drastic treatment the trees have made only moderate growth, which proves that one must not expect fruit from overgrown trees. I have never tried the ringing process recommended by L. Bigg-Wither, but if it proves as successful as my one attempt at root-pruning it would seem to be a far easier way of attaining a desirable end. J. DUNCAN PEARSON.

Lowdham, Notts.

—— Two printer's errors appeared in my notes on "Ringing" fruit trees on page 725 of GARDENING ILLUSTRATED. The sentences should read:—

"In the case of Plums and Cherries, which are apt to *gum* when cut . . .," not "*grow.*"

"Where wire has been used this should be *removed* in October," not "*renewed.*"

This latter correction is very important.

L. BIGG-WITHER.

—— "Root-pruning," says "A Scottish Gardener," "is not only fatuous, but it is absolutely barbarous and dangerous." "Fatuous," that is, illusory, and means that those who do these things are doing that which is nothing short of useless. Well, now I was given to understand that "A Scottish Gardener" is of the Old School, belonging to that beautiful past when everybody worked from morn till eve. Such being undoubtedly the case, it is of moment that we read his views on root-pruning so explicitly expressed. For the old-fashioned gardener used to regard this process as a means to counteract a too luxuriant growth in fruit trees, so far as leaf buds are concerned, and an encouragement of blossom, and consequently more fruit. But the old order changeth, giving place to new, and we find further on in the letter that those who advocate this practice (of root-pruning) are labouring under a mistaken idea. "Mutilating the roots of any fruit tree . . .," he says, "will not restore it to health and fruitfulness." I am not aware that Mr. Wright (the aggressor in this matter) advocated "mutilation," but let that pass, for we are on the warpath without the shadow of a doubt. But look at this: "The unmeaning, uncraftsmanlike practice of mutilating the roots of fruit trees was, I had thought, tacitly relegated to the limbo of old, forgotten things."

It is a well-worded passage, but it cannot be allowed to pass without protest. It is clear, however, that the root-pruning of any tree must be placed in the hands of those who *understand* the process, and we have to thank quite a number of men from the Highlands for coming over here to teach the heathen the rudiments of our profession (?).

BRUCE HEWITT.

—— There is nothing I dislike more than to contribute to your correspondence columns, because one is obliged to hit out right and left against friends and foes alike, and, moreover, one is liable to receive hard knocks in return; but I cannot let the subject of root-pruning go by without lashing out against such a pernicious practice. The fact that a fruit tree makes strong wood growth and

refuses to fruit is to admit faulty management on the part of the cultivator. Not satisfied with being incompetent, he now gives us advice as to how such fruit trees should be managed, so that they become again fruitful. I ask the question, Is this logical? Is it not better if one has such trees to seek the advice of successful and competent cultivators who have no such infertile trees, or, rather, whose management does not allow fruit trees to adopt such bad habit? "A Scottish Gardener" is quite right with his reference to the first four years in the life of a fruit tree. The pruning, to get fruit as quickly as possible at the expense of the natural growth of a fruit tree in the early years, lays the foundation for such conditions. When, after some years, the tree makes endeavours to grow and right its mismanagement, along comes the root-pruner with further bungling. "L. B. W." is quite wrong when he advises bark-ringing. The correct and only solution in such cases is obtained by a study of the plant itself. Having made fibrous roots in abnormal proportion to tap roots the plant is reversing such conditions. These tap roots are necessary to the tree as they anchor it in the soil against storms and because they supply water in times of drought, when trees without them would suffer. I quite agree with the root-pruners that if such trees are left to themselves they will become permanently infertile apart from infertility due to blossom sterility. The fact that wood is being made at the expense of fruit spurs shows that potash and nitrates are in excess of phosphates, therefore the latter must be supplied in greater proportions. Such tap roots in uncongenial soil will not develop fibrous roots at their tips unless the soil is sweet and neutral, therefore lime (98 per cent. calcium) is also supplied. Whereas 3 ozs. of lime and steamed bone-flour per square yard are the normal dressing, double or treble should be given in autumn and again in spring, and continued for two or three years in heavy soils. If this treatment is adopted in conjunction with bark-pruning the result is attained at the end of the first year. "L. B. W." is right in advocating the restriction of the flow of spring sap, but it is his method which is wrong. Take a knife and cut the bark of the stem upwards, leaving the sapwood bare half an inch wide. Three such cuts should be made equidistant round the trunk. The length of the cuts depends upon the size, age, and vigour of the tree, say 1 foot to 3 feet long. The second cut is best started from the middle of the first and the third cut about the level of the top of the first. Any time during the winter pruning will do, but paint all cuts over with knotting. The rise of the spring sap is diverted. The food made by the leaves on wood shoots, which on vigorous trees is sent down to the roots, is made to callus and heal the wounds on the bark, and does not reach the tap roots, which consequently cease growing too vigorously. The lime makes the cold soil down below more congenial, and the phosphate makes the wood growths ripen perfectly. Normal ripe wood is the secret of fertility in fruit trees. These have all been obtained at the minimum of labour and expense. Why listen to the incompetent cultivator who advises the maximum of labour, expense, and the ruination of a tree which it has cost money and trouble to raise?

C. A. Jardine.

The Grey Carpet Juniper (Juniperus Sabina tamariscifolia), shown by The Orpington Nurseries Co.

It is one of the most beautiful of all dwarf conifers

Lilium Harrisii

In September last we sent to you a few samples from a consignment of Bermuda bulbs of this Lily, and you were kind enough to mention them in your paper. Since then we have received letters from a number of interested persons, and several have inquired whether the Lilies now being grown in Bermuda are of the true L. Harrisii variety. We think, therefore, that Lily growers would be interested in the following statement, which we give on the authority of a letter from the Plant Pathologist of the Department of Agriculture of Bermuda.

"The correct name of the Bermuda Lily is Lilium longiflorum var. eximium. It is a distinct variety and a native of the Linkin Islands. It was introduced into Europe r the early part of the nineteenth centu whence bulbs were taken to Bermuda. So time later it was called Harrisii by a r named Harris in the United States, and i is the name that has come into general u but, as we say, the Lily had really b named already. The bulbs now being s over from Bermuda are Lilies of the t longiflorum var. eximium type, or, as t are generally named, Harrisii."

We would add that many bulbs from ot sources are described quite incorrectly as Harrisii. For instance, a large number Azorean Lilies sold under this description a in reality, not L. Harrisii at all, but ordin types of L. longiflorum.

We shall be very grateful if you will all us to use the valuable medium of your pa in order to bring the facts to the notice of large number of readers interested in th Lilies.

Robert Tucker and Co.

Christmas flowers

In almost all establishments an extra s ply of flowers is required at Christmas, the fore it is necessary to give timely attention make the most of resources. The late-flow ing Chrysanthemums should be kept as c as possible, but with damp weather it will necessary to give just sufficient fire-heat dry the atmosphere, otherwise the flow will damp. Where Azaleas, as Deuts Perle and Fielder's White, have been pre ously forced not much heat will be requi to have them nicely in flower by Christm A few of the earliest varieties of Hyacin and Tulips may be started at any time n Helleborus niger is always a favour although this is usually in flower in the o ground by Christmas. I find it advisable give protection from cold and stormy weat by covering with hand-glasses or cloches.

F. H

Apple Bismarck

This is a large, richly-coloured Ap which, as grown here (Sussex), is not wo the ground it occupies. For this reason it w be thrown out this year. Not only are t trees addicted to mildew, but the fruits a leathery and juiceless. With so many sp did cooking Apples available we can dispe with such as the above from our gardens a orchards.

M.

Sussex.

Apple French Crab

This is a fair-sized good cooking and cr ping Apple, and a long keeper. I have, two or three occasions, kept it sound in August. It does not lose its flavour wh ripe.

Pyrus.

Yucca pendula (Syn. Y. recurva)

It is well known that Yuccas as a fami are not given to displaying their charms what might be called the flapper stage. fact, in this country, at any rate, they usual have attained their majority, and often co siderably over it, before they will condescen to unveil their beauties to their patient waiting owners. The plant which flower here this year is, however, an exception. was bought in about two and a half yea ago, a tiny morsel in a 3-inch pot. I gave for a time, a 6-inch pot, and just over tw years ago it was planted in its present pos tion. I confess to being a bit surprised a puzzled when it showed signs of throwing u a flower-stem, but there it was, and althoug small in comparison with a 20-year or 30-ye old plant, it was really very beautiful, wi 73 individual flowers on the stem. I ma add that, contrary to the usual practice, was planted in a position one might ter decidedly damp.

G. Watt.

Baronald Gardens, Lanark.

NOVELTIES AT VINCENT SQUARE

1. The Butcher's Broom (Ruscus aculeatus), to which an Award of Merit was given in recognition of its value as a brightly berried shrub

2. The neat and dainty Cypripedium Pan from the Westonbirt collection

3. Chrysanthemum Golden Climax, a perfectly shaped little Pompon (Award of Merit)

Noteworthy Plants at Vincent Square

ORCHIDS and Chrysanthemums, Carnations and winter-flowering Begonias were all well represented at the fortghtly exhibition of the Royal Horticultural ociety held at Vincent Square on the last y of November. The Orchids were parcularly good, and there were no less than ne groups.

The famous collection of Orchids owned the late Lt.-Col. Sir George Holford has cently been taken over by a private comny under the title of H. G. Alexander, d., and this was the first occasion on which e Westonbirt Orchids were shown by the wly-formed company, who staged a beautil group of exquisite varieties from which singled out for illustration the small and rfectly-shaped Cypripedium Pan. This is viously a hybrid of C. Fairieanum, and it is a great favourite of Sir George olford. Appropriately named, it is as at and sweet in appearance as a Cypridium can be. An Award of Merit was anted to Cypripedium Nesta Westonbirt ariety, with a conspicuous white rounded rsal lined with purple spots.

Two richly-coloured Brasso-Lælio-Cattleyas ined Awards of Merit, viz., Mithra and ytheria, shown by Baron Bruno Schroeder d Messrs. J. and A. McBean respectively.

Cymbidium Tracyanum was well shown by essrs. Sanders, and Odontoglossum Zulu rown and yellow) and Cypripedium F. M. Ogilvie were shown by Mr. H. T. tt, Rosslyn, Stamford Hill, London.

A delightful display of new Odontoossums formed the chief feature of the exhibit by Messrs. Charlesworth and Co. Messrs. Black and Flory showed Cattleya hybrids, while Cypripedium Swallow was conspicuous in the collection shown by Messrs. Cowan and Co.

It came as a surprise to see an Award of Merit made to the Butchers' Broom. As all the world knows, this is a native plant. The sprays shown by Mr. Gerald Loder, Wakehurst Place, Ardingly, Sussex, were remarkable for their abundance of bright red fruits. We hear that it is particularly well fruited in other parts of England this year, while fruiting sprays are being sent over in quantity to Covent Garden Market from the South of France at this season.

Dwarf Conifers for rock gardens were shown in variety by Messrs. Whitelegg and Co., Chislehurst, also by The Orpington Nurseries Co. We illustrate one of the best, viz., Juniperus Sabina tamariscifolia, of spreading habit. It is variously known as the Grey Carpet Juniper, Spanish Savin, or Male Juniper.

Winter-flowering Begonias were well shown by Messrs. John Peed and Sons. The varieties Exquisite, Emita, and the bronzy-leaved Mrs. Petersen were the source of great admiration.

Two remarkably good Carnations, Royalty (a scarlet fancy) and The Favourite (splendid pink), shown by Mr. W. E. Wallace, both received Awards of Merit.

Chrysanthemums Autumn Tints, Andania, Jas. Seymour, and Thomas W. Pockett were noticeable in the grand group staged by Messrs. Keith Luxford, while Mrs. R. F. Felton (see illustration, page 739), P. Dore (white incurved), and a yellow incurved variety, A. Brooker, were well shown with others by Messrs. Cragg, Harrison, and Cragg.

In contrast to the large exhibition Chrysanthemums the new Pompon variety, Golden Climax, found many admirers. It is very free-flowering, with neat little heads of golden-yellow. This variety, which gained an Award of Merit, was shown by Mr. H. J. Jones, Lewisham. H. C.

Beech hedges

Possessing considerable sheltering properties and extremely pretty at the present time is a well-cared-for Beech hedge, for, unlike the established forest tree, the hedge retains its beautiful leaves all through the winter, the warm colour resembling the tones of ripening Bracken. Fagus sylvatica (Common Beech) is the kind generally employed for this purpose, and if used as a fence against cattle, and not merely for shelter or ornament, then an alternate plant of White Thorn put in at the same time as the Beech will render it more effective. The young leaves of Beech hedges are much admired by most people in spring, and for this reason it has often been employed to form a background and shelter to borders of plants, which, however, are bound to suffer from its voracious roots after a few years, otherwise its beauty cannot be denied. Visiting a garden near Ashdown Forest, which is swept by strong south-west winds, rendering some sort of protection absolutely necessary, I was pleased to notice the free use which had been made of this useful native tree. E. M.

TREES AND SHRUBS

Raphiolepis japonica

THIS evergreen shrub from Japan and Corea flowered more freely than hitherto with me this year. The leaves are each about 3 inches long, stout, and leathery, the growth compact and shapely, and sometimes reaching 8 feet in height. Its deliciously scented flowers are white, funnel-shaped, and borne on stiff, erect panicles, each about 4 inches high, the centre of the blooms rose with age. At the base of the flower panicles numerous felted young shoots appear, framing each cluster of bloom like a miniature nosegay. Rather slow-growing at first is this pretty shrub. Those who enjoy sweet-scented evergreens near their doors and walks should plant this, giving it a somewhat sheltered position if possible.

R. DELACOURI is also quite a pretty low shrub bearing pink flowers about the same time as the above (the latter part of May and early June), but of less substance. Of the two I much prefer the former. M. S.

Raphiolepis japonica

Autumn flowering shrubs

Autumn is the season of fruit rather than flowers. And yet the rains of September renew so thoroughly the vivid green of the grass, and many trees retain so entirely the beauty of their foliage, that one feels the more a lack of flowers. Nearly all the finest shrubs have bloomed in June or July, and only a few remain to continue the flowering season. It becomes somewhat important, therefore, to the amateur that his knowledge should afford every means within reach to lengthen out this season. Without pausing to dwell upon the exquisite beauties of autumn Roses, we note first the noble masses of Hydrangea paniculata grandiflora, plants or groups of which make such prominent objects in the landscape. What can be finer than these great clusters of white flowers, passing, as the season advances, through varying shades of light green, rose, reddish-purple, and deep red? The flower is not satisfactory when plucked. A certain coarseness adheres to it, which is not lessened by the great size and sameness of structure. Seen on the lawn, however, it is difficult to surpass; indeed, it ranks with many persons as the very best of shrubs. So grand an individual as this Hydrangea quite overshadows the merits of other late-flowering shrubs. Another well-known but late-flowering shrub is the Althæa (Hibiscus), bearing large flowers often striped with white, purple, red, and pink. Both plant and flower, however, are somewhat coarse in construction and colouring, but the late-blooming property, a bright, glowing aspect, great vigour and aptitude for growing in hedges or large masses, will always render it very important to the landscape gardener. More humble plants are the Hypericums (St. John's Wort). Most of them bloom late in summer or early fall, and their profuse, bright yellow flowers, studded over dwarf, compact bushes, present a very pleasing effect in October. H. kalmianum is especially attractive with its shining, evergreen-looking foliage and numerous flowers, remarkable for many anthers. These shrubs have been long known and esteemed, but have never received the attention they deserved. Potentilla fruticosa is another pretty autumn-flowering shrub, with yellow flowers and somewhat silvery or glaucous foliage; it is of low growth, but more erect usually than Hypericums. Two or three pretty Spiræas also bloom at this season, bearing more or less pink blossoms, and having the respective names of S. Billiardi, S. Regeliana, and S. Nobleana. The study of the various seasons of flowering peculiar to shrubs and trees should receive more attention, for there is very much that might be done in this way to render our grounds more attractive than they usually are in autumn.

Hypericum Coris

The blue-grey foliage of this is very attractive at all seasons, and is a decided ornament to the rock garden even when not in bloom. Added to this we have the little spires of large golden flowers. Judging from some of the larger Hypericums we are prone to suppose that it should like some shade and a cool place. The contrary is the case, as H. Coris loves a hot, dry spot in sun. It is also a lime-lover, although it will not resent soil from which this is absent. In cold, exposed places I have seen plants perish in winters unusual severity, but, as a rule, it is har It can be raised from seeds sown under gl in spring or by cuttings. Ess

Clematis Flammula

ONE may fairly claim for this pre species that there is no other gar plant that can be put to so many and good uses. It is invaluable in the flo border for training over various plants t have gone out of bloom. Placed at the b of a group of Delphiniums it takes their pl most happily in September. The Delphiniu are in bloom at the end of June and in ea July. When the flowers have turned to se pods, which they do very quickly, they cut down to just below the pods, leaving stems standing about 4 feet high. Me while the Clematis has been growing, can now be trained over the Delphinium. some of it is wanted higher than the res couple of tall, branched Pea-sticks will ra it, as the picture shows. It comes into flo in September, before the purple of the Lavender at its foot is over, and when t has turned to a quiet grey it is none worse as a picture. Beyond it is a group the primrose-coloured Sunflower, which to well with the warm white of the Clematis

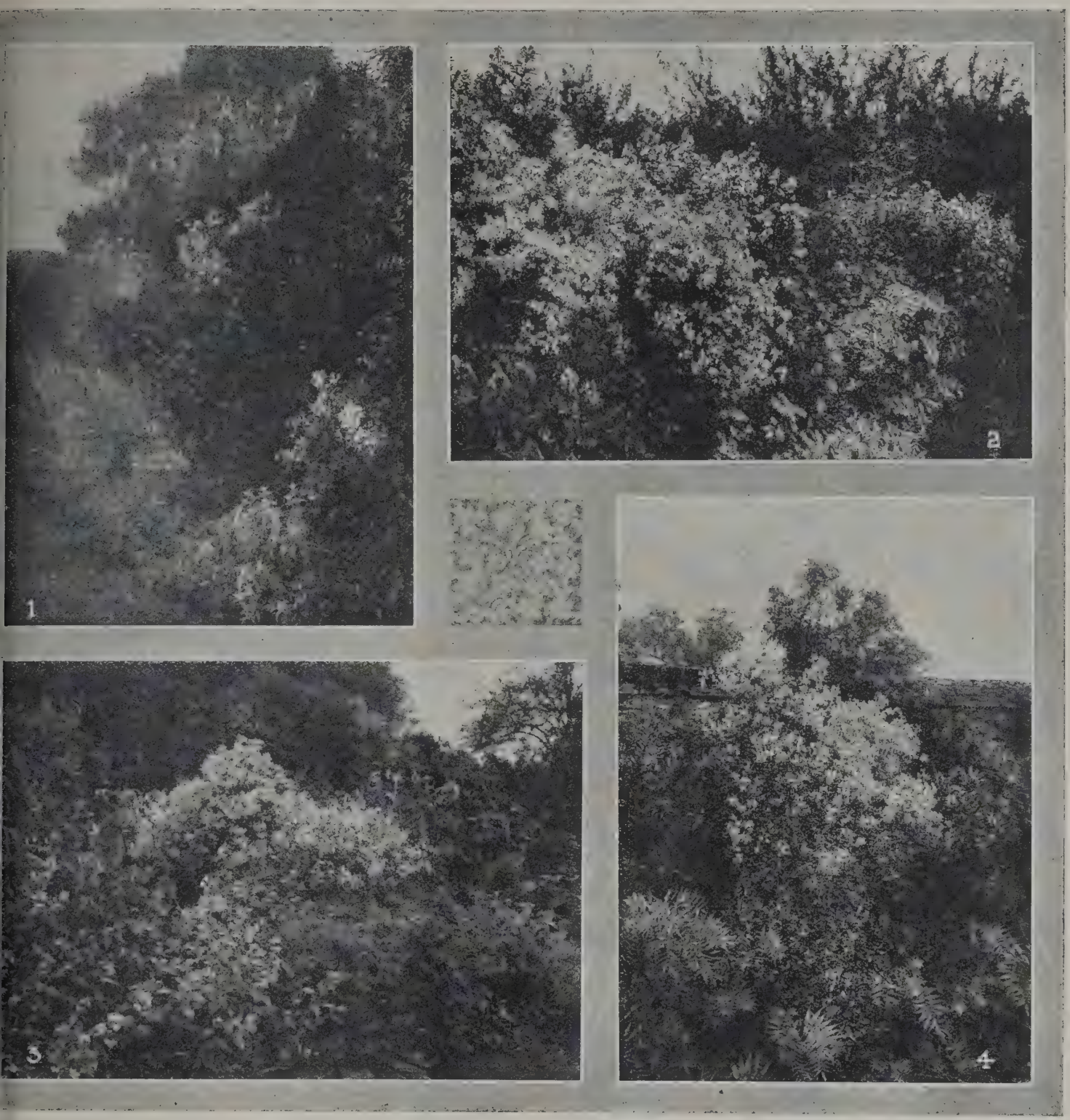
In another border it accompanies the S tember Michaelmas Daisies. Just beyond is the warm white Aster paniculatus, so n it in colour that, until one is quite near a sees the difference of habit, it might be c and the same plant. At its foot, to the le is a group of the rich purple Aconitu japonicum, 2 feet high, a valuable late bord plant that seems to be less well known th the taller kinds. Beyond are Asters of go purple colouring, and next to the path so yards of bordering of Stachys lanata.

At the edge of the lawn are some bushes Laurustinus, now 10 feet to 12 feet high. Clematis was planted at the foot and branches led up into the Laurustinus. It h taken to the treatment and has now begun tumble out in little clouds of bloom at vario heights as desired. Another year it will ma a finer show and will still better remind o of the way it grows on wild hillsides Southern Italy, puffing out of bushy brak like the smoke of a dying fire, and so earni its local name of *fuochi morti*.

There are some who find a difficulty in c ciding what is best to be used for clothi walls with northern or eastern exposur On such a wall we planted a Spira Lindleyana and trained it loosely to the wa A Clematis Flammula was put in a few fe from its root and was led up into its branche For the last two years neither plant has be touched, and the picture shows the happy r sult. The place is open to fierce blasts wind from the north and north-west, but t friendly shrubs in close companionship ha no protection and take no harm. There a many places about gardens where there some unbeautiful shed, or bare wall, or son other unsightly object where this useful co bination may well be adopted. G. J.

Buddleia alternifolia

The long spikes of purple flowers th Veitch's Buddleia shows us in August are well known that the claims of other membe of this useful family are rather overlooke Buddleia alternifolia is, I think, a shrub th deserves attention, and it is so distinct every way that it demands a little mo notice. Buddleia alternifolia is very slende growing, with small, almost linear leave quite unlike B. Veitchii. Moreover, it flowe in May and early June, and, consequentl blooms on the last year's wood, so that must not be pruned until after it ha flowered. The blooms are small, clusterin



CLEMATIS FLAMMULA CAN BE PUT TO MANY GOOD USES

One may fairly claim for this pretty species that there is no other garden plant that can be put to so many and so good uses

1. Growing through Laurustinus 2. With September Asters 3. Trained on Delphiniums 4. With Spiræa Lindleyana against a wall

closely on the slender shoots till they are entirely encrusted with them. Were the colour pure rose one would describe the effect as of sprays of coral, but though I have seen some flowers almost rose-coloured, the more usual shade is rose-lilac. Left to itself the slender shoots are rather straggly and ineffective, but if the strongest shoot is tied up to a long cane and the others cut away it develops drooping side shoots that make a perfect fountain of bloom just as the small young leaves develop. I do not know how freely this lovely shrub may show flower in English gardens, but in the South of France it is the daintiest and most graceful thing imaginable, and it lasts in flower a considerable time. For elegance it is unsurpassed, and requires but little room to show its beauty. It demands sun and a dry, open situation, but, like other Buddleias, it seems quite indifferent to soil, whether calcareous or otherwise. To show its full beauty it must be tied up to some support. The Buddleias all vary so greatly from seed that if you have the luck to get a bright-coloured form you must propagate it by cuttings, which strike readily. Buddleia Colvillei is another shrub or small tree that varies so greatly that for years I thought it worthless. The form now grown at Kew is accepted as the type and is a grand thing for warm and sheltered gardens, but the plant I first grew was so poor and so pale in flower I discarded it, little knowing how beautiful the best form could be. The well-known Buddleia Veitchii, that is so very vigorous and overpowering in growth, has a variety called B. nanhœnsis, which is quite dwarf and dainty, but it does not come true from seed, which is very freely produced. Its seedlings must be planted with caution, and the wise man will propagate this charming and very free-flowering form by cuttings only when he has obtained the true dwarf form from a nursery.

EDWARD H. WOODALL.

INDOOR PLANTS

Potting

IN the course of my visits to admirably-managed gardens in many parts of the country there is one thing which has struck me as most peculiar, and it exists very evidently among well-established nurserymen—it is the apparent disregard of the all-important principles of potting. Gardeners cannot urge upon their staff the vital facts to be observed, too frequently, where plant life in pots or tubs is concerned. According to the plant to be potted so, of course, must the soil be prepared, and it is not sufficient to have one soil in the potting-shed and "doctor it up" to serve as food for all. Equally important, too, is the choice of such constituents as leaf-mould. To mix up dry leaves in a compost is waste of time. Leaf-mould to *be* leaf-mould must be well decayed. Sand to be of service in a compost must be something more than dust. Loam, too, must be finely chopped, for it is worse than useless to pot young plants in lumpy soil, and it must be remembered that plants in pots, generally speaking, are reared in artificial conditions, which mean that they are denied the action of the natural elements, such as rain, and are further restricted by their limited space. This, of course, does not apply to some plants which are *naturally* artificially reared.

Having then, at hand, the requisite preparation for the potting on hand, see to it that the pots which are to be used are, if old, well scrubbed and dried, and, if new, thoroughly soaked and dried. Drainage may be effected by placing broken flower-pot fragments over the hole of the pot, but not in such a way as to block the water outlet.

The compost which has to be used must be neither too damp nor too dry. In the case of the former state irreparable damage will be done to the tender fibrous roots. In the latter there is the danger of the compost becoming dry and hard like clay, and this state will be further rendered dangerous by cracking. Potting for the most part is effected during spring, when there are signs of new life. Perhaps one of the most important factors in the execution of correct potting is the state of the soil when the plant has been potted. Ramming the soil round the roots of the plant may be fatal in some cases, and it is, perhaps, well to abide by the general precept that soft-wooded plants and rapidly-growing ones must not be too firmly rammed, whilst hard-wooded plants and those of the slow-growing class should be firmly potted. Over-potting is not to be recommended, by which is meant the using of pots much larger than is required. In some cases such treatment simply encourages a mass of foliage where bloom is desired, and, as is well known, pot-bound specimens of some plants bloom best.

In potting it is imperative to the success of your undertaking to leave at least half or three-quarters of an inch of space between the soil and pot-rim, so that watering may be effected satisfactorily. Newly-potted plants should be watered with a fine rose. The practice of standing Ferns or flowering plants in a saucer of water cannot be too strongly condemned, it merely seals the air space at the bottom of the pot and thus sets up some disease.

BRUCE HEWITT.

ROSES

Some good Roses for pillars

ROSE-PLANTING has again come round, and no garden is complete without some good Roses for growing on pillars, pergolas, and arches. Two important items in the cultivation of these Roses are a properly prepared station for each plant and the cutting down of the plants to within 9 inches of the ground in early spring. It is surprising the number of these Roses that are ruined each year by the owner expecting too much from them the first season. If bloom is sacrificed and the plant cut down, the foundation is laid and a rich return results the following season.

When preparing for planting much depends on the nature of the soil. If of a loamy, sticky, or clayey nature all is well, but if of a poor, stony, or brashy nature that is liable to become dried up during the summer, extra attention is required if the Roses are to be a success. Dealing with soil of this class, a station should be dug out 2 feet deep and 3 feet in diameter. Some rough turfy loam of a heavy nature should be chopped up and mixed thoroughly with a fair proportion of rotted manure, wood ashes, and a sprinkling of crushed bones. The hole should be filled up and made firm by treading before planting the Roses. Afterwards mulch with littery manure. Soil of a suitable nature only requires trenching and a fair dressing of manure added to the lower spit. When planting these Roses they only require to be set an inch or so lower than the soil mark which denotes the depth they were growing in in the nursery; many plants are ruined through planting too deeply. The roots should be spread out their entire length before filling in the soil around them.

Among the best varieties for beginners are American Pillar, a very strong grower, bearing enormous trusses of blooms which are of a deep pink. Blush Rambler is another splendid Rose as a companion to the former. There are few Rose lovers who are not aware of the qualities of Dorothy Perkins, with its double Rose pink blooms. There is something about Hiawatha t appeals to everyone. The blooms are r crimson with a white eye. Debutante i very attractive cream pink, Gardenia bri yellow, changing to cream; Minneha deep pink, and White Dorothy.

All the above are Wichuraianas, and robust growers that will furnish high pill and large pergolas. Other beautiful climb of not so robust growth are Paul's Sca Climber, Climbing Mrs. W. J. Gra Climbing Caroline Testout, Climbing F Karl Druschki, Climbing Mme. Abel C tenay, Bouquet d'Or, Gloire De Dijon, M Alfred Carriere, Aimé Vibert, Dr. V Fleet, Alister Stella Gray, Tea Ramb Longworth Rambler.

The climbing varieties require differ pruning from the Wichuraianas. G strong rods should be retained and all s shoots pruned back in March, all w shoots being cut out at the base.

W. E. WRIGHT

Tregarth Gardens,
Creigiau, near Cardiff.

Autumn pruning of Roses

In what does the autumn pruning of Ro consist, and should such pruning be giver all classes of Roses—H.P.'s, H.T.'s, et and to all forms—dwarf, standard, and cli ing? Some of the bush Roses planted season have made shoots 5 feet to 8 feet h Should these be shortened after the lea have fallen and staked to prevent the r being moved by high winter winds? A

[Generally speaking, it is the Hybrid P petuals and the summer-flowering Roses are pruned in autumn. This pruning c sists in removing the old wood, retaining or six of the well-ripened growths of the c rent season to supply the blossom next y These young growths are not pruned in way now. Tea Roses and many Hy Teas, being so active in growth, would be in a fit state to prune now. Stanc Roses of the same classes could be treate the same manner—that is, thin out the worn-out wood. In some plants this car be done entirely, but where possible disc the old wood—certainly that over two y of age. The more young wood you can your Roses to make, the better will be blossoms. Climbing Roses of the sumr flowering type—such as Crimson Rambl may have their old wood cut out n although this is usually done soon a flowering. Any climbers that have parently finished flowering may have som the very oldest growths removed, so a enable those remaining to be well ripe by the freer access of sun and air. You understand in all cases it is the old grov that may safely be removed now. Even requires some discrimination, because certain Roses the old wood continues hea and active for a considerable time, but practised eye can soon detect when there waning in vigour, and, as before stated, Hybrid Perpetual group are all the better a free discarding of their old wood annua The plants you set out this season, and have grown so vigorously, may either shortened, so as to prevent injury by wind you could tie them over almost horizont and use them as pegged-down Roses r season. Certain Roses make such long r each year that it seems a pity to cut t away in March, but by tying them down get quite a lot of bloom along the grow but they are on rather short stems. T however, make a display. When t growths have ceased to bloom they are away, and others will take their place. tying down now we help the eyes or bud become more uniformly ripened, and a m even growth occurs in the spring.]

Gentiana sino-ornata

This has all the pleasing characters of the ce, and excels all other species in density bloom. It is the most precious of all ntians for its colour, hardiness, lateness in wering, and use in all sorts of places. The ms are prostrate and branching, and root they grow. From among them spring ct, open, tubular flowers of a rich blue. metimes the blossoms are faintly tinted th green, due, probably, to exposure, and usually 2 inches long. It begins to wer in August, and often continues in om until the end of November if the plants healthy. Though reputedly difficult to tivate, success may be assured by planting in broken sandstone mixed with a quantity rich fibrous loam and leaf-mould in a spot the rock garden where it will be fully osed and where the roots will be near sses of buried rock to the sides of which y delight to cling. It should be planted some slightly elevated position where its l beauty may be enjoyed in autumn and ere it will not be liable to get overrun by onger plants and assured of perfect drain-.

Frequent top-dressings of loam and leaf- l well rotted are the keynote to successful tivation. This should be well worked in l about the plants, and made reasonably n. A few bits of rock placed among the nts, if they are planted in groups, will do d by preventing evaporation, and also act a protection to the plant, which never out-ws its position.

Nothing is more lovely than a patch of this nt in full bloom and healthy on a bright umn day, and it should form carpets on ry rock garden. The plant forms tiny ettes at the apex of the leaves. These m roots freely at the base and may be en off and potted into small pots and kept a cold frame, when they will make neat e plants for flowering the following umn. A handful of sand placed round the wn will guard against the predatory slug, ch shows a decided liking for Gentians.

H. Stevens.

Iris reticulata

his is a lovely little plant, quite hardy and rming for the rock garden, where it ally thrives in soil of an open nature. The it is not more than 6 inches high when in flower, its rush-like foliage which follows flowers rising 1 foot or even more under d cultivation. Its flowers are rich violet, tled gold. Not the least attractive feature ut them is their delightful fragrance. s Iris usually blooms in March, though it s sometimes, under warm conditions, give its blossoms in February. Its early ering is sufficient to warrant its planting a large scale. When planted among rf carpeting plants this Iris makes a e show when rock gardens are usually erless. The plant should be fully exposed irect sunlight, but sheltered from the cold ds of early spring. Bulbs should be ted in early November. A handful of l at the bottom of the hole will ensure a bottom, so desirable to successful culti-on. It may be grown in pans in a cold e, transferring to a cool greenhouse just n the flowers are opening.

H. Stevens.

Salvia uliginosa

his is a beautiful plant, bearing on ching stems 3 feet high loose clusters of blue flowers at the extremity of each t. It flowers during late summer and etimes till late autumn. The plant re-s only ordinary garden soil mixed with mould for its underground network of succulent roots to ramble into. In damp soils it is apt to go off during winter. Where it does so it should be propagated annually. Established plants should be top-dressed with leaf-mould when they are cut down, and may be divided during spring if necessary, although it is advisable to leave the clump undisturbed for a few years for the plant to give of its best.

H. Stevens.

Oriental Lilies in Southern Scotland

THE far-famed Lilies of the East and the West, distinctive natives of Upper Burmah, the lower slopes of the Himalayas, of Western China and Japan, of Formosa and California, may be said to luxuriate in the extreme south of Scotland, and especially in Wigtownshire. I have had Lilium monadelphum var. Szovitzianum in Kirkmaiden Manse Garden nearly 10 feet high, though I never could grow Lilium giganteum as it has been grown at Castle Kennedy. There its culture was commenced by Mr. Cruden, increased by Mr. Findlay (now at the Royal Horticultural Gardens, Wisley), and continued and sustained by the present head gardener, Mr. Rye. There, also, it has occasionally been close upon 13 feet. Lilium auratum var. platyphyllum, growing in a picturesque woodland sanctuary, finds itself at home. One of the greatest glories of Castle Kennedy is the unique collection of Water Lilies growing with Arums as their close companions in the miniature lake.

In Logan Gardens, which for a long period have been personally superintended and often vastly improved by their proprietor, Mr. Kenneth A. McDouall (materially assisted by his Nature-loving brother, Mr. Douglas), there are Lilies (not to speak of a myriad other flowers) that attract crowds of visitors to their precincts during the summer and autumn. Supreme among these, in impressiveness of aspect, are Lilium philippinense formosanum, Grayi (whose pendulous habit is very attractive), Lilium Willmottæ, of vivid orange-red colour and exquisite floral fascination, and particularly Lilium ochraceum, akin in its grace to nepalense, but charmingly stained with deep wine-purple, which has been greatly admired.

At Monreith there is an extensive collection which I have often had the privilege of seeing. Among them are the Regal Lily of Western China and its beautiful rival, Lilium Sargentæ.

Magnolia macrophylla, presented to me by the late Sir Harry J. Veitch 25 years ago, has flowered in the garden of Kirkmaiden Manse for the first time this year. It is a native of Carolina.

David R. Williamson.

The sub-tropical appearance of Logan Gardens is a source of surprise to many visitors to this beautiful garden in Scotland

Gesnera macrantha

This is conspicuous even among the showy class to which it belongs, owing to the brightness of its blossoms. It forms a large fleshy tuber, which, if rested after flowering, starts into growth about November and pushes up stout succulent stems, the latter furnished with pale green foliage and terminated by a cluster of bright velvety, vermilion-coloured flowers. The whole plant is densely covered with hairs. It is easily grown, and from the fact of its flowering at this time of the year is especially valuable.

Saxifraga Macnabiana

Many fine plants have had their origin in our botanic gardens. That at Edinburgh has not been barren of fruitful results in giving us numerous good things. Among these is a very beautiful hybrid Saxifrage named S. Macnabiana, in honour of the late Curator of these gardens. This Saxifrage was raised in 1875, but, although it has been distributed by the trade for many years, it still remains a rare and somewhat expensive plant. Then there are impostors which are being sold under its name. Probably many who sell these are unaware of the character of the true plant. It grows about 18 inches high when in flower and has good foliage and very handsome spikes carrying large white flowers heavily spotted with red. It is a delightful plant which well stands close inspection when in bloom on account of the lovely freckling of red and the way in which it is arranged on the flowers. Some of the other forms which masquerade under the title of S. Macnabiana are very good, but none equal the true plant. S. Macnabiana responds to the treatment usually accorded to the other silver Saxifrages. It is increased by offsets, which, however, are not produced so freely as with some of its allies.

S. Arnott.

REMINDERS FOR THE WEEK

Southern and Midland

Rhubarb

There is no difficulty in obtaining early sticks of Rhubarb if a few strong crowns are placed in gentle heat as required. The roots force more readily if dug up and left exposed to the weather for a few weeks. They may be set in boxes of soil and forced in a cellar or out-house, where they can be kept dark in cases where no greenhouse or pit is to hand.

Spring Cabbage

These have made good growth during the autumn, and, when weather permits, the soil should be stirred around them, and a little drawn up on either side of the rows will give protection to the plants and prevent them from becoming loose in the ground. Later batches should be protected against slugs and other pests.

Work for rainy days

At this season there are lots of work to be done in the potting-shed during inclement weather. Seed-boxes should be repaired and new ones made. All pots and seed-pans should be thoroughly scrubbed, labels re-painted, and stakes sharpened and tied in bundles. Machines and tools are all the better for use if kept well cleaned and oiled. All these jobs, if done now, will save valuable time when seed-sowing and planting time arrives.

Poinsettias

These are now showing their bracts and should be given a slightly lower temperature in a cooler house, where they will remain fresh for a longer period than if subjected to stove heat. When the bracts have fully developed, feeding should be discontinued, but the roots must not be allowed to become dry. If the plants are to be removed for house decoration care must be taken against checks during this process.

Cinerarias

The earliest batches of these plants are now commencing to flower, and should be fed with weak liquid-manure once a week. These plants have a tendency to damp off quickly if the soil is allowed to become water-logged, so care is necessary until the pots are full of roots. Where green-fly is troublesome the house should be fumigated with nicotine or tobacco-paper. Although Cinerarias enjoy cool treatment they must not be subjected to frost.

Bulbs in pots

Roman Hyacinths and Paper-white Narcissi are always appreciated at Christmas, and where preparation was made by potting and plunging the bulbs early and removing them to cold frames, as previously advised, the pots are now well filled with roots and in a fit condition for gentle forcing. Ample supplies of water are necessary from now on, and as the flower-spikes appear weak liquid-manure may be given. Keep the pots well up to the glass.

Schizanthus

The plants should be kept growing as sturdy as possible during the next few weeks in a light, airy house that is just heated enough to keep out frost. The tips should be pinched when the plants have made 4 inches of growth. Small stakes should be placed to each, as growth is fragile and liable to bend over. Water should be given sparingly.

Cuttings of fruit bushes

Where it is necessary to increase the stock of Gooseberries and Currants now is a good time to insert cuttings. Strong, healthy shoots should be selected and taken with a heel of old wood. In the case of Red and White Currants and Gooseberries the lower buds should be removed to within 4 inches or 5 inches of the top. Cuttings 12 inches in length are the most suitable, and they should be firmly inserted one-half their length in the soil.

Cordon Gooseberries

These are very profitable to grow in the small garden and are suitable for planting against north or west walls that are not high enough for other classes of fruit. They may be obtained as single or double cordons.

Nuts

Filberts are profitable to grow as bushes in soil that is of a heavy nature, and do well on a bank. The chief point is to keep all suckers from around the roots of the trees. The leading branches should be pruned annually in the same manner as Gooseberries and Currants.

Buddleias

These beautiful flowering shrubs should be included in every garden, especially the variety Veitchiana, which bears during August beautiful long mauve sprays of flowers that are suitable for cutting. The plants require hard pruning each winter or early spring to produce good and free-flowering growth. They are readily increased from cuttings.

W. E. Wright.

Trêgarth Gardens,
Creigiau, near Cardiff.

Scotland

Violets in frames

This is the time at which Violets in frames are likely to suffer from damp or from being covered up in order that they may not suffer from frost. In either kind of weather it is sound policy to expose the plants as much as possible by opening the frames whenever the conditions permit of it, and by regularly removing all decayed or decaying leaves. The soil, too, should be frequently stirred among the plants, and light dressings of wood-ashes and of lime in mixture are valuable.

Fruit rooms

Those whose fruit-rooms are, fortunately, well furnished ought to set apart an hour or two every week for the purpose of inspection. All rotting fruits should be promptly removed as they soon infect others. If Apples occupy a house by themselves let the ventilation be of the freest description, a low temperature, if damp be absent, being best for this fruit. When Apples and Pears are stored in company give the latter the warmest end of the structure. To finish Pears it is a good plan to take them from the fruit-room a few days before they are likely to be needed and to place them on a shelf near the glass in a heated house. This generally brings out the flavour and puts the finishing touch to the fruits.

Potting materials

Now is the time to lay in sufficient stocks of potting materials for future use. In most country places there is an abundance of leaves, and these should be collected and made into a heap. Good loam is more difficult to acquire, but turves from a pasture which has been closely cropped by sheep or, better still, by deer will generally be suitable. The turves ought to be cut, not more than 2 inches in thickness, and stacked, placing a layer of horse manure and a sprinkling of lime between each layer. Peat and sand also essential, and if these cannot be obtain otherwise they must be bought.

Pruning Peach trees under glass

It is advisable to loosen and re-train Pea trees annually. Pruning ought to be done such a manner that the trees are well furnish with young and ripe wood in every pa This is very much a matter of practice and observation, and the seasoned grower seld goes far astray. Before re-training, branches and shoots ought to be washed w a solution of Gishurst Compound, which clear off any lurking insect pests. It is a bad plan to burn a little sulphur in house while the trees are in a dormant sta This effectually disposes of all insect life a does no damage to the trees.

Pruning wall trees

This should be pushed on during suita weather, and when the pruning can be do with comfort. No one will do good wo when the fingers are numbed and the f cold. The middle of the day, therefo ought to be appropriated for pruning, morning and late afternoon being utilised digging or for the wheeling of manure. pruning Plums lay in as many young sho as can be done without crowding. Wh this course is followed the chances of regu crops are enhanced, because the young sho lie close to the wall and are, therefore, l likely to suffer in spring. Apricots should treated on the same lines, but the sho must not be trained so thickly as those Plums. The pruning of Sweet Cherries a Apples presents no difficulties, and, of cour it is well known that the Morello Che bears best on young wood.

Fruit trees to plant

If a wall must be covered with bearing tr as quickly as possible the best form to pla is the cordon trained diagonally. These m have more than one branch, each trained foot apart. The palmette is also a use form of fruit tree. This is merely horizon training, with the end of each branch turn up at right angles about 3 feet from the ste Whatever form be chosen, let the training neatly done, and arrange the branches such a manner that the flow of sap may equal all over the tree.

Seakale and Rhubarb

A further batch of these indispensa vegetables may now be got in and put work. Great heat is not recommended, n indeed, is it necessary. The aim ought to to provide a steady warmth which does unduly fluctuate. It must be remember that both Rhubarb and Seakale, when bei forced, are living on their capital, and th therefore, they must be freely supplied w moisture.

Kitchen garden

Sets of Potatoes intended for early forci must now, or shortly, be selected and place crown upward, in shallow boxes. Sta these in a light, airy position and in a te perature which may vary from 45 degs. 50 degs. Roots of Mint and of Tarrag should be lifted and placed in warmth view of possible demands. Place the roots boxes of light soil, and always water w tepid water. If the supply of early Brocc is, at the moment, in excess of the demar the surplus plants may be uprooted and hu head downward in a frost-proof shed whic preferably, ought to be dark. Under su conditions the heads will keep for a co siderable time.

W. McGuffog.

Mabie Gardens, Kirkcudbrightshire.

VEGETABLES

Seakale for forcing

O obtain Seakale crowns which will, when forced, give the best results, two things are necessary. The one is that cuttings for planting to produce the wns shall be the strongest obtainable. e other is to select an open, sunny plot of ound in which to grow them. This should thoroughly manured, and if it can be tard trenched all the better, as the roots Seakale, when able to do so, descend to a d depth. In any case the ground must be ll dug, not with a partly worn-out spade, t with a new or nearly new one, so that soil is moved to a depth of 12 inches or inches. Employ the best manure obtain- e and turn the ground up roughly and let lie so till March to become weathered and eetened. As to the

CUTTINGS, these are usually made from the ngs or roots which are detached from the in stems at the time the crowns are being ed in the autumn and buried in ashes until be convenient to make them into cuttings. e strongest of these should be selected for king into cuttings some 6 inches to 7 hes in length; and that there may be no stake at planting time make a sloping cut the lower end of the cuttings and one aight across at the upper end. Then tie m in bundles and bed them in ashes under vall or hedge. The time for

PLANTING varies according to the season. metimes it is possible to do so early in, or ut the middle of, March, and at others not the end of the month or early in April. any rate, somewhere about either of se periods, when the surface of the plot be caught in a dry condition, it may her be lightly forked over, trodden firmly, d then raked to level and free the surface stones and so forth, when planting can be ected if weather conditions remain favour- e. With ample space at command the tings may be planted with a trowel at a tance of 18 inches apart in rows standing feet asunder. Where space is restricted distances must be 15 inches and 18 inches pectively. When planted, the tops of the tings should be level with the surface, and er each with a handful of finely-sifted es to prevent the young growths, when y appear, being eaten by slugs. When wth is strong enough to allow of a selec- n being made, leave not more than two on h cutting, and those the strongest, but if lly fine crowns are desired rub off all but . Routine matters, such as frequent hoe- and keeping the ground clean, must have ention, while, as growth advances, feed- the roots occasionally with nitrogenous nures or liquid-manure, if plentiful, must be overlooked.

f a supply of Seakale is required during vember and December a sufficient number crowns to meet the demand should, on the npletion of growth, be partially lifted in umn and left exposed for a fortnight or ee weeks. They will then respond more dily when placed in warmth. The re- inder of the crowns can then be lifted at usual time and stored where they can be dily got at.

Where the demand for Seakale is on a re than ordinary scale special facilities in form of heated pits provided with close- ing shutters instead of sashes are re- red. In a general way the forcing is ried out in the Mushroom-house, where h a structure exists. In the absence of h a convenience the forcing has then to be e under varying conditions, such as in a rm cellar, under greenhouse stages, or where where the necessary warmth and darkness are to be had. The old-fashioned method of forcing the crowns where grown with the aid of fermenting material does not find many adherents at the present day, but where such a course is possible the quality of the produce is excellent.

Leaf-mould

With the great value of leaf-mould in his mind many a gardener is at this season desirous of converting fallen leaves into a soluble condition as quickly as may be. The owner of a wild garden has no need to worry over the question, for the prevailing wind will sweep up this woodland harvest and pack it away in hollows and corners in which he will always be able to secure a supply sufficiently matured for use. People less fortunately situated should stack the leaves (those of hard-wooded trees are best) in a shallow pit. Merely to put them there and wait is not enough. To accelerate decay, and also to give more body to the material, I always mix a little sand, chopped turves, or clean road-sweepings with the leaves, also, as the collection grows, it is sprinkled with salt. This hastens decomposition in a very marked degree. Every three or four months the pile should be turned over. If this is not done the leaves are liable to become matted together, in which condition they are apt to become sour, or develop fungoid growths, and the process of decay is retarded. One hears of gardeners making leaf-mould by filling a tub with leaves, applying water, and subjecting the contents to pressure, but, while the resulting material may be useful enough as rough stuff for working into heavy, cold land, I doubt whether real leaf-mould can ever be made by any such method. Lime should never be employed in leaf collections, for it destroys humus and renders the material useless for the many subjects which delight in leaf-mould and detest lime. Salt is much better, since it not only breaks up the vegetable tissues and liberates the potash, but, having done its work, it eventually disappears. A. T.

FRUIT GARDEN

Cherries

IN Kent and the lower parts of Hertfordshire Cherries are largely grown as standards in orchards, but in gardens they are trained to walls, not so much, perhaps, for the sake of shelter as to have them in a position where the fruit can be protected from birds. My intention now, however, is to have something to say about varieties before the season for planting gets further advanced. Taking the earliest first, the one I would recommend is Governor Wood, which is a most prolific kind, and bears medium-sized fruit of a pale yellowish-white, suffused with colour on the side next to the sun, the juice, of which this Cherry is full, being very sweet and delicious. The next to ripen after this is the Frogmore Bigarreau, which is a little larger and brighter than the foregoing, and, like the old Bigarreau, of exquisite flavour. Black Eagle and Knight's Early Black come in quickly after, the former being a small kind with very black shining fruit, that is sweet and agreeable, and Knight's is the same in colour, but much larger, and not equal in flavour, as it is more fleshy and less sweet in the juice. To come in after these none is equal to the Elton, which is the showiest and best of all Cherries, as the fruit is large and highly coloured and very rich in the flesh. As a black companion to this, ripening at the same time, the Tartarian is the best, the fruit being large and conical and deep blue-black in colour. Although there are many other dessert kinds, those mentioned above are the most distinct and desirable, and for cooking, till the Morellos come in, none is equal to the May Duke, which is a prodigious bearer, and the fruit will hang a long time.

The Morello is the most serviceable of all Cherries, as it may be used in such a variety of ways, and its season is a prolonged one, as by keeping the trees dry the fruit will remain sound and good till very late in the autumn, and the longer, in reason, it remains, the better it is. To have it at the period referred to, it is necessary to train the trees to a wall or fence, those with a north, north-west, or north-east aspect being the most suitable, and if the young shoots are allowed a little freedom to grow out as breastwood, much time will be saved in tying them in, and they will bear heavily and keep cleaner and more free from insects through the washings they get. Morello Cherries also do remarkably well grown as dwarf standards or loose espaliers, with the main branches just looped to strained wires, which is a good way of growing them, as they may be protected easily when in flower or fruit—in the first case, by sticking a few evergreen branches along their sides, and in the latter by dropping nets over the tops. All Morello Cherries require in the way of pruning, when grown loosely, is just an annual thinning out to prevent them becoming too dense, as, unlike the dessert sorts, they must not be spurred, or have the shoots stopped, but left to grow full length.

The most favourable situation for the dessert sorts is south-east or south-west, but it is always advisable to have some in different aspects, as when frost comes with wind from one quarter and kills the blossom, it often escapes in the other, and not only that, but a longer succession of fruit is maintained. To keep the spurs close to the wall, which is the only way of taking full advantage of the shelter, the shoots the trees make during the summer should be pinched back about the middle of July, when they will form fruit-buds at the base. Although Cherries do fairly well in almost any soil, that of a light sandy nature suits them best, and, therefore, in planting the young trees, they should be started by having a barrowload or so of sharp turfy loam to each, in which they will root. The growths ought to be laid in full length, and not stopped, or shortened at any time till they have filled the allotted space and met the others trained at their sides. For destroying green or black fly on the trees, to which insects they are very subject when the shoots are young and tender, there is nothing so safe as Tobacco-water, in which the points may be dipped. S.

Apple Ellison's Orange

Information about behaviour wanted

The following letter has been addressed to "The Fruit Grower" by Messrs. Stevens and Sons, Woolbrook Nurseries, Sidmouth, South Devon, and in publishing it we shall be glad to have the opinion of growers on the subject:—

Will someone who has a large tree of the variety Ellison's Orange Apple, kindly enlighten us on the following. Does the fruit come smaller on an older tree, or does it still retain its large size of the young tree? Is it a constant and good cropper? Does the tree retain upright character, or does the head spread with age? Is the fruit a good traveller, or is it too soft for commercial purposes?

One would like to have these questions answered before launching out or planting largely this variety. There is no doubt whatever about the flavour, but intending planters, and young beginners especially, would like something to go by on starting. It is very

disappointing for a beginner to plant a number of the newer or more recent varieties, only to find, after a number of years, that he has been growing firewood. This has been my experience.

What we want are commercial varieties that will provide Apples for the million, not for the few. When I say commercial varieties I mean Apples of the Bramley's Seedling type, that will grow anywhere and can always be depended upon for a crop.

I think that if the committee of the Imperial Fruit Show were to add a class for 6-bushel baskets of the most approved commercial cooking varieties, and six half-sieves of the most approved commercial dessert varieties, beginners would know what to concentrate on, and we should be getting nearer to the standardisation of our commercial varieties. We should then strike out all that will not pay to grow. Choice varieties are all very well for the amateur.

Of course, if we can get Cox's flavour in some of our commercial varieties, so much the better. Cox's Orange Pippin is not a commercial kind, and never will be in this country, except under most favourable conditions, our climate being too damp and not sunny enough for its delicate wood. It should not be planted largely for market. The Imperial Fruit Show has demonstrated the fact that we can grow good Apples in this country.

Resting Vines

If successful Vine culture is aimed at, too much importance cannot be attached to giving the plants a period of rest. They ought at least to have two months' perfect rest, and if more can be given so much the better. Where bedding or other plants have to be wintered in the vinery, as occurs in many places from want of room elsewhere, it is impossible to give Vines a proper resting time, as the temperature which such plants require tends to keep up a state of constant agitation on the part of the Vine. Therefore, when spring-time comes, Vines rested under such conditions break into growth quickly and make rapid progress, pushing out long-jointed laterals. The foot-stalks of the bunches also become drawn out, and the bunches themselves have a loose, straggling appearance. This is debility in its truest form, and if allowed to go on the Vines will degenerate from year to year. Vineries should be emptied of all plants that will not stand frost while the Vines are at rest, and air should be kept on the house night and day, unless the weather is very severe. The practice of shortening the laterals to within two eyes of the base just before the growth has ceased, in order that the remaining energy may be directed into the bottom bud, so as to induce it to plump up and become prominent, is a mistake. Any attempt to increase the size of this bud and make it stand out more prominently will end in failure; it will start into growth, and that at a time which is ruinous to the Vine. It reminds one of trying to make up a bad day's work when night comes. There may be something in pruning piecemeal, but that I cannot say; it is what I never practise. I always prune right back to the base at once, and can with the greatest confidence recommend the system. A.

Apple Allington Pippin

This is a very reliable dessert Apple, and, if not of the quality of such shy croppers as D'Arcy Spice, Cox's, and a few others, it may be enjoyed; indeed, many seem to prefer its sharp flavour to that of the sweeter kinds. It furnishes a lot of nice dessert-sized and shapely fruits annually; and even during the past season, when so many varieties failed, this Apple filled many baskets. The fruits are in use from the end of September until about Christmas. There is a tendency, especially among the larger fruits, to spot beneath the skin, and as this appears to prevail among the larger fruits severe thinning should at no time be resorted to, for a heavily-cropped tree will produce Apples of a desirable size. In the stiff soil here (Sussex) it grows very freely; indeed, it makes too much small wood, which must be thinned each year in order to admit sunshine and air to all pa of the tree.

Pruning fruit trees

Everyone wishes to have the bulk of pruning done before the close of the ye and to this end the work ought to be pus on during suitable weather. It is a mist to insist upon pruners standing out on co sunless days, even if the ground be hard a suitable for the work. Cold hands and c feet are not conducive to good pruning.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants be named should send fair examples of each—t stem, leaf, flower, or fruit. (Snippets of lea and points of shoots are useless.) Not more th four plants should be sent in any one week by t same correspondent. Where more than one ki is sent they should be numbered. Of conifers t cones should always be sent.*

Naming fruit—*Several specimens in differe stages of colour and size of the same kind great assist in its determination. We have receiv from several correspondents single specimens fruits for naming, these in many cases being u ripe and otherwise poor. We undertake to na not more than four varieties at a time.*

FRUIT

Mussel scale on Apple tree

I am sending you some Apple twigs infested with a scale-looking insect. Will you be kind enough to tell me what it is and the best way of getting rid of it? YORKS.

[Your Apple twigs are infested with Mussel Scale (Lepidosaphes ulmi, Linn.). This is a common pest of the Apple, and, if not controlled, weakens the trees on which it is living. If you lift up one of the scales carefully you will find, underneath, a lot of dust-like material. Using a small lens for further examination you will find that the dust is really the egg stage of the pest. At this period of the year the scale only contains the remains of the dead female and the eggs she has laid. The eggs hatch early in June and the tiny mites are very active for a time, moving about the tree. Finally they settle down and become fixed to the bark, where the life history is completed. To control a bad infestation of Mussel Scale at least two operations are necessary. At the end of January you should spray the trees with a 7 per cent. solution of a good tar oil wash, *i.e.*, 1 gallon of the tar oil to 13 gallons of water approximately. After spraying the tree, cleaning the main stem with a stiff scrubbing-brush and a little of the above solution are a great help. The trees should be again sprayed early in June; you are bound to miss killing all the eggs with the winter spray. These eggs, as stated above, hatch in June, and the mites at this stage can be easily killed with paraffin emulsion. Later, when the mites are older and begin to get their protective scale, insecticides which can be safely used on Apple foliage are useless to control the pest.]

Apple aphis

Looking over some Apple twigs a few days ago I found, all round the buds and old leaf scales, numbers of tiny shining black Pear-shaped bodies. I am sending you some twigs for examination. Will you be kind enough to tell me what the black bodies are? G. L.

[The black bodies around the buds on your Apple twigs are the eggs of Apple aphis. They are just visible to the naked eye, but can be seen very much better with a lens. The tiny red specks which we also find with the eggs of the aphis are the eggs of red spider. The summer attack of aphis and red spider is now best controlled by the use miscible tar oil washes applied during w ter. We have found that these washes most effective when applied as late in dormant season as possible. It appears to that the most favourable time to apply wash is the end of January or the first we in February. A still day should be chos and the trees well washed with the fluid. the spraying is delayed until the buds be to swell, damage to the foliage and crop often the result. If a good egg-killing wa be chosen, the numbers of "stem mothe aphis, which appear next spring, will depe on the thoroughness with which the work spraying is carried out.]

Grapes Gros Colman and Gros Ma

I shall be obliged if some GARDENI ILLUSTRATED reader who has had experien with both will say which of the two variet is the better to grow as a late black Grape a fair-sized vinery with the necessary amou of piping. I was asked to advise on t matter, but am not quite sure of my grou for while on the one hand I grew Colman long time and fairly successfully, I had experience of the other. A cane of t variety was planted repeatedly, but proved u satisfactory from a quality standpoi although producing large, well-colour bunches. A friend told me it was not Gr Maroc, but Alnwick Seedling. Personally, do not think the small grower can impro on Black Hamburgh and Muscat of Ale andria if sufficient heating power is availa for the latter, but if a late black Grape, ext large in berry, is required, one of the tw named above must be included. I fancy I ha heard or read that Gros Maroc is the mo difficult to grow, the difference between the in this matter resembling that betwe Canon Hall and Muscat of Alexandri Doubtless some GARDENING ILLUSTRAT reader will be able to tell us. The illustr tions in a recent number are a proof th there are some fine growers still with us. was noted above in connection with Musc of Alexandria "when sufficient heat is ava able," and when this is not so Mrs. Pince recommended as a substitute, requiring ve little artificial heat, but I never found colour satisfactorily unless helped in th way except, perhaps, in quite exception summers. E. BURRELL.

[Gros Colman is undoubtedly the later the two Grapes, Gros Maroc being, as a rul

ɔnsidered a mid-season Grape. To do Gros olman really well it requires a long time to pen and a considerable amount of heat; in ıct, almost similar to that which the Muscat f Alexandria needs. Owing to the size of ıe berries great care is required in thinning ıd not overcropping, an error of treatment hich very quickly shows in the want of ɔlour. Alnwick Seedling is also a good late ıriety. In quality it is only second-rate, but s late-keeping entitles it to a place in the nery. As regards the quality of Gros olman, the aspect of the vinery influences ıis. In the conservatory at Chiswick there sed to be a rod on the south side. The rapes on the south side were always of fine ıality, while those on the north side were of ɔor quality and did not ripen so well.]

FLOWER GARDEN

warf edging plants

(D.).—Any of the Mossy Saxifrages would it you, such, for example, as S. hypnoides, elegantissima, S. Sternbergi, S. Stansldi, also S. Geum, S. G. dentata, S. ınbrosa, S. Wallacei, S. Hostii, S. rosularis, ıd S. Andrewsi. These would afford variety so among these plants. Of Sedums, the rms of spurium, oppositifolium, and ımtschaticum would be best, together with grandiflorum and glaucum. Other dwarf ıd very hardy plants are Antennaria mentosa, Achillea tomentosa, dwarf Camnulas, Polygonum Brunonis, Armerias, eronica rupestris, V. incana, Gaultheria ocumbens, G. Shallon, Dryas octopetala, thospermum prostratum, etc. Some of the ouseleeks would also be attractive in little oks and crevices, and Zauschneria calirnica, with a stone block covering its roots, ɔuld succeed also. Then you may also ant small bulbous things, Crocuses, Snowɔps, Snowflakes, Chionodoxas, etc. Stelria graminea aurea and Euonymus radicans riegatus may also be useful and afford lour.

viding Delphiniums

(C. P.).—It is rather late to divide Deliniums, but we do not think any harm will me to them if divided and replanted before rd frost sets in.

TREES AND SHRUBS

uning Plumbago capensis

J. M.).—Plumbago capensis only needs ıning if necessary to keep it within bounds, when grown as a bush, to maintain a rly symmetrical shape. The flowering is t assisted by pruning in any way; indeed, her the reverse. In a temperature of 50 gs to 65 degs. it will flower more or less oughout the winter, but in a cold greenıse it is apt to lose some of its leaves and partially to rest. When in that state the l should be kept fairly moist, and on the urn of spring it will start freely into ɔwth. That is the season to repot it, if ɔessary, and the young plants then proɔed strike root readily if treated much as a chsia.

GREENHOUSE

rysanthemums—When to insert the cuttings

S. E.).—Take cuttings at any time in vember or December, or within a week or ɔ after the plants are cut down. As soon the flowering is over, cut back the main m, afterwards standing the pots on the enhouse bench, or, better still, on some of shelves near the glass. Keep the soil ly moist, and in a short time the small ots at the base will begin to grow. When se young shoots are some 3 inches to 4 inches in length they should be detached with a sharp knife, the lower bases trimmed off, and the cuttings inserted at once, using some light gritty compost for the purpose. The cutting should be cut straight through just below a joint.

Heliotrope in cool greenhouse

(M.).—To winter the Heliotrope in a cool greenhouse the plants should be given just enough water to keep the soil fairly moist, but no more. Place them in the warmest part of the structure, and where the atmosphere is dry. Even then many of the young leaves will die off, but, on the return of spring, the plants will soon push forth new shoots. Then, of course, they must be watered rather more freely. To flower them successfully during the winter a temperature of 60 degs. to 65 degs. should be maintained.

ORCHIDS

Watering Orchids

Kindly let me know which is the best way to water Orchids in pots. Do you have to dip each into a pail of water, like those in baskets, or use a water-can? C. R.

[How to water Orchids properly is one of the most essential items in their culture. It matters little how applied, so long as water is afforded or withheld at the proper period. If more attention were paid to the condition of the plant as regards root-moisture we are convinced that there would be far fewer difficulties to contend with, and that Orchids would be grown far better than is generally the case.

The first consideration is as to the condition of growth in which the plant may be. Plants in an active state of growth at any season of the year will, with a normal temperature, require every encouragement to induce them to make their growth. If the active season of growth occurs in the summer, little difficulty will be experienced, as the drying conditions outside tend to liberal treatment being afforded inside the houses; but it is quite another matter if one has to deal with plants in full growth during the winter, and the difficulties are increased tenfold if the situation happens to be in the neighbourhood of London or other large towns, where dense smoke and a fog-laden atmosphere prevail. These conditions, unfavourable to plant life generally, may be considerably minimised by the observant cultivator, and we can point out instances in which Orchids are cultivated successfully and retain their normal conditions in positions where almost all other plants fail.

Watering, again, is one of the chief considerations. Should a plant be in active growth during the winter, care must be observed to allow the plant to become dry before water is afforded, and, when given, sufficient should be applied to thoroughly wet the compost. If the surroundings are dull, the earlier in the day water is afforded the better chance there is of the superfluous moisture draining away before nightfall. Always take care to see that the normal degree of temperature is reached before watering the plants. During periods of cold, frosty weather, when the temperature ranges low, it is always safest to keep the plants in a fairly dry condition at the roots. When the plants are at rest less moisture is naturally required, but it is a mistake to place Orchids on a shelf or in some out-of-the-way place and withhold moisture; this is against Nature. Take the natural conditions of the Dendrobiums, where no rain falls perhaps for three months in the year. Here the heavy dews which prevail nightly must be reckoned with. These dews are enough to saturate one to the skin if moving among the foliage and grasses. This will suffice to illustrate the conditions prevailing generally through the resting period of most Orchids. It is far better to place the plants under cooler conditions as soon as the growths are completed, and during the resting season to afford sufficient root moisture to maintain a plump condition of the pseudo-bulbs.]

ROSES

Planting Climbing Roses in shallow soil

I intend planting some climbing Roses on a wall facing south-south-west, which gets the sun all day. You state the soil should be dug 3 feet wide by 3 feet deep, but in taking out the stones and ashes next the house wall, about 1 foot down it is solid rock. I presume this will not suit Roses? Should the Roses be planted close to the wall or a few inches from it, and how far out from the wall should the soil be dug? I intended planting Gloire de Dijon, W. A. Richardson, or Safrano and Reine Marie Henriette. Is the last a good one, or would you suggest a better one? In planting Roses, should the roots be spread out a few inches from the surface, or should they go straight down the depth of the roots? I have also heard it stated that no manure should touch the roots, it should be below and above, but I suppose mixing manure and soil together is better? If Roses will not do, could Clematises be planted? How many Roses would be required for a circular bed of 24 feet, a mixture of Teas and H.P.'s? I intend making the bed on a lawn. Would the turf require to be removed some time before the Roses are planted? H.

[If the soil is of greater depth, even 2 feet away from the wall, we should advise you to plant that distance away, but if you can only procure 1 foot of soil before you come on to the rock, then there is little chance of Roses or Clematises succeeding. You could, however, provide some tubs or boxes and fill these with good compost, so that you had at least soil 2 feet wide and 2 feet deep for each plant. There should be some 1-inch holes bored in bottom of tubs, and then about 6 inches of crocks put in before adding the soil. Stand the tubs upon three bricks. Such tubs would enable you to grow some fine Roses, but they would be much exposed to the sun, and consequently need watching to see that the roots did not suffer. A few trailing annuals, such as Nasturtiums, would shield the sides of the tubs from excessive sun, and you could mulch the surface soil with 5 inches or 6 inches of well-decayed manure during the summer. By attending to this, and also well watering the Roses about twice a week, we think you would be successful with some climbing Roses. Gloire de Dijon, W. A. Richardson, and Safrano are good kinds for your purposes, but Reine Marie Henriette takes mildew so badly. In planting Roses it is always best to spread the roots outward, rather than allow them to go straight down, especially upon shallow soils. With the seedling Brier this is not an easy matter, and unless the roots are small and wiry, the only way is to plant them as you see they have been growing. With standard Roses it is comparatively easy to spread the roots outward, and it is far better for the plants. They are sure to find their way down. It is not a good plan to allow manure to come into immediate contact with the roots, so that when planting it is well to give each plant a few shovelsful of fine soil immediately upon and beneath the roots. You cannot do better than mix the manure with the soil as you proceed to dig the latter, keeping the manure from immediate contact at time of planting. The number of bush Roses required for a circular bed of 24 feet in circumference would be 24. You should pre-

pare the bed at once, digging the soil deeply, and burying the turf in bottom of the bed. After a few days' interval you could then plant your Roses.]

MISCELLANEOUS

Preserving netting

(A. E. Bannantyne).—The best thing for this is boiled linseed oil. The netting should be saturated in it while hot, then, when it has cooled, taken out, pressed or wrung, and hung up to dry. This renders the netting comparatively weather-proof, while, when dried, it is fairly supple.

Making up hot-bed

(D.).—When a hot-bed is made up to support a frame there should be provided enough manure to make it even when well trodden fully 2½ feet deep behind and 2 feet deep in front. Even then it will settle lower, but enough manure is needed to give heat for some time. Then with regard to width; that must be governed also very much by the amount of material at disposal. If the bed can be 18 inches wider and longer than the frame so much the better, as that allows a solid, firm border to rest upon. But to make it too wide is to waste the heat generated by the outer portions of the bed. Then, when made up, all the long manure that can be obtained should so fast as brought be built up round the bed to assist in retaining the warmth. Of course, the manure should, before the bed is made up, have been well turned and mixed two or three times.

Fowls' manure

(L.).—The manure from a fowls' run is very good material for almost anything, but the run should be covered with sand or ashes, from off which the manure could be raked every day or so quite clean. Then, as collected, it should be smothered with soot, and be placed in a heap and mixed with its bulk of soil, allowing it to so remain for a month, then turning it in and giving it yet a farther dressing of soot, still allowing the manure to remain to sweeten and become incorporated with the soil. Practically, if allowed to remain some three or four months so much the better for your purpose. Then spread it about in March, and just lightly fork it in. A thin dressing suffices; still, it is unwise to employ this manure solely, as a diverse dressing is desirable the following year.

Trade Notes

Tobacco for Christmas

John Player and Sons have given us the opportunity of testing their "No Name" tobacco, and the fact that the sample soon went is sufficient recommendation. This tobacco was originally blended from an old recipe for the sole use of a Director of the Imperial Tobacco Co. It has of late years quietly circulated among a number of smokers. No name or publicity was given to it, and the demand was entirely created by recommendation. This demand has so extended that the proprietors have now put it before the public under the title of "No Name." The wonderful success of Empire packet tobaccos produced by Player's has induced the Nottingham firm to offer to cigarette smokers a packet of Empire blend cigarettes. These Player's Empire Navy Cut cigarettes will be retailed at 10 for 5d., and splendid value they are too.

The ideal Xmas Pudding

For housewives who are wanting an ideal recipe for their Christmas puddings we have pleasure in giving the following, which has been issued by the well-known firm of Borwick's. Take ¾ lb. of flour, two heaped-up teaspoonfuls of Borwick's baking powder, 2 ozs. of breadcrumbs, 1½ lbs. of suet, 2 lbs. of Raisins, 1 lb. of Currants, 10 ozs. of sugar, 2 ozs. of Almonds, 1 lb. of mixed candied peel, salt and spice to taste. Mix the ingredients well together, and add six eggs, well beaten, and ¾ pint of milk; divide in two and boil eight hours. It is said that no substitute or fancy flour will produce the same satisfactory results as Borwick's.

Horticultural Societies' News

Question Night at Dundee

One of the most interesting meetings of the session of the Dundee Horticultural Society was held on December 3rd, when the following questions, among others, were discussed:—

1. Is the constitution of the Potato deteriorating?
2. Is the young gardener of to-day as enthusiastic as his predecessors?
3. What is the best method of keeping Apples?
4. Is the present-day gardener less proficient than his predecessors of, say, 25 years ago?
5. How does the relationship between the gardener and his employer compare with that of a former generation?
6. In what way can the Society help or encourage the occupiers of the Garden City houses?

Mr. W. H. Buist presided over a large attendance, and each of the subjects brought forward were fully debated.

Mr. Buist opened the debate on the question as to how the Society could help or encourage the occupiers of the Garden City houses to keep their gardens.

He thought that he was asked to speak on this subject as he was a member of the Town Council, which had built these houses and had something to do with the beautifying of them. It was also the duty of the Society to encourage these people to improve their gardens.

One way of helping them was by giving seeds that would grow best in the various districts; another way was to grant a prize or prizes for the best-kept garden in each of the schemes; the decision to be made by a committee just before the annual show, and the result declared along with the others; while the third possible method would be to set aside a special class at the annual show in which only those householders could compete. Along lines such as these the Society could help.

Mr. Alex. Duncan, Mayfield, said that he had asked that question because he had seen some of the tenants of the houses making very fine attempts to keep their little bit of ground.

It was unanimously agreed to put the matter before the Schedule Committee for the favourable consideration of the suggestion to give a prize for the best-kept garden in each scheme.

Storing Apples.—Of special interest to amateur fruit-growers will be the suggestions for keeping Apples. Mr. J. Bell, Rosendael, Broughty Ferry, said they should be stored in a shed with a north aspect at an even temperature. The fruit had to be gathered when ripe, as it would not keep otherwise, and any Apples that had fallen from the trees should be stored by themselves and used as soon as possible. Only the very best should be put away, and the smaller ones could be used for jam.

Mr. W. A. Crighton, Glencarse, advocated storing the fruit in a temperature of 45 degs. to 50 degs. Fahr., in a shed with a floor of ashes. If stored on wood or matting th Apples were apt to lose their flavour, and h suggested the use of white paper or brow glazed paper. No air should be allowed int the storehouse until the Apples had sweate and very sparingly even after that.

Deterioration in Potatoes.—Mr. Ale Duncan spoke on the deterioration of th constitution of the Potato. He thought was deteriorating, and, as proof of the fac said that the Potato now refused to repr duce itself by natural means. The Pota was an exotic and should reproduce itself b seed.

He could remember 30 years ago, whe Potato "plums" were common on plants, bu now it was rarely that they were see Cultivation was altogether unnatural, and was a wonder that the Potato had kept i constitution so well, considering that i natural habitat was Peru, which differe so greatly climatically from Scotland.

The vegetative method of reproduction wa by the tuber, and the natural was by see New varieties were necessary now and agai and the only way he knew of getting the was from seed.

The present-day gardener.—It was agree that the present-day gardener is as proficie as his predecessor of about 25 years ago.

Mr. J. Beatts, Binrock, said that althoug the war had taken away many of the your men who were rising as gardeners, I thought that the present-day man was efficient as his predecessor, and more scie tific. Times had changed, and the finer ty of indoor fruit had been done away with.

Mr. Duncan said that, as one of the o school, he did not think that any comparis could be drawn, but when he looked back some of the old works on gardening he ha to smile.

On the motion of Mr. James Slate Broughty Ferry, a vote of thanks was a corded to the Chairman.

LATE NOTE

Remodelling Preston Park, Brighton

As foreshadowed in our report of t activities of the Brighton and Sussex Hor cultural Society, it is proposed to spe £50,000 on remodelling Preston Par Brighton, which is now largely an expan of tarred paths, evergreen shrubs, and gras The scheme has been drawn up by Cap MacLaren, the Horticultural Superintende of the Brighton Parks and Gardens, wh says that the features of his scheme follo the tradition of well-known Continent parks. If his proposals are adopted, visito to Brighton will be able to float leisurely boats on a lake 6 acres in extent, while th listen to a band playing in the setting of temple, which will rise from the middle the lake. Terrace gardens, rock garden and boulevards will replace the present gra paths. Horticulture is going ahead in t Borough, and happily the Mayor of Bright is also the President of the flourishing loc Horticultural Society.

Apple trees and Pear trees for regraftin

There is not now much regrafting done private gardens, but where unsuitable vari ties may have been planted this is a goo time at which to head back the trees. Mea time, the scions of approved varieties can taken carefully and laid behind a north wa

Enquiry

Can any of your readers who have grow Vitis Brandt give me their experience of t fruit ripening out-of-doors in the south-we counties? L. B. W.

Wells, Somerset.

LATE REPLIES

apanese Chrysanthemums

Will you kindly inform me through your aper the names of 12 Chrysanthemums apanese) for large blooms, medium height; nd will you please state which to pinch and hen, and which break naturally for 1st owns? CONSTANT READER.

[The following should answer your purose:—Dawn of Day, natural 1st crown. dith Cavell, natural 1st crown. Golden hampion, natural 1st crown. Majestic, nch 2nd week in May. Mrs. Algernon avis, natural 1st crown. Mrs. G. Drabble, nch 1st week May. Mrs. Geo. Monro, nr., pinch 3rd week May. Mrs. Peter urray, natural 1st crown. Queen Mary, nch 1st week May. Princess Mary, pinch t week May. Sir E. Letchworth, natural t crown. William Rigby, pinch 1st week ay. The Chrysanthemums sent for identiation are:—1, Single Chrysanthemum ortia; 2, white Chrysanthemum Mrs. R. berthur.]

arly-flowering Rhododendrons

I should be much obliged if you would give e some information on the winter-flowering hododendrons; the names of the best, with bit and time of flowering. I understand at R. præcox is a well-known variety, but ve been told that there are others.

Pangbourne. E. M. SIMMONS.

[One of the first to flower is R. Nobleanum arlet and rose), which grows into a large ee. We have seen it in full bloom at Kew the open on New Year's Day. The aller-growing R. præcox, a popular deluous variety of bushy habit, with rose, ac, or mauve-pink flowers, usually opens in bruary, and continues, frost permitting, rough March. R. moupinense, a pretty arf species which, in its native haunts, ows on other trees, may be grown in a eltered place. It has large white flowers otted red, which open in February and arch. Rhododendron rhombicum, someies referred to as an Azalea, has rich rple flowers borne on bare twigs in March d April. R. Jacksoni is a good early crim, and Christmas Cheer is a splendid blushite, dwarf-growing, and very early. R. escens (pale yellow), dauricum and mucroatum (rosy-lilac) are all early-flowering. e neat-growing R. racemosum is usually flower in April.]

BOOKS

Dairy Farming and Cattle Breeding*

hese two volumes belong to the "Farmer Stock-Breeder Manuals," a title which s not indicate they are solely intended for ners, but are sponsored by the celebrated rnal indicated. Indeed, two forthcoming mes on "Soils and Fertilisers" and sect and Fungus Pests" will directly ern gardeners, while if it be in anybody's er to always precisely draw a line been horticulture and agriculture it is not in mine. Thus, I was lately at a farm everal hundred acres on which there is an mous block of Tomato-houses and a conrable area under small fruits and flowers, k by jowl with and worked in unison agricultural crops and stock. Agricul in England is not as wholly prosperous e present time as we should all like it to and I am far from saying anything new remark that the farmer might often, with advantage, emulate the more intensive methods of the gardener.

As a gardener who has also done some farming I am very favourably impressed by these two books, and heartily commend them in particular to the country gentleman who has cows on his place.

We are told that "The average annual yield of milk of all the dairy cows in this country is estimated at about 500 gallons. It is possible, with ordinary skill and care, to secure a herd average of at least 700 gallons. The average age of the steers and heifers slaughtered for beef probably exceeds three years. Where conditions are ordinarily favourable it is possible to produce butcher's cattle at less than two years old without the sacrifice of weight or quality." These are the sort of books which should powerfully assist such desirable ends. The authors appear to assume that hand-milking will be employed, not machine-milking. My own experience of dairy farming is chiefly Colonial, and my comment is that the almost general preference for hand-milking in England appears to me old-fashioned and ill-advised. G.

*The Principles of Dairy Farming," by G. H. Garrard, ..; 7s. 6d. net.
*e Cattle-Breeder's Handbook for 1926," by Watson, on, & Garrard; 6s. net. Published by Ernest Benn, for "The Farmer and Stockbreeder."

Benn Brothers' Other Journals

The Cabinet Maker.—The Inside of a Mattress: Article XXV.; What is Waste?; Lecture at the Geffrye Museum: Furniture Mountings.

The Chemical Age.—Monthly Dyestuffs Supplement; "The Fastness of Developed Dyes on Cellulose Materials," by H. J. Hall, B.Sc., F.I.C.; "Intensive Production of Sulphuric Acid," by P. Parrish; Proceedings at the Meetings of the Institute of Fuel Technology and the Institution of Chemical Engineers.

The Electrician.—"Paris Suburban Electrification," by T. Rich; "An Outline of the Trunking Aspect of Automatic Telephones," by G. F. O'Dell (I.E.E. Paper); Automatic Telephone Testing Apparatus.

The Fruit Grower.—"Future of Covent Garden Market," by Major E. G. Monro; "Roses Under Glass," by A. J. Macself; The Heating of Nurseries.

The Gas World.—Oil and Other Fuels for Carbonising Processes: The Influence of Carbonising Conditions upon the Free Carbon Content of Tar; Coal Tar for Vertical Retorts.

The Timber Trade Journal.—Scottish Railway Rates Test Case Lost; From Saw to Sander—Special; Trade on the Pacific Coast.

The Hardware Trade Journal.—Implements and Dairy Appliances at the Smithfield Show; A Chat on Lever Locks; The Scrap Metal Trade of London.

SHORT REPLY

H. W. P.—We have found that searing the end of the stem with a red-hot iron will stop the bleeding.

NAMES OF FRUITS

Col. Hopton, Ledbury.—A particularly fine fruit of Pear Duchess d'Angoulême, weighing 1 lb. 3 ozs. This variety is one of the parents of the better-known Pitmaston Duchess.

M. O. Foster.—Apple Duke of Devonshire.

Dendron.—Apples: 1, D'Arcy Spice; 2, not recognised.

CATALOGUES RECEIVED

Barr and Sons, King Street, Covent Garden.—List of winter and spring flowering bulbs; clearance sale of perennials, etc.

J. W. Cole and Son, Peterborough.—New and choice Chrysanthemums.

PUBLICATION RECEIVED

"Farrer's Last Journey, Upper Burma, 1919-20," by E. H. M. Cox. Published by Dulau and Co., Ltd., price 18s. net.

Watch this Series No. 3.

Six Hills
Great Autumn
CLEARANCE SALE

ALPINES

All Plants in this section are
1/- each
3 of one individual sort for 2s. 0d.
6 " " " 4s. 0d.
12 " " " 8s. 0d.

Centaurea uniflora. Silver foliage, flowers rose-claret, uncommon alpine, 9 in., June
Dicentra formosa. Dainty and graceful, pink flowers, 9-12 in., April-July
Dracocephalum Sp. China. Heads of violet, 2 ft., handsome, July-August
Epilobium Macropus. Dainty trailer, big white flowers, 1 in., new. Summer
Erigeron leiomerus. Charming dwarf species, lavender Daisy flowers, 2 in., May-June
Iris Forestii. Choice citron-yellow species, 18 in., May-June
Micromeria Douglasii. Interesting trailer, very fragrant leaves
Phlox Douglasii. Neat mat-like habit, fragrant flowers, May-June
Phlox Douglasii Lilac Queen. Lovely lilac variety, 1 in
Primula Aileen Aroon. Gorgeous bog species, terra-cotta orange, 18 in., May-June
Primula Auricula Old Yellow Dusty Miller. Beautiful soft yellow Auricula, fragrant, May
Primula helodoxa. Noble bog species, flowers rich gold, 2-3 ft., May-June
Primula pulverulenta. Bog species, crimson flowers, powdered stems, 18 in., May-June
Saxifraga aizoon saldensis. Very small growing, silver leaves, rare and dainty, May
Saxifraga aizoon punctatissima. Flowers white, richly freckled with red, May
Saxifraga Dr. Ramsey. One of the loveliest silvers, richly encrusted, handsome flowers, 9 in., May-June
Saxifraga Esther New Very silvery rosettes, graceful sprays of sulphur yellow, May-June
Saxifraga Irvingii. Small, choice, dainty, shell-pink, March 1 in.
Silene pusilla. Very dainty dwarf, myriads of tiny white flowers, 3 in., May-June
Vacinium vistus idoea. Pretty peat shrublet, white waxy bell flowers, red berries, 6 in.
Veronica Bidwillii lilacina Very lovely, sub-shrub, pale lilac flowers, 6 in., June
Viola biflora. Tiny golden-violet flowers, 4-6 in., Summer

All plants in this section are
1/6 each
3 of one individual sort for 3s. 0d.
6 " " " 6s. 0d.
12 " " " 12s. 0d.

Erodium hybridum roseum. Rosy flowers. All summer, dwarf, choice, 2 in.
Linnaea borealis. Choice trailer, tiny pink bells, fragrant. Peat or leaf mould
Onosma echioides. Amber coloured, Almond scented flowers, 9-12 in., June-July
Primula Lissadell Red Hugh. Gorgeous bog species, cinnabar-red, 18 in., May-June
Saxifraga Jenkinsae. Shell pink, biggish flowers, March, 1 in.
Saxifraga Kestonensis. Dwarf, compact, snow white on red stems, 1 in.
Veronica Bidwillii, true. Tiny shrubby species, very attractive, trailing white flowers, June-July

CLARENCE ELLIOTT
(Dept. G.) Ltd.
Six Hills Nursery, Stevenage, Herts.

An Ideal Xmas or New Year's Gift

A year's subscription to "Gardening Illustrated" would constitute the most acceptable and useful gift you could make to your — gardening friend —

On receipt of 13/- we shall be glad to send a copy regularly each week for 12 months to any part of the world

A PERPETUAL REMINDER OF YOUR FRIENDSHIP

Address—

The Subscription Department,
"GARDENING ILLUSTRATED,"
Bouverie House,
154, Fleet Street, London, E.C. 4

For Present Use in the Garden

FERRY BRAND
Regd. TradeMk.

GARDEN MANURE
HUMUS MANURE

"FERRY" GARDEN MANURE gives back to the soil the Phosphates, Potash, Nitrogen, and other foods that have been taken up by the growing plants during this year. It is the finest manure for general garden purposes. Apply at the rate of 2 to 3 ozs. per square yard.

14 lbs., 3/6; 28 lbs., 6/-; 56 lbs., 11/6; 1 cwt., 21/-.

"FERRY" HUMUS MANURE. The only satisfactory substitute for Stable Manure. It improves the physical condition of the soil and enriches it with the important plant foods. Contains 10 per cent. Phosphates.

28 lbs., 4/6; 56 lbs., 7/6; 112 lbs., 12/-

ALL PRICES CARR. PAID TO NEAREST STATION FOR CASH WITH ORDER.

Agents wanted throughout England for "Ferry" Specialities.

The BRITON FERRY CHEMICAL AND MANURE CO., LTD. (Dept. C.), Briton Ferry, South Wales. (Est. 1886.)

ONE SIMPLY MUST

Dig with a "BULLDOG" Border Spade

The cleanest and sweetest working spade made

Indispensable in every Garden

Fully warranted

Ask your dealer for a "BULLDOG" and see that you get it

Send for leaflet

WM. PARK & Co., Clarington Forge WIGAN

THE DOWNER LUPIN

is known all the world over.

Apply for LUPIN LIST.

Also HERBACEOUS and ALPINE CATALOGUE.

DOWNER, 1, Drayton Manor Nurseries, Chichester

THE MEET-ALL WATER STOVE 52/6

A Complete Heating Apparatus for Greenhouses up to 20 × 10 ft.

Burns—Cinders, Coke, Anthracite, etc.
Moist Heat. No Injurious Fumes.

Boilers & Heating Sets for all requirements.

PRICE LISTS FREE

12 HOURS' STOVE SYNDICATE LTD.
CENTRAL AND DOMESTIC BOILER WORKS,
258c, Vauxhall Bridge Road, S.W.1.

BULB BOWLS AND ARTISTIC FERN PANS

State quantities and sizes required, and have "Carriage Paid" quotations, or write for Price List — FREE.

RICHARD SANKEY & SON, Ltd.
Royal Potteries, Bulwell, Nottingham

BAYLISS, JONES & BAYLISS LD
WOLVERHAMPTON AND LONDON

ILLUSTRATED LIST Post Free

Greenhouses from £4 17 6 — Poultry Houses from £1 12 6 — Huts from £3 12 6

Bungalows, Garages, Rustic Houses, and Poultry Appliances of every description.

T. BATH & CO., Ltd., Savoy St., London, W.C. 2

EUREKA WEED KILLER

LABOUR SAVERS. "EUREKA" LAWN SAND. SOILFUME. NICOTINE, INSECTICIDES, FUMERS, SPRAYS, AND OTHER CHEMICALS AND SUNDRIES. SEE LIST. PLEASE ASK YOUR AGENT FOR THE EUREKA ARTICLES - THEY ARE ALWAYS SATISFACTORY IF ANY DIFFICULTY IN OBTAINING, WE SEND DIRECT, CARRIAGE PAID

ONLY ADDRESS: TOMLINSON & HAYWARD LTD LINCOLN

SEND FOR THESE BOOKS "ON APPROVAL"

These practical little books, by Mr. F. J. FLETCHER, F.R.H.S., will help every Gardener, whether working for pleasure or profit, to get the best results from his plants. They are issued at the uniform price of **2/6 each**

GLASSHOUSES AND THE PROPAGATION OF PLANTS

CONTENTS IN BRIEF.—The Nurseryman—Greenhouses — Propagation — Seedlings — Cuttings — Practical Cutting Making—Potting—Index.

SPECIAL GLASSHOUSE CROPS

CONTENTS IN BRIEF.—Tomatoes—Cucumbers—Melons—Grapes — Sweet Peas — Forcing Bulbs — "Lifted" Chrysanthemums—Catch Crops—Index.

ROSES FOR MARKET

CONTENTS IN BRIEF.—Some Business Considerations—Propagation by Cuttings—Stocks—Budding—Propagation by Grafting—Rose Cuttings under Glass—Roses in Pots—Roses Planted Under Glass—Things that Matter—Marketing—Index.

CARNATIONS AND PINKS

CONTENTS IN BRIEF.—The Perpetual Flowering Carnation—Propagation by Cuttings—Potting and Growing on—Summer Treatment—Enemies—Cutting and Packing the Flowers—Older Plants and Indoor Planting—Border Carnations—Raising Border Carnations from Seed—Layering—Planting or Potting?—Perpetual and other Border Carnations—Dianthus Allwoodii—Garden Pinks—Index.

CUT FLOWERS FOR MARKET

CONTENTS IN BRIEF.—Annuals—Biennials—Herbaceous—Roses (outdoor)—Carnations and Pinks—Chrysanthemums—Glasshouse Flowers—Bulbs—Asparagus Fronds and Smilax, etc.

DECORATIVE PLANTS, TREES and SHRUBS

CONTENTS IN BRIEF.—Hedge Plants — Flowering Shrubs — Conifers — Window Box Evergreens — Hardy Climbers, etc.

EACH VOLUME DEMY 8vo. PRICE **2/6** net each. (Postage 2d. extra or 6d. for four.)

ERNEST BENN LIMITED, Bouverie House, Fleet Street, London, E.C. 4

GARDENING ILLUSTRATED

. 2493—Vol. XLVIII. DECEMBER 18, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

zia Nemu 767
TEUR'S BF-RTS, AN 757
Lane's Prince ert 755
ver's Broom, turn-scarlet for Christ-decoration ... 767
nanthemum cut-s 767
santhemum Mrs. Turner failing 767
anthemums fail- 767
Carnation maggot ... 768
Conifers for a sana-torium... 767
Constant reminder of friendship, a ... 768
Dahlia Pink Pearl ... 763
DAHLIAS FROM SEED 763
Doronicums... 765
Elæagnus macro-phylla blooming in December 758
Flowers, a garden of sweet smelling ... 765
Flowers for Christ-mas 761
Fruit trees be root-pruned? should ... 756
Fruit trees, lifting and transplanting... ... 765
Fruit-trees, root-pruning 766
Garden store, the ... 757
Gladioli corms, about 767
Gladiolus Los An-geles 757
HEATH GARDEN, PLANTING THE... 758
Labels and labelling 762
Lavender, pruning ... 766
LILY, THE WHITE MARTAGON 765
Lomatia ferruginea... 759
Maritime Alps, in the... 757
Obituary: Dr. Nyman Lower 768
Onion Brown Globe ... 762
Onosma albo-roseum 756
Pernettyas 757
Phillyrea Vilmorini-ana 759
Pinus Montezumæ ... 758
Plants, climbing, in pots 768
PLANTS FOR CHRISTMAS, ROOM 755
Plants for name and description 768
Potato, black leg of ... 766
Potatoes, quality in... 762
Reading and District Gardeners' Associa-tion 768
Rose bed, making a ... 767
Rose hedges 760
Roses and black spot 758
Rose trials at Wisley, the... 756
Tomatoes, growing ... 766
TREES AT ALBURY PARK 760
Trees, training wall 765
Vine border, reno-vating a 766
Vines, outdoor 765
Water Lilies under trees 768
Wood ashes 763

Room Plants for Christmas

T no period of the year are indoor plant decorations so much appreciated as at Christmas, when vegetation out-of-s is at its lowest ebb. But the list of :s suitable for the purpose is rather ed; at least, such as succeed well for length of time in the dry atmosphere of ary rooms or city offices that are in use. The following are such as may own by anyone with the average amount ttention required to grow any kind of :. Of

NE-FOLIAGED PLANTS, Chamærops humilis C. excelsa are two of the hardiest of the e family of Palms; Aspidistra lurida is ner most useful plant in spite of all that id about it in these days, and everyone rs Ficus elastica, or the India-er plant, to be almost without al; then there is Aralia Sieboldi, its Fig-like leaves. Dracæna isa is a very elegant plant, and be grown into large specimens ite small pots. Ferns of hardy greenhouse kinds do well in s if the hard, leathery-leaved are selected. The common 's Tongue is a very effective when well established in pots, its shining leaves, clear and it, seem to appreciate a good ing from the syringe. Then bers of the Pteris family—h are called the Ribbon Ferns, having long serrated leaves—as P. longifolia, P. serrulata, P. cretica, will thrive the year d as window plants, and the tiful Lycopodium denticulatum ost effective with its verdant , either by itself in pots or ing baskets, or for carpeting ce soil in the pots of other s, as when well established it s over the edges of the pots, ing a most graceful fringe or ing. I have known many eurs make most effective win-askets of the common small-d English Ivy by digging up s with good roots on banks e it grows amongst Ferns, and ferring the clump bodily into ets of either wire or wood, latter being preferable, as if have pieces with the bark on look extremely well, and the nd Ferns last for years, as they be hung up in any shady posi-out-of-doors when not required ndoor decoration. Among

FLOWERING PLANTS Erica hyemalis is one of the easiest-grown Heaths, and, with Erica carnea, flowers naturally about this time of year. Primulas are most effective window plants, and if one has a little frame to grow them in summer they will keep blooming all through the winter and spring, as a rather dry atmosphere suits them well. Zonal Pelargoniums continue to produce their gay blooms as room plants where a genial warmth and rather dry atmosphere prevail. The Early White Roman Hyacinth may be had in full bloom at Christmas by potting the bulbs early in August, and keeping them in the warmest part of the house. As Roman Hyacinths are still scarce and dear the miniatures, known as the "Dutch Romans," make good substitutes. Of berry-bearing plants, Solanum Capsicastrum, or Winter Cherry, is most attractive, and easy to manage, for if cut down close in spring, it may be grown on in summer in an ordinary frame, to form most effective plants. Grevillea robusta is another good room plant. Many others might be added, but the above are easily procurable, and may be grown with the usual appliances at command of villa gardeners; the great thing to aim at is to have the plants well rooted; in fact, rather under than over potted, as they are not only much more useful, but are decidedly more easily kept in good health in small pots than in large ones, the roots perishing if surrounded by a quantity of cold, inert soil. It is surprising how long plants may be kept growing in small pots full of roots by means of liquid food alone.

T.

Cynthella Hyacinths, known also as the Dutch Romans, are suitable for bowls, vases, or window boxes

The true Roman Hyacinths are still scarce, but these Cynthellas or Miniature Hyacinths, in white, scarlet, rose, and blue, are admirable substitutes

Notes of the Week

Apple Lane's Prince Albert

IN a survey of the Apples, which have borne satisfactory crops during 1926 here, in East Sussex, the above has proved one of the best. The trees, both pyramids and standards, have produced, without exception, quite a good crop of clean, average-sized fruit. The pyramid trees are growing in orchards and the lower branches actually rested upon the grass with the weight of their fruits. The regularity of the cropping of this fine Apple should be made a note of by intending planters, for its fruits come as a boon in a year notorious for its Apple shortage. The tree is graceful and drooping, and very picturesque both in fruit and in flower. It is not, however, suitable, except as a standard, for planting where cattle must graze. Even standards must be taller than is necessary with the majority of other kinds, otherwise the tips of its drooping branches will be eaten off. The fruits are attractive when ripe, and more even in size than most sorts, being of a pleasing pale yellow overlaid with red stripes, generally on that side facing the sun. During February and March this Apple may be used as a dessert fruit, although generally valued for its good cooking qualities. Who raised

it no one seems to know, but it lies to the credit of Messrs. Lane and Sons, a famous nursery of last century, for having discovered it in a Berkhamsted garden and bringing it to the notice of the public. E. M.

Onosma albo-roseum

No flower lover can see this for the first time without wishing to possess and cultivate it. Would that one dare assert that it can be grown in any rock garden without care or trouble? It wants some care and, even with such care, it may succumb to the idiosyncrasies of our seasons and leave us forlorn. It is a very charming plant, much after the habit of the better-known O. echioides or tauricum. It is even more hoary in its foliage than that species, and is thus more liable to injury in winter. It is subshrubby in its habit, and grows from about six inches to nine inches high. When it blooms it throws up clusters of flowers, bugle-like in form and of a velvety texture. These are sometimes like molten glass, ranging to blue and blood colour, the combination of colours being most fascinating. It loves a hot, dry place, and is best in a crevice of limestone. S. ARNOTT.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Should Fruit Trees be Root-pruned?

I HAVE nothing to add to, nor to withdraw from, my considered opinion concerning root-pruning. May I crave space, before retiring from the controversy, to make a few observations to my critics? I shall take them *seriatim*. (1) Mr. W. E. Wright does not advance a solitary reason for or against. As a matter of fact, he "hedges." He asks me to give a more up-to-date (blessed phrase) method that will answer the purpose. That is the very thing which I did in my note. Look after the roots of fruit trees in their early stages and the fatuous practice of root-pruning will be unnecessary. Mr. Wright asks me to refer to back numbers of this journal—informing me that, in these, I will "find many answers that fruit trees should be root-pruned during autumn." Apparently Mr. Wright considers that this puts "Q. E. D." to the matter.

(2) I confess, candidly, that I had looked for more effective criticism from one who bears the honoured (and famous) name of a "Pearson of Lowdham." The chief points in his notes are these: For many years he agreed (in theory) with "A Scottish Gardener." Then, one year, he and his old friend, "Joe" (I imagine I know "Joe's" other name), attacked some trees "in no gentle or scientific manner" and with no tools but spades. The results, says Mr. Pearson, were far better than he had thought for, and on this isolated case, isolated by his own admission, he left theory behind. Let me assure him that my conclusions have not been arrived at from theory or by a single instance, but have been gathered in the hard field of practical experience. And may I suggest to Mr. Pearson that the results to which he refers so complacently may not have been obtained by his ungentle and unscientific treatment, but in spite of it?

(3) Entirely do I fail to see the point (if point there be) of Mr. Bruce Hewitt's notes. This criticism is neither constructive nor destructive. He says neither "yea" nor "nay." His notes are entirely and absolutely negligible. I thank him, however, for the friendly interest which he evinces in my "well-worded passages." Apart from that compliment his entire note is far from being germane to the subject under discussion, and is principally devoted to an attempt to be sarcastic (or ironical) at my expense. I assure him my withers are unwrung, and, I may add, I have no intention of treading on the coat-tail of Mr. Hewitt, so temptingly trailed before me, in the word "profession (?)." In vain is the net set in sight of the bird. A SCOTTISH GARDENER.

—— I have read with much interest the different opinions of this much-abused subject. I have for the last 30 years root-pruned fruit trees, both inside and out, with very good results, in different parts of Lancashire, and I could name several who could bear me out in this statement. I quite agree with "A Scottish Gardener" in what he says about taking the trees in hand the first four years, but if a tree has been planted to take care of itself, and in time the roots get down into the cold subsoil, I do not see anything barbarous or dangerous about root-pruning, quite the reverse. If this is done at a proper time and in a proper manner it cannot fail to have a beneficial effect on the tree; that is my experience. I have seen both Pear and Apple trees bearing inferior fruit brought out to perfection by cutting the strong roots back and bringing them nearer the surface. It may interest some of our readers to know that I picked six Winter Nelis Pears this year that weighed over 4 lbs., and not from a young tree either.

A LANCASHIRE GARDENER.

—— I observe in your issue of December 4th "A Scottish Gardener" objects very forcibly to root-pruning of fruit trees, stating the time to regulate the root growth is within the first four years after planting, which is quite correct, but when a gardener takes up a new charge he often finds there are large trees making plenty of growth, and having been spur pruned, only produce more growth. These trees often produce flower but no fruit. In my experience, when I have had charge of such trees, I thin out crossing branches and cut back others to where I can get a suitable young growth as a lead, leaving it a foot or eighteen inches in length according to the strength.

The spurs are thinned out, and the side shoots are left four or five inches in length. They can easily be shortened later on. When a tree wants to grow, give it plenty of work, but let the head have plenty of air and light to enable the wood to ripen.

The next season I root-prune a quarter or one half of the tree according to size. I do not believe in being too severe; and the other half can be done the following season, if too much strong growth is still produced; but this is often not required if the tree begins to bear fruit, this will steady up the growth. I have always found root-pruning to be very beneficial, either in the open or against a wall or under glass.

The methods explained by "J. M." and "A. W." are quite correct; therefore, I will not repeat them. I have a Pear tree planted about eighteen years ago, I am told, which made 3 feet to 5 feet of growth this past season, flowered well, but only two small fruits were produced. What would "A Scottish Gardener" recommend to do with it?

Stirling. A. L.

—— I do not profess to be an expert, should like to give my experience on the ject. I had a number of trees, Pears Apples, which had been cut back for a many years, but were always throwing shoots 3 feet or 4 feet long, and as they duced very little fruit I decided to let t go ahead, after cutting out some of weaker growths. Next season they for an abundance of fruiting buds, and the lowing season plenty of fruit. The sh have to be considerably thinned, or would become as thick as a Thorn bush, the fruit would be small. The fault is the shoots which have had to be cut back liable to die out, thus leaving a lot of wood about the tree, which experts say is desirable.

I wonder if your correspondent who vises ringing completely severs the bark I was under the impression that to d would be to permanently check growth. seems to be a very simple idea and w trying. H. I

—— With reference to my letter on r pruning published on pages 741 and 74 want to add that the methods therein a cated have been practised by me for 30 years with success in Britain, Fra Italy, South Africa, Australia, and The E Let any of your readers give it a trial aga any system of root-pruning, and then will be in a position to argue. My inten in writing again on this subject is to a few hints on cultivating fruit trees in o to avoid such mismanagement in future. is always best to plant yearlings or two-y old trees, because they can be trained m more easily, and because they transplant establish themselves better than older tr All young fruit trees must have the atten that baby plants require and which nurs men give them. The proportion of one- potash to two-parts phosphates is essentia ensure healthy growth. It is mainly strong, heavy soils that wood growth att excessive proportions; rarely is this the in light soils, pointing to the fact that po is in excess to phosphate in such heavy s which are notoriously deficient in phospha hence the use of steamed bone flour, w is not acid, containing 60 per cent. p phate, 1 per cent. ammonia. Sir A. D. H in "Fertilisers and Manures," says: " action of phosphoric acid on the plant is confined to its ripening effect; it stimul the early development of the young seedli to a remarkable extent." It is because f cultivators ignore these golden words they have trouble with their trees in a years. In the first four or five years fruit tree's life too much phosphate canno given. It is only as mature trees w phosphates in excess cause the fruit to There is no such danger in the early ye Lime lets loose potash; therefore the amo of phosphate to potash to be proportion must be in excess. I hope these few po will banish the necessity of root-pruni which would never have arisen had the perties of phosphate and its function b properly understood. C. A. JARDIN

The Rose Trials at Wisley

With reference to the article on "Wi Roses" over the name of a "Rosaria which appeared in issue November 2 page 710, I want to say, and the Editor bear me out, that the letter is not from pen and that I knew nothing whatever ab the article until I had seen it in print.

I am constrained to send this note, a have received a letter this morning from English gentleman who imagined that I the author of the article in view of the p

it I took at the last annual meeting of the yal Horticultural Society.

ll the same, I am in cordial agreement h the expressions used in the article on the sley Roses. ROBT. FIFE.

dinburgh, Dec. 10.

— I read with interest the remarks and ice which have been tendered by "Fair y." I should, in the first place, like to him one question. It is this. Has he n the trials at Wisley, has he observed m for the last two years? He is a poor logist for the Council of the Royal Horti- tural Society, for the Wisley Garden Com- tee, and for the Director of Wisley. His plaint would infer that the whole of these gust gentlemen have been guilty of un- donable dereliction of duty.

make no apology for being, what he ns, ungrateful. To begin with, if he was the last business meeting of the Royal rticultural Society, held on February 9th, Vincent Square, he would have heard a y clear statement upon the Trial Roses at sley. This was made by a very able and onsible horticulturist, and "Fair Play" ows, or ought to know, when he butts in h advice such as his, the reception it re- ed. It was, I am afraid, characteristic the Council. That, and that alone, was icient warning to the administration of sley that things were not as they should One would imagine from his letter that ryone concerned with the famous gardens been going about with closed eyes for a ple of years.

am aware of the multifarious and rous duties of the Council. All the apolo- ics, however, put forward by "Fair y" do not justify the condition of affairs ich I described in my letter. Important ls such as these should have been dealt h in a very different manner. ROSARIAN.

Gladiolus Los Angeles

"Smilax" does not seem to be alone in his erience of the above-named variety, for raiser in his Bulletin No. 4 concludes a y interesting account of two trips through East and South as well as part of the idle West as follows:

"I had known before that Gladiolus owers, produced with insufficient mois- ure, were much lighter in colour, small in ize, poor keepers, and in every way unde- irable for cutting. The dry season in the ast this year was the most extensive lustration of this fact I have seen. The os Angeles flowers which I saw were ometimes so different, I was unwilling to laim them. Under dry culture all varie- ies not only are lighter in colour but un- ttractive. The Los Angeles produces ewer side spikes unless given plenty of oom, good culture, and sufficient mois- ure. It is too much to starve it and ex- ect it to bloom as I have claimed. It does ot. All Gladioli must have water abun- antly while flowering. Other effects of noisture insufficiency are crooked stems, urned flowers, and burned bracts."

let us hope, as "Smilax" says with refer- e to Tycko Zang, that "another year it y come up to expectation." OBSERVER.

Pernettyas

was interested in your article (by Mr. rkham) a few weeks ago, and wonder ether he can help me. In my last place ad a splendid bed, which berried freely. rought six well established plants with me e five years ago. They are quite healthy produce flowers, but these fall off and I no berries. I have consulted two of the ding gardeners in the county, but with no result. My soil here is a stony clay—not kindly!—but most shrubs do very well.

Pangbourne. HARRY S. BARTON.

[We have submitted this inquiry to Mr. E. Markham, who replies:—The Pernettya loves a cool, moist rooting medium and a soil free from lime; heavy soils should receive an addition of a little peat or decayed leaf mould, although this is not absolutely essential. They should be planted in full sunshine. Your difficulty, however, is not so much in cultivation as with the absence of berries, which is probably due to insufficient moisture at the time of flowering; hence the flowers failed to set. Your plants are an example of what occurs in many places, for in some they berry so freely as to almost kill the plants, and in others refuse to berry at all, even when every care is taken.

Like many of the shrubs from South America it was at one time considered absolutely necessary to plant them in partial shade, and this led to failure, the Desfontainea being a typical example, but planted in full sunshine it forms a very large bush and flowers profusely every year. We advise you to see that your Pernettyas are in full sunshine, and as the flowering season approaches are plentifully supplied with water and a mulch of litter of some kind placed among the plants, following which you should obtain more satisfactory results.]

A neat little house and a well-kept garden at Old Lodge, Aldenham Park

An amateur's efforts

THE accompanying illustration, which at first sight may appeal to readers as a domestic photograph rather than appertaining to gardening, is intended to depict the success attained with almost as strict a minimum of garden that it is the lot of man to usually have. The house shown is the Old Lodge at Aldenham Park, which originally served as a gate-lodge before the main road was diverted from its course for a length of about a mile, which work was undertaken by the late Lord Aldenham in order to add to the amenities of his gardens and pleasure grounds. The Lodge is now occupied by Mr. George Tuckey (seen in photograph with his wife), and in such spare time as he gets he turns to gardening as a hobby and a pleasure. Tomatoes are grown by him with great success in tubs, stood against a west wall, and which can just be seen on the left of the illustration, whilst the narrow borders at the foot of the wall are devoted to most carefully-attended bedding plants, which find room there in company with a number of choice small-growing creepers, such as Garrya, Holbœlia, Ceanothus dentatus, Corokia Cotoneaster, and Ribes viburnifolium. The blaze of the scarlet Geraniums, contrasted with the deeper tones of Iresine, the blue of Lobelia, and the ornamental foliage of scented Geraniums, the whole bedded with Violas, and adjuncts in the form of specimen Fuchsias grown in tubs, turn the quaint-looking old building into a pleasing picture, rendered the more so by the apple-pie order in which everything is kept, every growth of the wall plants being carefully trained into position by this enthusiast, whilst weeds are not, and fallen leaf or flower is soon removed, and the effort is an example of what can be done in minute space.

EDWIN BECKETT, V.M.H.

Aldenham House Gardens, Elstree.

In the Maritime Alps

Readers may be interested in some of the alpine plants that grow within a car drive of such resorts as Mentone and Monte Carlo. Primula marginata and the very scarce P. Allionii flower by the last week in March at an altitude of less than 3,000 feet. Later on come the Liliums, Martagon, pomponium, and bulbiflorum; also Pinguicula grandiflora, Saxifraga lingulata, and a beautiful Pæony called, I believe, P. peregrina. But wild horses will not drag from me the whereabouts of the one spot I know where Primula Allionii grows—too many people know of it already.

G. L. HOLDSWORTH.

La Carruba, Diano Marina, Italy.

The garden store

The present is a good time for owners of gardens, and gardeners generally, to consider the question of laying in their annual stock of all such requisites as usually find their way into the garden store. I refer more particularly to any necessary insecticides, soil fumigants, artificial manures, Bamboos, or other garden canes, wire, nails, staples, paint, Stockholm tar, twine, seed-boxes, lime, soot, sifted soil, silver sand, charcoal, bonfire ash, and other potting ingredients, weed-killers, flower-pots, labels, and brooms. At the same time opportunity might, with advantage, be taken during inclement weather to look over and repair any broken tools, chairs, garden seats, frames, handlights, etc. Any broken panes of glass should be repaired, and any pieces of sufficient size and suitable for covering pots or seed-boxes might, with advantage, be removed to the garden store for use when required. Where sufficient timber

is available locally a good supply of dry Birch twigs should be now laid in ready for making up Birch-brooms under cover on wet days. These are invaluable in most gardens, and can easily be made up with a little practice far more cheaply and much better than the average brooms sold by hawkers or purchased in the market. The garden store, in short, may be likened to a well-stocked doctor's surgery, wherein are kept all necessary ingredients and other stores likely to be required at any time during the ensuing 12 months. It is a bad practice to leave the ordering in of these till the spring, which is usually a busy season with most gardeners.

CAPTAIN E. A. SAUNDERS.

Crompton, Sussex.

Elæagnus macrophylla blooming in December

For the introduction to our country of this handsome Corean Oleaster in 1879 we are indebted to Maries, a native of Stratford-on-Avon, who was then collecting in China and Japan for Messrs. James Veitch and Sons. It is the largest-leaved, as it is also the most striking and effective of the genus, and one has only to pass within reasonable distance of a few bushes at this time of the year to be made aware of its presence, its delicious Daphne-like fragrance pervading the air around. The leaves are lustrous green and slightly scaly above, and of a rich shining silver beneath, the general effect being that of a large silver-leaved and graceful bush. The nodding flowers are borne profusely in the leaf-axils and are of a silvery-yellow colour, and, if not showy, are quite pleasing to look upon. The fruits are borne freely in some years, and are each ¾ inch in length, red, freely scaled with silver, and not unpleasant to the palate. This fine shrub is not particular as to soil, but flourishes best in land which has been well worked, or which has received a free addition of decayed leaves at planting time. Given this it will often send out suckers freely. I believe this shrub would make a beautiful hedge, as it grows very thickly and does not mind cutting in the least. Its branches are in considerable demand for Christmas decorations.

E. M.

Pinus Montezumæ

A remarkable tree and one rarely met with even in the south is the above, which comes from Mexico, where it is said to be abundant and widely distributed. I know of a few in this part of East Sussex, and saw a very beautiful example the other day which would be about 20 feet high with a similar spread of branches. It is distinct from all others by reason of its rich brown bark and extraordinary long blue leaves, which were each from 10 inches to 12 inches in length on the tree I saw, and which, in some instances, have been known to reach 18 inches in length. There are various forms of this tree in cultivation. Many of these are lacking in colour of leaf when compared with the beautiful example noted above. There are many good specimens in Cornwall, Devon, and in Ireland, and it may yet be possible to include Sussex.

E. M.

Roses and black spot

I was very glad to see Newbury's note, on p. 740, concerning "Rosarian's" *ex cathedra* statement that "no modern gardener who knows his craft" will permit black spot on his Roses. I, of course, have no pretence to be a gardener who knows his craft, but I also have tried the usual remedies, and spent hours chasing the fallen diseased leaves from all over my garden, but have been unable to check the disease. I recollect expressing surprise at the entire absence of aphis on the Roses of a garden I was visiting. The head gardener replied, "We do not allow it," and explained that by good cultivation he kept his Roses so healthy that they were immune the attacks of green-fly. This may be least one remedy for black spot, but the becomes a question of being able to aff the time or the money for the labour materials, which we gardeners in a sn way are not always able to afford in order bring our cultivation to perfection. Perh those who are thus unfortunately placed m expect to suffer from the attacks of dise and insects.

A. H. WOLLEY-DOR

Planting the Heath Garden

The ideal position for the Heath garden is out in the open, where the plants can have the maximum amount of light and air, as they are children of the open and should not be under the shade of trees, which makes the growth soft and lanky

PLANS and schemes for the improvement of the garden should be the aim of all at this season. The expense of forming a Heath garden is small, if the soil is of a light sandy loam, and the upkeep, after it is established, is very little, yet a well-planted Heath garden is a joy every month of the year. A good deal of misunderstanding exists regarding the nature of soil required for growing hardy Heaths. Many people think that Heaths cannot be grown unless on peaty soil or a soil to which peat has been added. This is not so. Heaths are quite happy in a sandy loam provided it is free from lime. Even Erica carnea and its many varieties will thrive in soil impregnated with a certain amount of calcareous matter if a good coating of decayed leaves is mixed in the soil before planting.

Erica carnea, flowering from January till April, should find a home in every garden

It will even thrive in a soil impregnated with lime

In preparing the ground, if it is in grass, it will require to be trenched, the turf being put deep enough to be out of the way when modelling the garden before planting. No manure should be added to the soil as this causes soft growth and lack of flower, so different from what we see in the wild Heather. (There is no need to have a garden to cultivate Heaths in, any rough piece of ground in the open is ideal for this purpose, and few people know how well this family of plants with its numerous varieties marks the seasons.)

In forming the ground before planti mounds and ridges should be thrown up h and there according to the extent of ground. The higher ridges should be plan with groups of the taller-grow Heaths, such as E. arborea, lusitanica, E. mediterranea, and alpina; the slopes with E. car and its varieties, E. cinerea, and ciliaris in variety; and the low parts, where more moisture likely, should be planted with tetralix and its varieties.

Where the Heath garden is large dimensions it will be an vantage to use a few groups Pines; none seems to associate well with Heaths as the Scots Pi which can be replaced if it gets large to be in keeping with the s roundings.

A list of varieties to give flow during every month of the year w be found in the following:—Er Darleyensis, a valuable cross tween E. mediterranea and carnea, grows about 18 inches hig The flowers are of a rich rosy-pin It begins to flower during October or early November and mains in bloom throughout winter months until April. carnea, with its rich rosy-r flowers produced in endless p fusion from January to April, always welcome, either as sing plants or in large groups. T varieties of E. carnea are num ous, and all are worthy of a po tion in the garden for their ea flowering. Amongst the best w be found King George, Queen Mary, C. Backhouse, præcox rubra, Prince of Wal Pink Beauty, and alba. E. carnea Verlo is one of the best forms of this charming s tion, free-growing, with dark green foliag and when in bloom in early spring, with bright rosy-red flowers, is much admired all.

Tall-growing varieties for planting on t higher parts should include E. codonode a tall-growing Heath from 3 feet to 5 feet height, with beautiful soft green folia covered with white flowers from December early spring. E. mediterranea is a we known tall-growing species with pale pi flowers which appear from March to Ma This is at times cut with frost and shou be given a sheltered position in the cold parts of the country. E. m. alba is a fi pure white form of more compact growt E. m. glauca is in flower during Novemb and forms neat bushy plants. E. m. Brigh ness is a bright rosy form of compact hab of growth. E. m. superba is also a for worth growing. E. arborea forms larg bushes with soft green Asparagus-lik foliage; the flowers are fragrant and free produced, and a few plants will scent t

hole garden. It lasts in flower from March) May. E. arborea alpina is a beautiful rm of dwarf, compact habit with delightful ·ft green foliage. E. australis, with its rich sy-purple flowers which appear in the ırly spring months, is seldom seen, yet it is most desirable form to grow. The flowers this are also fragrant. E. Veitchiana, a ·brid between codonodes and arborea, rms bushy plants from 3 feet to 4 feet high ıd has large white flowers in spring. E. ·ricta is a tall, bushy, upright-growing eath with pale red flowers and continues in ›wer from July to October. E. Watsoni, ·owing about 12 inches, is a natural hybrid etween E. ciliaris and E. tetralix; has large ısy-crimson flowers from July to October. he dark form of this should also be inuded. E. Alportii, a crimson form of the ›mmon Heath, is worthy of a place in every ›llection. E. ciliaris, the Dorset Heath, is low, spreading plant with flowers of a pale ·d colour during August and September. : cinerea, the Scotch Heath, with its variees alba and coccinea, will last in flower om early July to October. E. tetralix, the lountain Bell Heather, has rose-coloured owers and is in bloom from July onwards; ›is and its varieties should be planted in w moist positions. E. vulgaris Hammondi a strong-growing variety with white ›wers from August onwards. E. v. ypnoides is of dwarf, Moss-like growth, only :aching to about 3 inches; the flowers are

Above: **Erica vulgaris Hammondi. A strong-growing variety, with white flowers from August onwards**

Below: **The Heath Garden at Wisley**

·hite and it commences to bloom in July. ;. v. multiflora is a fine late bloomer and as spikes of pale rose flowers well into)ctober. E. v. Serlei is a distinct white form, owering from September to November. ;. v. argentea, with its silvery foliage and ink flowers, has its uses, likewise the variety urea, with its golden-coloured foliage. :rica scoparia, with its dwarf, green, comact pyramids, is a desirable plant to grow. ;. Mackayi, E. Lawsoni, and E. Stuartii are ll good and should be in every collection of ny size. Menziesia polifolia, in some garens known as Dabœcia polifolia, is one of he freest flowering of the family, bearing uring summer and autumn a profusion of :lobular purple flowers. There are, also, the vhite form and the variety known as atropurpurea, which has crimson-purple flowers. All are equally good and form neat, bushy, Heath-like plants, flowering from June to October.

E. vagans, the Cornish Heath, is one of the best, being a sturdy, compact grower with pale pink flowers from late July till October. There are various forms of this, and the variety known as St. Keverne is one of the best. The white form is also worth growing.

E. v. grandiflora is a stronger grower and later in coming into flower, thereby continuing the flowering season until the first of the winter-flowering section comes into bloom.

E. v. rubra is a free, strong-growing form and was, in mid-November, in full bloom, thus connecting the flowering with the first of the carnea section, of which E. Darleyensis opened its first flowers this year during the latter part of October.

With reference to E. vagans and its varieties, it does not seem to be generally known that these make excellent edging in place of Box, and the wonder is that it is not more universally adopted, as it flowers so freely and can be cut into shape as easily as can Box edging.

From the foregoing list, which is far from exhausting the different forms and varieties procurable, ample material can be found for having flowers practically every month of the year.

R. Findlay.

Wisley.

Lomatia ferruginea

Although, perhaps, requiring the shelter of a south wall in the colder districts of the north, here, in the south, that handsome evergreen shrub, Lomatia ferruginea, is to be found growing from 8 feet to 10 feet high.

The flowers, usually rosy-red or white, are borne on stalks so short that they are usually hidden by the luxuriant Fern-like foliage, which is very dark green above and bluish-white underneath. On account of its graceful habit, Lomatia ferruginea, where hardy, should have a place in all collections of shrubs.

Introduced from Chile in 1851, it delights in a well-sheltered position, thriving best in a specially-prepared compost of loam, peat, and sand.

It is easily propagated by cuttings, which strike best in a gentle heat.

Exbury Gardens. R. Findlay, Junr.

Phillyrea Vilmoriniana

Phillyrea Vilmoriniana is a beautiful compact evergreen shrub usually from 5 feet to 10 feet high, and sometimes more in diameter. It does well in any good garden soil.

It is the most striking of all the Phillyreas and very distinct from the others in size and shape of leaf.

The leaves, which are narrowly oval or oblong, 2 inches to 5 inches long and about 1 inch wide, are of a beautiful dark glossy green, adding greatly to the beauty of the plant.

The flowers, which are borne in clusters in the leaf-axils of the previous year's growths, are pure white, bursting forth in the month of April.

The fruit, when it first ripens in September, takes on a reddish colour, gradually

turning to a blackish-purple as the season advances.

A native of the south-eastern coast of the Black Sea, Phillyrea Vilmoriniana is quite hardy in this country, and is easily increased by cuttings or seeds, the former being made of the current season's wood and taken in July, when they will take root readily.

Exbury Gardens. R. FINDLAY, Junr.

Rose hedges

I am glad to see that this extremely useful and beautiful method of growing Roses is increasing in favour. I strongly urge upon planters the desirability of thorough preparation of the soil. We must remember such hedges depend upon their vigorous and healthy growth to sustain their charm, and the plants cannot do this unless a good start is made. Speaking to a gardener recently replanting some climbing Roses to scramble over old trees, I urged the necessity of preparing the soil fully 3 feet deep in order to induce a free growth, but his reply was that his duties were so numerous that he could only afford time to dig the soil about 18 inches deep. Now, how can the Roses grow luxuriantly if the subsoil be not well broken up? I do not say bring this subsoil to the top, though in some cases this might even be advisable, but certainly it should be disturbed and some manure mixed with it. The formation of a Rose hedge is largely governed by the object it is desired to obtain. If a screen from cutting north and east winds be desired, then preparations should be made for a plantation of the very vigorous-growing Ayrshire, evergreen, or multiflora Roses. For these there should be placed supports in the form of Oak posts and wire stretched between. Provision should be made for adding a length of wire to the top as seems needful. The hedge of less vigorous growth, but yet rising some 5 feet in height, will also require supports, and here again it is well to give something substantial at the commencement. For the moderately high hedge the choice of variety is almost unlimited. Many planters are now using wicker hurdles, woven close after the manner of a wicker hamper-lid. These are placed in position, and some of the glorious Teas or Noisettes planted on the sunny side. No one can conceive the beautiful effect given to the garden when such hedges of Roses are well attended to, and they give a welcome screen to tend Roses.

In planting, care should be taken to pla rather shallow, just placing the junction b tween Rose and stock an inch beneath t surface—that is, if the plants are budde Should own-root Roses be available much the better. If the soil happens to very dry when planting it would be well water the plants in. The first season t plants may be cut back to one-third the length, leaving two-thirds of growth upon t plants. The following year cut hard ba one or more growths and leave the othe intact, save shortening unruly ends. T keep such hedge in an entirely youthful co dition there must be annual cutting back one or two shoots on each plant, and th cutting back should be quite to the base. T result will be that splendid new growths w spring up, and thus maintain the thrifty co dition so much desired. S.

The White Lime (Tilia argentea) on the lawn at Albury

A magnificent specimen, 109 feet high, and said to be the finest example in cultivation

Trees at Albury Park

ALBURY PARK, situated about fi miles east of Guildford, in the beautif valley of the Tillingbourne, has lon been famous for its trees. John Evelyn, t diarist, who lived at Wooton, within thre miles of Albury Park, is generally credite with having laid out the Albury pleasu grounds. Much of Evelyn's reputed work Albury still remains, notably the fine Ye hedge and the broad terrace of greensward quarter of a mile long above it. These fe tures of Albury are much cherished by t owners, the Duke and Duchess of Nort umberland, and are well maintained at t present time. With these notes we illustra two of the most interesting trees of Albu from photographs taken a few months ago.

In 1913 Mr. A. Bruce Jackson compiled admirable list of the "Albury Park Tre and Shrubs," a companion publication to t "Trees and Shrubs of Syon House," and t dimensions of the specimens here illustrate are taken from that list.

The first illustration is that of a fine a stately example of the White Lime (Ti argentea). This tree, with remarkably ere branches and of symmetrical outline, fro the angle at which the photograph was take is on the lawn near the house. The tre over 109 feet in height, and the trunk, whi is 16 feet in girth, breaks into numero stems about 6 feet from the ground. Som idea of the height of this tree may be gain from the figure of a man of average heig faintly discernible on the left-hand side the illustration. Unfortunately, this fi Lime tree was damaged in a storm about year ago and lost one of its main branches.

The Black Walnut, which forms the su ject of the other illustration, is a very larg tree of exceedingly beautiful outline. T wide-spreading branches are most pi turesque. It differs from the typical Blac Walnut in its pendulous branches, and i fruits, which are borne in clusters of three four and six instead of only one or two as usual in this species. The tree is name Juglans nigra alburyensis, and the measur ments of this remarkable tree, which stan on the lawn east of the house, are:—Heigh 75 feet; girth, 9½ feet at 5 feet from t ground; spread of branches, 80 feet.

Within the beautiful grounds of Albury a fine specimens of the Oriental Pla (Platanus orientalis), Black Italian Popl (Populus serotina) about 150 feet, the Swe Gum (Liquidambar styraciflua), the foliag of which turns brilliant red, purple, yellow in autumn, Tulip Tree (Liriodendro tulipiferum, about 100 feet high, and t Cucumber Tree (Magnolia acuminata), abo 75 feet high and one of the tallest trees of i kind on record. H. C.

A picturesque example of the Black Walnut (Juglans nigra alburyensis) at Albury

Flowers for Christmas

ABOUT this time of the year flower growers for market produce enormous quantities of white flowers. For church coration alone large quantities are used, ile for evening parties, and, in fact, for all nds of floral decoration, the purest white wers and Fern fronds form the bulk of all rangements. Coloured flowers are by no eans popular, and growers find it better to ly on well-known sorts than to go in for iscellaneous collections, such as are found private gardens. Amongst the most ticeable at the present time may be mened Azaleas. Amongst these, the Old hite, Fielder's White, narcissiflora, and eutsche Perle are forced early into flower ery year; consequently, they make their ung growth and mature their flower-buds rly, and therefore they are preferable to ung plants that take much longer to unfold eir blossoms. For very early forcing, large ants in comparatively small pots full of tive roots are best, and in this respect the alea is an accommodating plant, but it ust never be allowed to get dry, or it seldom covers from the check. Unfortunately, aleas are not flowering as well as usual is year, and even the market growers are mplaining about the lack of Azalea bloom is season. Abutilon Boule de Neige is one the freest winter-blooming white-flowered ants in cultivation; old plants of it trained near the glass in houses in which there is temperature of about 55 degs. yield abunnce of snow-white blossoms at almost any ne of the year, or even all the year round. White Camellias, too, are greatly prized. They are usually gathered from trees planted out in rather low span-roofed houses, which admit of a large bed in the centre and a row of plants all round; they grow in a compost of turf and peat, or one composed entirely of the latter, and when kept constantly under glass, as they must be on the planted-out system, there is little difficulty in getting them into full bloom at Christmas. The safest plan with Camellias is to prepare them for forcing when making their growth in spring. Plants that flower early one year can have their young wood pushed on by artificial heat, and when the buds are nearly ready to burst into flower they may be kept back or forwarded at pleasure, but attempts to force buds partially developed into bloom by means of strong fire-heat too frequently end in failure. Amongst coloured varieties the old C. Donckelaari is a great favourite, as it blooms very early naturally, and semi-double flowers are really more effective than the symmetrical double flowers that come in with the lengthening days of spring-tide. The stately white-spathed Arum Lilies are exceptionally well suited for church decoration, a purpose for which they are largely employed. They are mostly plants put out in summer into open-air beds; they are lifted in September and placed in gentle heat as soon as they are well rooted, a dry, warm atmosphere being necessary in winter to infuse into them the pure white colour for which they are distinguished. Eupatorium odoratissimum bears useful, feathery, white flowers, and requires but little artificial heat to get it into full bloom in mid-winter. Grown out-of-doors in summer and kept closely stopped, it forms a mass of flower-heads that open in a genial temperature of about 50 degs.; the blossoms must be kept dry or their purity soon becomes spoiled. Gardenia blooms at Christmas are indispensable, but they are not such profitable flowers to grow in winter as one might imagine; they require a good deal of fire-heat in order to get them to open during the dark days—not an easy matter this year, in particular; under the most careful management a great number of the buds rot at the base and drop off just as they appear ready to expand. They do best planted out on mounds of peat, and when well rooted, mulched, and copiously drenched with clear soot-water, that imparts to the foliage that dark glossy look that betokens good health, they do well. The Christmas Roses are much grown, especially the large white kinds. Large clumps of them are lifted and forced in pots, or covered with cloches or hand-glasses where they grow, the latter plan being unquestionably the best for the plants, which do not like much root disturbance. Hyacinths of the white Roman variety are now very largely grown, yielding, as they do, their delightfully fragrant sprays of bloom with but little artificial heat, and thus doing away with the necessity for employing kinds that do not submit to early forcing so kindly as this useful variety does. Double white Primulas are still popular market flowers, being well suited for bouquets of all kinds; they are grown mostly in 5-inch or 6-inch pots in low span-roofed houses, having a bed in the centre and a border all round; a dry,

warm atmosphere of from 55 degs. to 60 degs. suits them well. Early-flowering Narcissi, such as the Paper-white, are grown in boxes for the sake of their delicately-perfumed blossoms, which are in great request for vase decoration. Half-expanded Tea Roses are much used for button-hole bouquets, and for this purpose none is more popular than the white-flowered Niphetos. White Tulips, too, play an important part in most floral decorations, as do also Tree Carnations and Violets.

Labels and Labelling

THE subject of labels and labelling presents one of the most debated problems of present-day gardening. Too often it is neglected, and even when it does receive attention the two points considered are whether a label is substantial and cheap. Surely a label is of little merit unless it gives the name of the plant clearly and is unobtrusive and neat. It should be borne in mind that the labels belong to the plants, not the plants to the labels. But, on the other hand, a label does not fulfil its purpose unless it tells us at once all we want to know. No neck-breaking or stooping should be required, nor should it be necessary to lift the label to read it. It should be as easy to read the names of the plants as we walk along the garden path as it is to read the titles of books in a library.

Recently we have received several inquiries from readers regarding various labels which are obtainable. We are taking the opportunity, therefore, of giving a short description of the principal varieties generally in use.

THE ACME.—These are the oldest metal labels on the market, and have been unaltered in any way during the last half-century. They are made of zinc with raised letters for either Roses, fruit, or herbaceous plants. They are, of course, imperishable and non-rusting.

THE WIZARD.—These are made of ordinary flower-pot clay, the dull red colour toning with the earth and rocks. They are made in several sizes either for tying, or with rustless wire supports for staking. One of the latest novelties is a long-shaped label made to take the place, in damp propagating frames, of the wooden tallies. The names are written in waterproof ink, and, if varnished afterwards, will last for many years. No frost, wet, or heat seems to have any effect on them.

THE LEGILAB.—These are always legible and instantly changeable. A tough glass disc contains the label, which is securely corked in at the back, thus making it quite accessible in the event of the change of the name being required. The label itself is reversible, being white on one side and green on the other, the latter being less conspicuous. It is made in three sizes for either staking or hanging. Notes regarding planting can, of course, be inserted in the container, and are always available for reference.

THE HELICHRYSA.—This is a permanent holder and garden label, which can be changed as required at a very small cost. Made of stout galvanised wire, the holder is fitted with a gripping device securely holding an aluminium label stamped in bold embossed letters with the desired name. It is made in various patterns, which make it adaptable for trees as well as the herbaceous border, Roses, or rock garden.

THE NEETA.—A Rose growers' label, which is permanent, withstanding all weathers and is impervious to chemical sprays. They are extremely light in weight, clean to handle, and do not buckle. Rose growers will appreciate the necessity of knowing to what class each Rose belongs; this is indicated on the name label.

THE COVERSLIP.—This is a labelling system where a cover is made to slip over any length of ordinary standard old-fashioned wooden label. The cover material is transparent and non-inflammable. It renders the wooden label weather-proof, and therefore protects ordinary pencil-writing in all climatic conditions.

THE A. G.—The names are fired on small opal tablets which are fitted into zinc cases with galvanised stems. Their permanency is guaranteed for 30 years; they are always clean and legible. Any wording or numbering can be obtained on white, green, or buff tablets. For rock gardens where many labels are used the latter two colours are recommended as they are less conspicuous.

THE NEVERFADE.—These labels are tough, unbreakable, yet not heavy, and can be inscribed with a nail. The metal is entirely covered with a pigment, the nail-point in writing cuts through this covering, and the writing is indelible. Upon exposure the writing gets darker and plainer, and eventually becomes etched into the metal. If in years to come the surface covering is scraped away for experiment the writing will be found deeply embedded. There is a range of 20 sizes and shapes, and strong stakes of various lengths are provided.

THE ALLPROOF.—These are made of strong zinc covered by glass which slips into the holder, thus forming a weather-proof container. This covering glass slip is secured by bending one of the "ears" downwards. The writing space has a smooth and dead white enamelled surface which can be inscribed with any ordinary pencil. When an alteration of name is required the glass is lifted and the old writing obliterated with india-rubber or soap and water. It can then be re-written and the covering glass refixed.

The Editor will be glad to give further particulars of any of the above on receipt of a stamped-addressed envelope.

VEGETABLES

Quality in Potatoes

THE first aim of a grower should be to obtain quality, and in selecting varieties this should receive consideration. Speaking of varieties of Potatoes, one has to admit that their name is legion, and year after year new sorts—many of them, perhaps, only so-called—are placed on the market. Considering this, it is a wonder that the whole thing is not in a state of chaos and that varieties have not got mixed up in a perplexing medley. But such is not the case, and the reason is, I think, that out of the almost unlimited number of varieties in existence there is only a small proportion possessing good all-round qualities, and these have got a firm hold on public favour. The few leading varieties of both early and maincrop Potatoes are known and grown in every county and nearly all localities, which goes to prove that if a Potato possesses good quality it is certain to become popular. Nor is a tuber of this character long in gaining public favour, and if an illustration be wanted, take the well-known variety Up-to-date. Perhaps the Maincrop variety has enjoyed a wider popularity. It would be interesting to know how many nv varieties of Potatoes have been put on le market since Up-to-date was introduced, ad how far the majority have succeeded in ga ing public favour.

Admitted, then, that there are only a fe really popular Potatoes, the advisability introducing so many new varieties may e questioned. The argument is quite feasil and it is an open question whether we are r getting too many named Potatoes, becau numbers of them are so much alike that would puzzle an expert to tell the differen Considering the tendency there is to swell already large Potato family with varieties th may or may not be distinct or new, it is qu time some means was adopted to put a che on the output. The existence of any vari of Potato has a limit according to its co stitution. The best of Potatoes, howev perform a double office, for not only do th provide us with a staple food during th existence, but they are the parents of t standard varieties which follow them. support is needed to the statement that ev the best of Potatoes do not last indefinitely can readily be found. Think of the gra old varieties which were popular, say, quarter of a century ago. Referring to Po toes that are on the wane, take King Edwa which still has many supporters. At o time this was the most popular maincr Potato in cultivation, but the same cannot said of it now, and the reason is that it h lost some of the high qualities it on possessed. In some districts where Ki Edward was the staple variety it is harc grown at all; it is slowly following in t wake of other good varieties. Many of o best varieties, including Up-to-date, owe the origin to the well-tried Magnum Bonum.

In the raising of Potatoes too much atte tion is given to appearance, and not enou to quality and productiveness. The monst tuber is not encouraged in the best garder and rightly so; but at small shows a pr minent class still is that for the heavie tubers, and the gross, malformed specime seen prove that this is not encouraging t best culture. We all know the value of even tuber possessing no deep eyes, but th is not everything in a Potato, and tubers th are nice to look at invariably take first pri irrespective of their eating qualities and cro ping. At present there is no other standa for adjudicating prizes for Potatoes except a pearance, and this accounts for many sterli varieties never being seen on the show-boa We hear of this or that Potato being a go exhibition variety, and why? Simply b cause it presents an attractive appearan and to the worship of this profitableness a quality are sacrificed. Growers can soon fi out the sorts that are profitable, the wor out, inferior, and synonymous varieties bei weeded out and only the best quality vari ties grown.

Onion Brown Globe

This variety holds a foremost place as bei one of the best keepers. This I have fou for many years past. My experience w confirmed recently by seeing a large quanti of Brown Globe. The gardener said he d pended on it for his late supply, and h found nothing to equal it. Evidently it w a fine selection, as out of many bushels o could hardly find a poor bulb. Many sta dard sorts of vegetables get a bad name fro the strain not being closely selected. If mo attention were given, the crop would be i finitely superior, and pay the grower for a little extra cost in having the best seed Globe types have an advantage over the ve flat forms from their being higher and deepe thereby giving more weight. J.

A pair of promising Pæony flowered Dahlia seedlings

Warm buff-shaded brown

Deep chestnut bronze

Dahlias from Seed

By Clarence Ponting.

HAVE been interested in the letters from correspondents in recent issues on the above subject. Possibly readers may be terested in my experience of last year, in hich I raised Dahlias from seed sown in a ame placed on a hotbed. The seed was ntained in a sixpenny packet of the mixed æony-flowered varieties. A pan of rich otting compost was prepared and the seeds own on February 2nd. The heat had run own to a steady 65 degs. at this time. On ebruary 7th a few of the seedlings were rough, and the sunny days which followed on brought up the remainder. Germination was very good by the 13th, when the eat dropped to 40 degs., there being frost out. On the 14th there was ice on the ater out-of-doors, but the inside of the frame gistered a minimum of 40 degs. As frosts ntinued until the 20th the frame was matted p and kept round 40 degs. at night, rising 70 degs. during the day.

On March 8th 15 seedlings were potted up to 3-inch pots and replaced in the frame. o my horror, the following morning showed inch of ice on the water in the bird bath, ut, to my relief, the frame had not dropped elow 40 degs. The plants were shaded for ree days in order that the roots might get old of the new soil. From March 22nd to th my diary records frost each night, with n inch of snow on the 22nd, and yet on pril 2nd those seedlings were ready for nother shift into larger pots. On May th I commenced to harden the plants, hich were planted out into well-manured tations on May 18th. At this time buds ere showing—the plants being grown on ithout pinching. These developed in the second week in June, and continued to appear until cut down by frost.

The results were interesting. Three proved to be wonderful flowers measuring 10 inches across and worthy of an Award of Merit—so a Dahlia authority informed me. The colours were:—(1) A pure, clear rose-pink; (2) warm buff, shading to brown; (3) deep chestnut or almost bronze. The flowers were all carried well erect on long stalks; growth about 3 feet in height. Another grew no higher than 1 foot, and branched like the Coltness Gem. The colour was a pure crimson with a very double Pæony flower. The remainder were ordinary Pæony flowers of the usual colours, one only being semi-double with two rows of florets. One of these might have been a new colour, but I did not like it, as the effect was of a white flower which had been bruised in the wind. The colour, half white and half tan, was divided down the middle of each petal in every case—quite a piebald appearance.

I liked the three mentioned so much that I am growing them on again this year. The remainder will go into the background of the herbaceous border. From the foregoing it will be seen that, once the seed has germinated, the subsequent operations can be carried on in an almost cold frame. No trouble was experienced with damping-off, and, except for potting on, the plants gave no trouble.

Dahlia Pink Pearl

This beautiful little decorative Dahlia was distributed in May, 1925, and has already made a favourable impression on all who have grown it. It was raised by Mr. J. T. West, Brentwood, Essex, who states that Pink Pearl was selected from a great number of seedlings under trial during 1923 and 1924. This variety was the centre of interest in the remarkable border of Dahlias at Victoria Gate, Hyde Park, W. I have this season grown eight plants of this charming novelty, and I am more than pleased with it. The dainty flowers vary between 3 inches and 3½ inches in diameter; the florets are grooved and about ½ inch across, and are evenly developed. The flowers are freely borne on slender, wiry stems on plants about 2½ feet in height. There is a good length of flower-stem. For table decoration the flowers are ideal. The colour may be described as warm pink, and there is no other Dahlia like it. In my hearing at Holland Park Rink Show one of our leading market growers asked a trade specialist whether he could quote him for 500 plants of this variety. Should this well-known market grower take up the cultivation of Pink Pearl for pot culture the public will soon see much of it in the florists' shops, as he almost invariably grows his plants exceptionally well. It may be the beginning of the Dahlia being grown for market purposes, and, if it is, the cultivation of the Dahlia will receive an impetus. Readers should make a special note of this beautiful miniature decorative Dahlia.

D. B. Crane.

Wood ashes

These are very valuable in many ways in the garden, but it is essential that they are kept dry. All material of a woody nature should be collected and burnt, and when the ashes have cooled they should be stored in boxes that can be kept in an outhouse until required for use.

REMINDERS FOR THE WEEK

Southern and Midland

Lettuce

Where there are empty frames on hand these can be made use of by lifting some young Lettuce seedlings from the garden and planting, 6 inches apart, in a light, rich compost. These will form a succession to those already in frames and be a few weeks in advance of those grown in the open. After planting the seedlings, water and keep the frames close for the first few days, afterwards giving air on all favourable occasions.

Mushrooms

Preparations should be made for making up another Mushroom-bed by collecting fresh horse-droppings and treating as previously advised. To keep up a succession where there is a large demand a bed should be made up every other week. An even temperature should be kept up as far as possible and the beds and paths moistened with tepid water each morning. Cover the beds that are coming into bearing with clean litter.

Early Potatoes

A few dishes of early Potatoes may be grown in large pots in the greenhouse during spring, but a reliable early kind must be chosen and well sprouted before placing in the pots. These should be clean and well drained, half-filling them with a compost of loam and decayed manure. Place the sets on this and cover with 3 inches of soil, leaving room for top-dressing as growth advances. A warm pit or greenhouse may be utilised for the Potatoes, but when they commence to grow they should be given as much light and air as possible.

Winter Begonias

These are beautiful plants for the greenhouse that can be kept to a temperature of 50 degs. to 60 degs. The beautiful hybrids sent out by various nurserymen require a little more skill and attention than the varieties of Gloire de Lorraine. Watering is the chief point with these plants, as they must never be allowed to have the soil overcharged with moisture, as this soon becomes sour and the plants die off.

Allamanda grandiflora

To those who require a beautiful climbing plant for a warm greenhouse this can be recommended. It is a rapid grower, and the leaves, which are large, are of a glossy green and leathery texture, while the flowers are of a creamy-yellow colour and trumpet-shaped. It may be planted out in a compost of loam, peat, leaf-mould, and coarse sand, or grown in large pots or boxes. Pruning should be done in winter, cutting the young shoots well back to the old wood.

Richardia Elliottiana

This is the yellow Arum Lily, and requires different treatment from the well-known white variety. The dry tubers should now be started into growth by placing several into a 7-inch pot. A good compost containing a proportion of old cow manure is suitable for growing them in. If kept growing steadily in a cool greenhouse or pit they will come into bloom during late spring or early summer. Mrs. Roosevelt is a charming kind.

Pruning

It is advisable to have this work completed, as far as possible, before the New Year arrives, as frequently the weather prevents this being done during January, and much pressing work is on hand afterwards, when, in some cases, the trees may be neglected. It should be noted that it is best to leave the newly-planted trees alone until growth commences in March. Shrubs that require winter-pruning should also be attended to.

Lawns

Do not neglect the lawns when the grass is not frosted, as frequent sweeping and rolling will benefit the grass immensely. If this is impoverished a dressing of sifted soil and rotted manure in equal quantities will work wonders. This should be well worked into the roots by sweeping. Any renovations or levelling should be completed without delay.

Sweet Peas

Seed has germinated well and the plants raised from a sowing made early in October are now 3 inches to 4 inches high. To form bushy plants the tips should be pinched out. The young plants in frames must not be coddled, but exposed to the air on all fine days. The only time they need protection is during severe spells of frost, snow, and heavy rainfalls. Keep the soil dusted with soot to prevent slugs from attacking the plants.

Fruit in store

Attention should be given frequently to the Apples and Pears in the fruit-room, and all those that show signs of decay should be removed and used at once. Ventilation should be given when the weather is mild. An even temperature should be kept as far as possible.

W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Arum Lilies

Plants intended to produce spathes for the New Year must now be hurried gently along. A temperature which ranges steadily round about 60 degs. is ample. Spathes may be produced in a lower temperature, but it is hardly safe to rely on them. See that aphides are kept from the plants, either by syringing or by light vaporising. Water occasionally with liquid-manure or with soot-water.

Aloes and Cacti

Those who may have a collection of these succulents will, of course, be keeping the plants fairly dry, but in a comfortable house. They are by no means difficult to manage. We now use richer soil for them than was formerly the case, but the compost is made more porous. Epiphyllums are a distinct section, and many of them flower round about this time. These must not be permitted to become dry, but they should not be overwatered. By the way, Epiphyllums make very ornamental basket plants.

Coronilla glauca

Although this plant—now rather old-fashioned—may pass the winter against a wall in sheltered gardens, it is, I think, seen to more advantage when grown as a pot plant for winter flowering and accommodated in a cool greenhouse. The variegated form is less hardy and must be given pot culture and a higher temperature than C. glauca.

Bulbs

Successional batches of bulbs may be brought into the forcing-pit as becomes needful. The stems of the dwarfer Tulips may be elongated by putting the pots under the staging for a few days and inverting other pots over them. The stems of the Van Thol and Pottebakker families can be considerably lengthened by following this practice. Iris tingitana and I. reticulata are very useful in pots, and both will endure a moderate amount of forcing.

The propagating pit

Cocoa-fibre is one of the best mediums fo rooting almost every kind of plant, and, this time, it ought to be freshened up in th propagating-case so that cuttings of Croton Dracænas, the variegated Ficus, and simil plants may be put in. These root ver quickly under suitable conditions, and th young plants will be ready for removal befor the case is required for other things. Seed ling Palms will be all the better of a shor sojourn in this case; when they are in sma pots the moist atmosphere, combined with th bottom-heat, pushing them on rapidl Spores of Ferns, too, sown in pans an covered with obscured glass, soon germinat in the propagating-case.

Sweet Peas in pots

A few dozen pots of Sweet Peas, whic will bloom, under glass, in April, are alway useful and attractive. Young plants sown i the beginning of September should now b put into their flowering pots. These may b 9 inches or 10 inches in diameter, and si plants are sufficient to make a good potful After potting is done the plants may b placed in a gentle heat for a week or two Afterwards they will be better in a restin Peach-house until growth again become active in spring. Very little water will b required from now until the turn of the year

Strawberries in pots

It is, perhaps, rather too early to star forcing Strawberries in pots, but if ripe frui be expected in March a batch can be cleane down and plunged in a bed of leaves in frame in which there is a little heat. Mean time, a little air may be left on day and night This will prevent the leaves from becomin unduly long-stemmed, and very little wate should be given till the days lengthen onc more.

Roses

Many object to shortening the shoots o Roses until the orthodox pruning tim arrives, but if there be any very long straggling shoots it is quite permissible, and indeed, beneficial, to shorten them quite two thirds of their length. If such shoots be lef they merely put a strain on the roots durin windy weather, and, moreover, they exhaus the roots. If Rose-planting be not now finished it is better to defer the remainder o the work until February.

Fruit garden

Suitable weather for pruning ought to b utilised to the full. When the pruning o stone fruit trees is completed, a dressing o lime or lime-rubble should be lightly forke in; as a matter of fact, a dressing of either of these is beneficial to every kind of frui tree. The spade ought never to be used over the roots of fruit trees. Everyone knows that deep rooting is an evil, but when the spade is employed over the roots the tree is forced to root downward.

Kitchen garden

Where the Apple-room is well stocked there will not be a present demand for Rhubarb but roots should now be placed in heat for the provision of stalks for Christmas and the New Year. Well-ripened crowns, in a moderate heat, will supply pickings in a fortnight or three weeks. This applies equally to Seakale. The usual routine work o digging, trenching, and wheeling manure will, of course, be pushed along during favourable weather, but it is folly to work upon soft, sodden quarters.

W. MCGUFFOG.

Mabie Gardens, Kirkcudbrightshire.

The white Martagon Lily

THIS is a charming Lily, which remains comparatively expensive, although perhaps not unduly so, but it is easily raised ·om seeds, a good proportion of the seedngs coming true to the parent. It appears) prefer at least partial shade, and the finest ·ants I know are growing at the base of ›me bushes, and the stems rise among the ›arse branches of these and the flowers ›how beautifully against the greenery of the ırubs. There are some inferior forms, but good one is very charming with its turncap owers of pure white of great substance and s if made of wax. It is a Lily no garden hould be without, and, so far as my in-›rmation goes, it has not yet been attacked y the fungus troubles which are so detri-ıental to many of our finest Lilies. Like he type and other varieties, it should be lanted about 4 inches deep. S. ARNOTT.

A garden of sweet smelling flowers

There are many gardens in respect of vhich few could find fault as to the effective-ıess of the display produced in summer, but ›oked at from another standpoint—viz., that f fragrance—they lack much, and I think his lack of sweet-smelling flowers in a gar-ıen is, in a great measure, due to omission, ıs there are so many flowering plants one nay have that combine the two qualities. Hardy plants and shrubs both furnish us with nany examples, whilst annuals provide not few. I submit that in attempting to grow ›lossoms specially for their fragrance we are ıot called upon to sacrifice beauty. Amongst ıardv plants, for example, what can rival a ›ed of Pinks in June, or, later on, a few ·lumps of Clove Carnations or tall white ·ilies that fill the garden with their perfume? Wallflowers in the spring can scarcely be im-›roved upon for sweetness, and surely in the ummer few will deny that charm as well as ragrance are present in patches of Mignon-ıtte, with Mathiola bicornis, the night-ıcented Stock, and Nicotiana affinis at the ·lose of day. Rockets give a faint and agree-ıble perfume, and the old Double White is ·till much appreciated, but what has hap-›ened to the fragrance of Musk we cannot ıay. Violas and Pansies, more often con-ıidered for the wealth of colour they give, must also be placed in the category with ›weet-smelling blossoms, and Iceland Poppies ınd Sweet Peas must also be so considered.

Lovers of flowers will scarcely need re-minding of the season for planting Roses, a ›ost in themselves of beauty and sweetness, ›or will they need to be reminded of the ·alue of the Penzance and common Sweet Brier. As a fragrant climber, too, what can ·ival the Woodbine, or, in the shady corner ›f the garden, the delicate fragrance of the Lily of the Valley. I have sometimes won-dered in the early spring, when bulbs are showing, why the claims of the sweetest of all early flowers, Iris reticulata (the Netted Iris), a beautiful variety having rich purple flower reticulated with gold, very hardy, are not oftener acknowledged, whose flowers, even in the depth of winter, appear when given the shelter of a frame or a wall border. It is always advisable in making provision for growing sweet-smelling flowers in a gar-den to plant them where the fragrance may be appreciated the most. For instance, beds of Stocks, Mignonette, and Heliotropes should be made up near to a house window. T.

Doronicums

These plants are very lavish with their flowers in spring and the blossoms are useful for cutting. People who are fond of Gaillardias, Starworts, Erigerons, etc., I often notice seem to overlook the Doronicums. I find D. caucasicum, D. pardalianches, and D. Harpur Crewe three good varieties. Doronicums can be had in bloom much earlier if potted and placed in the cool house. F. H.

Lilium Martagon album

FRUIT GARDEN

Training wall trees

FALLING leaves tell us the time is here for going through the routine of pruning and nailing or tying again. As the spring always brings more than its fair share of work, I always like to get as much of this done before Christmas as possible. I am not going to enter into the question as to which is the best system of training, whether fan, horizontal, palmette, which is a combination of the latter and vertical, or any other; doubtless all are good if rightly managed. But what I wish more especially to notice as being seasonable now is the way in which the branches are crowded together in many gardens where fan training is adopted. I have no doubt some of the debility and weakness observable in many trees are, if not due to over-crowding, at least aggravated by it. The leaves of wall trees should not quite meet between the branches, or, at any rate, they should not overlap each other if the wood is to be well ripened and the foliage strong and healthy. It is not easy, indeed it is hardly desirable, to lay down any hard-and-fast line as to the distance the branches should be trained from each other, as the vigour of different fruit trees varies, but 18 inches will not be too much for Pear trees trained horizontally, especially if the trees are expected to be long lived. Six inches will in most cases do for Peaches and Morello Cherries. Early-fruiting Cherries should have as much space as Pears. The main branches of Plums and Apricots if worked upon the mixed system of natural and artificial spurs, laying in a young branch where there is space, should be trained a considerable distance from each other, at least from 15 inches to 18 inches apart. The more space the tree is expected to cover, the wider apart should the branches be trained if the centre of the tree is to continue fertile. Old trees that are full of weakly wood might, by thinning and rearranging, be improved in health, and as soon as the leaves are down, before the cold weather sets in, is a good time to set about the work. G. F.

Lifting and transplanting fruit trees

As soon as weather conditions improve sufficiently to admit of the ground being trodden upon, lifting and transplanting will be engaging the attention of fruit-growers who make a point of always having a reserve of trees on hand from which to make good any vacancies. By that means the grower is able, by having partly-established trees at hand, not only to consult his own convenience in regard to the carrying out of the work, but to gain time, as such trees will reward him with a crop, if not at once, some time in advance of those procured from a nursery. It is, therefore, good policy, where space admits, to purchase young trees both for walls as well as for the open garden or orchard, and grow them on with the object already stated. After the abundant rainfall of late there should be no difficulty in obtaining a good ball, which is essential in the case of partly-established or trees of considerable size, as the soil particles should hold now well together and not give trouble, as ofttimes happens, when the soil is bordering on a dry condition.

Even then it is always wise to provide against accidents occurring to the "ball" by its breaking while a tree is being transferred from one part of the garden to another by passing a piece of stout canvas or a mat under it and then making it fast round the ball. This also renders the latter more easy of manipulation when lifting it. The holes for the reception of the trees should be prepared, as far as possible, in advance, and great care exercised in regard to the "grubbing" of any tree or trees to see that no roots are left behind in the soil, otherwise much trouble may result when they decay.

Whether fresh soil is required for placing about the roots will depend on the nature of the staple, but in any case it always pays, when it can be spared, to mix some new with the old for laying the roots in. The latter should be spread out straight in all directions and in a nearly level position, and last, but not least, is the precautionary measure of placing a mulch of short litter over the roots on the completion of the transplanting for the exclusion of frost.

Outdoor Vines

These should be pruned in the same manner as the indoor kinds as soon as the leaves have fallen. Many plants are ruined through allowing them to remain unpruned until spring. The borders should also be attended to and the surface soil removed and replaced by fresh loam where necessary. A mulch of decayed manure should be placed over the roots afterwards.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED, *Bouverie House, Fleet Street, London, E.C. 4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

VEGETABLES

Growing Tomatoes

Kindly tell me the best time to sow Tomato seed for the coming year; also what kind of soil the seed requires, what to do when the plants begin to grow, and what soil they require in their fruiting quarters. I have a heated glasshouse where I am going to grow them. The boxes are 18 inches deep by 12 inches broad. JOHN E. GORDON.

Banchory, N.B.

[The best time to sow the Tomato seed would be as early in January next as may be convenient, germinating it in a temperature of 60 degs. to 65 degs. The receptacles in which to sow the seed are what are termed 48's, or 5-inch pots. These to the required number should be well washed, dried, and then crocked about one-third of their depth. Have the crocks in two sizes, placing the smallest at the top, and cover either with a little Moss or a few flaky pieces of leaf-mould. Then take equal quantities of loam and leaf-mould, add some silver sand, mix all intimately, and then pass it through a fine sieve. Some of the siftings may be put over the crocks in lieu of Moss or leaf-mould if preferred. Fill the pots nearly to the rims with the mixture and make it moderately firm, and stand in the house for 24 hours for the soil to get warmed through before sowing the seed. Sow the seed thinly, it being more advantageous to do so, even if more pots are required, than to sow thickly and have a crop of spindly plants. Cover the seed lightly with fine soil, and water with a fine rosed watering-can. Cover the pots with squares of glass and stand them where they can be closely watched until germination takes place. Then remove the glass and stand the pots close up to the light, but where the seedlings will still have the benefit of warmth. Carefully attend to watering, using tepid water always, and as soon as the plants have made the first pair of true leaves they may be potted off. Get as many 3-inch pots as will be required, washed if they have been in use, or, if new, soaked for a few hours in water. While this is going on take equal quantities of loam and leaf-mould, add a little silver sand, mix well intimately, and then pass it through a ¼-inch sieve. Place this in the house so that it becomes warmed through. Put a crock or two in the bottom of each pot, with a piece of rough loam or flake of leaf-mould over these, and proceed to pot off the seedlings, placing one in each pot and with the seed leaves just above the level of the soil. Although the potting must be firmly done, great care should be taken not to bruise or damage the tender stems of the plants. Water and place them on a shelf close up to the light, and shade from the sun until they cease to flag. As they grow give them more space to prevent them becoming drawn. When the pots are well filled with roots, but before they become potbound, we think, in your case, it will be best to shift them into 6-inch pots. The compost this time will not, if the loam and leaf-mould are well chopped to pieces, need to be sifted. The proportions should be three parts loam and one part leaf-mould. Place the balls of the plants as low down in the pots as possible, make the compost firm, and place in each pot a light stick to which to tie the plants. When nicely rooted they will be ready for transplanting to the boxes, but be careful not to let them become potbound. This caution cannot be too strongly emphasised, as, if it occurs, the plants receive a check from which they do not recover.

Well drain the boxes and cover the drainage with flaky pieces of loam. Then fill them a little more than two-thirds full of the following mixture, leaving a space of from 4 inches to 5 inches clear at the top for top-dressings, mulchings, and for watering:—To three barrowloads of good turfy loam, well chopped to pieces, add one of well-decayed manure or old Mushroom dung, about a peck of lime-rubbish broken fine, and half a bushel of wood-ashes, or a bushel of burnt soil if wood-ashes are not available. Turn the whole thoroughly three times to mix the ingredients intimately, then place it in the boxes and make it very firm by ramming it with a stout, blunt-ended potting-stick. Defer planting until the compost has got warm. If the plants are to be confined to single stems they may stand 15 inches apart. Place a stake reaching from the boxes to the trellis to tie the plants to. Both potting and planting should take place in the house itself and not outside. Settle them in place with tepid water, in which condition water should at all times be used.

The foregoing advice and instructions are given on the assumption you wish to make an early start. If this is not the case, February will be time enough to make a beginning. In this event use 4-inch pots for the potting of the seedlings, and as soon as well rooted transfer them at once to the boxes. Four good varieties of Tomatoes are Sunrise, Best of All, Princess of Wales, and Bide's Recruit. For a very early crop Winter Beauty is excellent. Of the four first-mentioned, the third is, perhaps, the earliest, but under good management all will yield fruit throughout the season.]

Black leg of Potato

I had an attack of Black Leg of Potato in my garden this season. Will the land be infested with the organism? If so, could I treat it with anything which would enable me to grow Potatoes next season? SPUD.

[We do not think you need worry about your soil being infested after an attack of Black Leg, that is, if you used reasonable care in dealing with the outbreak. It has been stated that the organism lives in the soil during the winter, but we think this has never been proved. On the other hand, the disease is known to over-winter in the tubers of a plant that has been attacked fairly late in the season. If these affected tubers were left in the soil some of them would give rise to diseased plants, which would, in turn, prove a source of infection to healthy plants during the growing season. In the ser then, that your land may contain so diseased self-sets, it may be infected. If y lifted and destroyed the Black Leg plants they appeared we do not think you will troubled with the disease, provided you clean seed next spring.]

FRUIT

Renovating a Vine border

(W. W.).—There is nothing better th fibrous loam with which to renovate an Vine border, with horse droppings mixe one part in five, also some lime-rubble, bui ballast, and bone-meal, or Vine manure. F move first as much of the old soil as you c conveniently do without damaging the roo and work the new soil among them. T loam would be better for being stacked ju long enough to kill the grass, but with t fibre still fresh. Tread the soil firmly abo the roots as it is added in layers, and try get the roots near the surface of the border.

Root-pruning fruit-trees

(W. W.).—Any time from now until ne March is a suitable time for root-prunin fruit trees. In root-pruning, the first thin to know is the age and size of the tree. Th larger the tree the farther away from th bole must a trench be cut in a circular semi-circular manner, and wide enough allow you to go deeply. If your trees gro very strong you will find large thong-lik roots striking downward, and the longer the continue to grow the stronger do the trees b come, unless overtaken by canker. Searc well beneath the tree and cut through eve root that takes a downward course. A di tance of 18 inches from the bole would be reasonable one for trees up to 15 year growth, going wider for older trees. In dea ing with long, fibreless roots, cut off the en smooth with a sharp knife, and then mak V-shaped notches on the upper sides. Th will cause roots to form in due time. Fo stone fruits add lime when you fill in th trench, and be sure to make the soil fir under the ball of earth, or, in settling dow it may rupture some of the roots. Do n give any manure; the strength of your tre clearly shows it is not needed. Water we next summer if there is a dry period, or yo will find your trees will suffer. Apply som stable litter to the surface to keep out th sun and air.

TREES AND SHRUBS

Pruning Lavender

Having pruned a Lavender hedge in Octo ber, it was with some dismay that I read i your issue of October 2nd, on page 604, unde the heading "Cutting Lavender Back," tha any cutting back should be done immediatel after flowering, or the second week i April. In your issue of November 20th, how ever, I read that (page 708) "On no accoun should the bushes be touched in the spring, a steady growth must be maintained through out early summer in order to ensure a goo crop of flowers." I should be very muc obliged if you would reconcile the two state ments. ANNIE C. GLADSTONE.

[You were much too late in cutting bac your Lavender, as no growth would be mad after that date. The article referred t on page 708 is quite correct respecting th cutting back immediately after blooming and plants so treated have never been harme by frosts to our knowledge. This cuttin back should not be done later than the firs week in September. With the statement i the same article that Lavender bushes shoul on no account be touched in spring, we do no agree, having on many occasions carried ou severe pruning of both large and small hedge

e second week in April, the plants regain-
g their compact character and flowering
eely the same year. We have, however,
nown quite large hedges to be destroyed
rough severe and careless cutting back
uring the winter. In the event of hard
eather we advise you to give a protec-
ve covering, such as straw or bracken,
your bushes which were cut back in Octo-
r, but it must not prevent a certain amount
light and air reaching the plants.]

onifers for a sanatorium

I would be greatly interested to know
hich are the best Pine trees to plant in the
ounds of a consumption hospital? I am
ot well up in the names, and would like to
now those which have such a lovely scent
ter rain? I have gone round from
e tree to another squeezing the soft
een tips and trying to find out which is the
st. I feel convinced it is those that give
it a sweet scent or resinous odour that
ould be beneficial for the chests of con-
mptives. S. A. M.

[In reply to our correspondent's inquiry as
the most suitable Conifers for planting in
e grounds of a sanatorium, we suggest the
llowing :—

PINUS SYLVESTRIS. Scots Pine.
P. INSIGNIS. Monterey Pine.
*THUYA PLICATA. American Arbor Vitæ.
*ABIES GRANDIS. Giant Fir.
*PSEUDOTSUGA DOUGLASI. Douglas Fir.
*CUPRESSUS GOVENIANA.
C. MACROCARPA.

The pines might be planted in groups of
ree or five, and would form a good shelter
r the others. Care should be taken not to
owd them. Those marked with a * emit
a aromatic odour, especially when the foli-
ge is bruised.

PICEA PUNGENS VAR. KOSTERI (not Abies)
very ornamental in a young state, but is
ot to lose its leaves and get scraggy as it
ows older.]

lbizzia Nemu

Can you give me any information as to
is shrub which I have just received from
Chenault's nursery at Orleans.
A. M. A. H. ROGERS.

[The Albizzias are unarmed trees, with
pinnate leaves (dedicated to the Albizzi, a
ble Italian family, one of whom is said to
ve introduced this genus into European
ltivation). We have not met with this tree
der the name you give, but A. Julibrissin
urazzini from Asia and Africa, also China
d other countries, grows from 30 feet to
feet high in favoured localities, where its
ndsomely divided leaves are most attrac-
ve during the summer. It requires the pro-
ction of a wall in Sussex. The leaves are
ch from 12 inches to 18 inches long, and
lf as wide. The flowers have rosy red
amens, in tassel-like clusters at the end of
e slender naked peduncles, and these are
llowed by constricted pods of seeds, each
out 5 inches in length. This tree is fre-
ently cultivated in the Southern American
ates.]

urning Butchers' Broom scarlet for Christmas decoration

" Constant Reader " would like to know
Butchers' Broom is bleached in some
emical before it is dyed scarlet for Christ-
as decorations. What is the chemical and
e used? It makes a good substitute when
ere are no Holly berries. It ruins Honesty
dye it, also Pampas Grass, and it com-
etely spoils their charm.

[" Constant Reader " inquires for method
dyeing Ruscus Butchers' Broom, which
und about Christmas time may be seen,
generally a brilliant scarlet, in many florists' shops. It is, of course, possible to prepare this at home, but probably the vessels required to take sprays of any size put it rather out of reach of the home worker. To get scarlet, or any other brilliant colour, the natural green of the foliage must be bleached out, and this requires strong chemical baths and necessarily large vessels. The Ruscus must be cut green and dried, and then immersed in a strong solution of chloride of lime in water for a period varying according to the strength of solution. Try for one hour, withdraw, and plunge in a 5 per cent. acid solution (muriatic acid, spirits of salts), say half pint acid to 5 quarts water. This, it is obvious, must not be put into a metal container, enamelled, galvanised, or otherwise, but into glazed pottery of some description, or else a wooden bucket. This acid bath liberates the chlorine that the soaking in chloride has carried into the fibre of the Ruscus, and it is the activity of the chlorine that bleaches. It may, however, require several immersions in both solutions before it is perfectly bleached, and care must also be exercised that it is not left in too strong solutions or for too long a period, otherwise the fibre may be destroyed or weakened, and the liberation of chlorine gas necessitates the work being done in the open air or open shed. When completely bleached, soak for hours in changes of clean water, to remove all traces of bleaching agents, which, if left in the material (and it takes a lot of getting out), would have an equally bleaching effect on the dye subsequently applied. Pure aniline dyes dissolved in a suitable quantity of hot water may then be used to give the required colour; the brilliant scarlet requires a very strong bath, and a little acetic acid in the bath will fix. " Constant Reader " avers that it " ruins " Honesty and Pampas Grass to dye them. If she refers to its unnatural appearance after dyeing, surely this equally applies to Ruscus! A delicate tint only on either of these is quite effective, and is incomparably easier and less costly, and, provided the harvesting of the Honesty and Pampas Grass has been effected when they are at their best and brightest, nothing but the light dye bath is required. The bleaching process described is not such as would be employed nowadays in quantity work in a factory. Modern factory methods and materials used are, however, quite unsuited to home working.—FREDK. G. WOOD.]

ROSES

Making a Rose bed

I am making a Rose bed in my garden, which is in a fairly open situation in the middle of the town. Shall be glad if you can advise me what standard and bush Roses would be most suitable, and when should they be planted? ORIEL.

[You have commenced well by choosing a fairly open situation for your proposed Rose bed on your lawn. You should now ascertain the class of soil you have to deal with. If this is of a deep loamy nature, you will have little to do in preparation other than trenching two feet deep and incorporating some farmyard manure in the lower spit. If the soil is of a light sandy nature, it is advisable to mix a fair quantity of clay with it, or, better still, remove the present soil and make up the bed with fresh loam of a heavy nature, adding manure deep enough so that the roots will not come in direct contact with it when planting. If your lawn is apt to become waterlogged during winter the bed should be drained by placing a layer of broken bricks or other rough material in the bottom, and raise the bed 9 inches in the centre above the level. The following two dozen bush Roses we can recommend for garden decoration :—Betty Uprichard, Los Angeles, Mrs. Henry Morse, Lady Pirrie, Mme. Butterfly, General McArthur, Hugh Dickson, Frau Karl Druschki (Snow Queen), Hadley, Mrs. Wemyss Quinn, Margaret Dickson Hamill, Christine, Golden Ophelia, Gorgeous, Mme. Edouard Herriott, Lady Hillingdon, Betty, Golden Emblem, Mrs. Henry Bowles, Sunstar, The Queen Alexandra, Una Wallace, and Mme. Abel Chatenay. A dozen good reliable standards for garden decoration are :—General McArthur, George Dickson, Mme. Butterfly, Mme. Edouard Herriott, Hadley, Christine, Frau Karl Druschki, Independence Day, Los Angeles, Mrs. Charles Lamplough, Golden Emblem, and Courtney Page. Planting may be done at any time up till the end of March, when the weather is open and the ground in a fit condition to tread upon. Bush Roses should be planted from 18 inches to 2 feet apart and standards 4 feet. When planting, it is essential to tread the soil firm round the roots, and in the case of bush Roses the union should be buried just below the surface of the soil. Plant standards 4 inches deep, and place a stout stake to each tree. Mulch the bed with manure, and prune hard back early in April.]

FLOWER GARDEN

About Gladioli corms

My Gladioli were lifted at the proper time and are now quite dry for storing in cotton bags to hang up. Most of them have increased by one or two, or even three. How should these be taken off? Should the disc beneath its fine roots be cut through so as to leave a portion attached to each corm? I have 300 of the parents, so it will be a big job and a tough one. QUEENIE.

[If, as you say, the corms are quite dry, you should find that the old corm is easily detached from the new one or more formed above it. The old corm and the outer rough skin may now be removed, and the new ones stored away as you suggest. If the stock of certain varieties is to be increased, the little corms should be saved and planted out of doors next spring.]

Chrysanthemum cuttings

(Suburbia).—The cuttings may be taken within a week or so of cutting down the plants. See reply to S. E., issue Dec. 11, page 751, also the leading article " Preparing Chrysanthemums for Cuttings " in that issue.

Chrysanthemums failing

(Hortus).—You do not appear to have been fortunate in the purchase of leggy plants with few roots so late in spring as April, and this may have had something to do with the time crown buds formed. These are flower buds which come at varying times in summer in the centre of a cluster of growing leaf points on the main stems. Evidently the buds on your plants were set generally too late, causing so many blooms to come open-eyed. From end of July to end of following month is a suitable period for bud selection. Try an earlier start next year with cuttings from the old plants.

Chrysanthemum Mrs. W. Turner failing

(H. Holloway).—This variety is addicted to splitting of bloom stem, the more so when buds are set early. The flower seems so slow in developing that sap of a vigorous plant cannot be taken up, particularly in damp weather. You might try rooting the cuttings early and selecting second crown buds, for the variety usually gives these in order of growth before the last, or terminal,

ones show. Anyway, the bloom stem in such case would not be so stout, and the size and shape of subsequent flowers would not be likely to suffer.

Water Lilies under trees

(H. H.).—These love the sunshine, and we do not think they would bloom—certainly not freely—in the position you suggest. We have had them flourishing beneath the overhanging branches of deciduous trees, where they flower very well, but one side is entirely open to air and sunshine. If your water is not more than 2 feet deep the Cape Pond Flower (Aponogeton distachyon), with fragrant white flowers, would succeed and bloom freely in such a position. Is it impossible to let some light and sunshine in upon the water by the removal of a tree or two?

MISCELLANEOUS

Climbing plants in pots

(Scot).—All the plants should be shaken out with the possible exception of the Garrya, which does not transplant well. If it is badly potbound we would nevertheless wash away the soil and spread out the roots very carefully. You will be quite safe in spreading out the remainder as you suggest.

Plants for name and description

(Ayr).—The shrubs and berries sent for identification are: (1) Cupressus Lawsoniana Allumi. This is an erect growing variety of this group, and cannot be termed a dwarf. (2) Juniper communis var. nana, syn. alpina. This is the alpine form of the Common Juniper, but it alters its form according to climatic conditions, and will at times revert to the ordinary J. communis under moist lowland conditions. (3) Euonymus, which variety it is impossible to determine. (4) Berries. The fruits sent appear to be those of the Common Arum, known as Cuckoo-Pint, or Lords-and-Ladies. This is found growing wild in some parts of England and Ireland, but seldom in Scotland, but is often found under cultivation in old gardens. It would have been advisable to have sent the rootstock of this when sending the fruits for identification.

Carnation maggot

I enclose two Carnation shoots; each has been attacked by some grub that you will find in their stems. I shall be much obliged if you will name this larva and adult through your columns, also a preventive, and if it generally attacks Carnations.

R. C.

[Your Carnation shoots are attacked by the larval stage of the Carnation maggot, Hylemzia nigrescens. This pest is a near relative to the Wheat Bulb Fly, H. coaretata. The onion and the cabbage root maggots are other pests which are somewhat similar in appearance, and are also nearly related. The perfect insect, or fly stage, is dark-brown or black in colour; it is hairy, and has two wings. The eggs are laid on the leaves of the Carnation, and the maggots enter the stems and feed on the pith of the shoot. It is believed that the eggs are laid on the unexpanded leaves of the shoots, and the maggots often feed on or in these leaves before entering the shoots. The maggot is cylindrical, it is cut short at the tail end, and tapers to the head end. At the blunt or tail end you will find a number of appendages present, while at the head end it has a horny, black structure which serves as jaws. The maggots are very active, considering they have no legs, and move about the plant freely in search of food. The pest causes more trouble on border Carnations and Pinks than on indoor Carnations. We should advise you to go carefully over your plants, and remove and burn all the infected shoots, making sure that you cut the shoots deep enough to remove the maggots. If any of the maggots have reached the chrysalis stage, you might try the effect of a good soil insecticide. The adult flies would be deterred from egg laying on your plants if you dressed your Carnation bed with creosote. You should mix 1 oz. of creosote with 3 lbs. of dry garden soil, applied at the rate of 1 oz. per square yard. The creosote should be well mixed with the soil and left 24 hours, covered with a sack, before it is applied. You would have to give several dressings at intervals of 14 days, during August and September, during which period the flies are on the wing. Syringing the foliage with anything distasteful to the flies would help you to keep the flies away. If you would be kind enough to send us some more specimens of the pest we should be obliged, as we should like to breed some of them through to the fly stage for use in reference work. We do not consider the pest a common one on Carnations.]

NAMES OF PLANTS

A. F. W. T., Guildford.—Thuya orientalis (Chinese Arbor-Vitæ).

G. D. R.—Euonymus patens. It is closely allied to E. japonicus.

Miss H. M. Logan Home.—The plant sent is Primula Mrs. McGillveray, a Scotch or possibly an Irish name. Where the plant originated we do not know. The variety was received last year from the North, and we have been able to compare it. It is, as you say, very early to flower.

Lady Lilian Digby.—Pyracantha coccinea (the common Fire Thorn), which is very gay with its orange-coloured berries at this season.

G. E. F., Dorset.—1, Atriplex Halimus; 2, Elæagnus reflexa aurea; 2, Tamarix gallica. All are shrubs that succeed near the seashore.

L. S., Dublin.—Chrysanthemums: 1, Romance (yellow incurved); 2, Arthur Holden; 3, Frances Rowe; 4, Souvenir d'Un petit Ami. *Re* Fairy Roses. These are derived from Rosa indica var. minima, a very dwarf form of Chinese origin. The original had pale pink flowers, semi-double, and about 1 inch across. It was figured in the Botanical Register, t. 538, as R. Lawrenceana (*Sweet*). This is doubtless one of the varieties you have in mind. Miniature or Fairy Roses are suitable for rock gardens.

PUBLICATION RECEIVED

Whitaker's Almanack, 1927. Complete edition. Office: 12, Warwick Lane, Paternoster Row. Price, 6s. net.

Obituary

DR. NYMAN LOWER.

Those who grow and love the Daffodil, and watch its progress, and also all who knew the man, will sorrow at the untimely death of Dr. Nyman Lower, which took place at his new home in Cornwall on November 20th. Dr. Lower lived and carried on his Daffodil breeding for many years at Presteign, in Radnorshire, and had only recently removed to Cornwall, where great hopes were entertained that his health, which had recently caused grave anxiety, would be restored. But, unhappily, this was not to be. His passing, at a comparatively early age, and in the fulness of his work, is a calamity which cannot be well measured.

A fine example of the superb seedlings he raised was displayed in his beautiful exhibit at the Birmingham Show of the Midland Daffodil Society in 1925, when a special deputation from the Royal Horticultural Society awarded him their well-deserved gold medal. His taste was cultured and refined to a remarkable degree, and among many beautiful things he raised I may just nam the white Trumpet Daffodil, Mrs. N. (Lower, and the unique and charming Leeds Beauty of Radnor. These will remain las ing memorials to the name, not only of genius, which Dr. Lower was, but to modest, kindly, and lovable personality, suc as was his.

ORNATUS.

Reading and District Gardeners Association

The usual fortnightly meeting was held i the Abbey Hall on Monday evening, Decem ber 6th. Through illness the lecturer ap pointed for the evening, Mr. E. J. Hende son, Dell Park Gardens, Englefield Green was unable to be present, but fortunately Mr A. J. Cobb, Lecturer in Horticulture, Read ing University, was able to step into th breach, and gave a most practical and in structive discourse on a "Review of th Fruit Crop for 1926." He said that th apple crop in particular was the worst in th memory of all present, and then went on t set forth what was in his opinion some of th causes of this disastrous failure. The point emphasised were the production of fruit buds spring weather, diseases and insect pests and the nutrition of trees by watering an manuring. These were exceedingly we reasoned out, and comparisons drawn fro the seasons of 1921 to 1926, and many valu able suggestions made. A lengthy and an mated discussion followed, at the close o which Mr. Townsend proposed that a heart vote of thanks be tendered to Mr. Cobb fo so kindly and so ably filling the gap at suc a short notice, and for giving such a valuabl and opportune lecture.

In the competition for three dishes of fru there were only four entries, thus showin the scarcity of English fruit this season. Th first prize was gained by Mr. Kitt, the Ga dens, Wasing Place, Newbury; the secon by Mr. C. J. Howlett, The Yews, Earley and the third by Mr. C. Runge, Penlee, S Andrew's Road, Caversham. In the non competitive section there were several fin exhibits. A first class certificate wa granted to Mr. H. Loader (foreman), Alder maston Court Gardens, for several magnif cent blooms of Japanese Chrysanthemums, in cluding Louise Pockett, W. Rigby, Mrs. G Drabble, Majestic, and Mrs. R. C. Pulling An award of merit went to Mr. F. J. Gree for several vases of fine decorative Chrysan themums; also Mr. A. E. Kirby, Reading for three dishes of Potatoes. Considerin the shortage of the Apple crop, Mr. J. He bert Benyon, Englefield (gardener, Mr. A B. Wadds), staged a remarkably fine colle tion of twenty-six varieties, especially goo being Grenadier, Arthur Turner, Warner King, Royal Jubilee, Barnack Beauty, an Newton Wonder. Mr. A. Terry, Hawthor Cottage, Earley, showed Potatoes an Onions.

LATE NOTE

A constant reminder of friendship

There is one Christmas gift that is we come to all garden lovers, and that is a year subscription to GARDENING ILLUSTRATE Readers who are at a loss to know what purchase their gardening friends for Chris mas would do well to follow this suggestio Such a present would be a useful and consta reminder of friendship throughout the con ing year. All that is necessary is for th donor to send us the address of his or he friend, with a subscription for 13s., and w will see that GARDENING ILLUSTRATED stamped, addressed, and posted each wee for the whole year.

GARDENING ILLUSTRATED

o. 2494—Vol. XLVIII. DECEMBER 25, 1926 [Prepaid Annual Subscription to any part of the World, 13/-

Founded by W. Robinson, Author of "The English Flower Garden"

INDEX—Illustrations in Capitals

HIEVEMENTS OF 'HE YEAR 774
drosace geranii-olia 773
ole Bismarck... ... 771
ole Lane's Prince lbert 771
ole trees, bush, eatment of 780
oles, diseased ... 780
CHERRIES, WINTER (PHYSALIS) 782
Chrysanthemums at Christmas 771
Chrysanthemums, the newest 772
Cotyledon simplicifolius 772
CYPRIPEDIUM INSIGNE 779
Duple-Joint, the 781
FLORAL DECORATION OF CHURCHES 769
Fruit, name of 771
Fruit trees be root-pruned? should ... 770
Garden, kitchen, manuring a 781
Lavatera Olbia 781
Lime, slaked 781
Lupins diseased ... 781
Lycaste Skinneri ... 779
MISTLETOE, MYSTERIOUS 772
MR. W. P. THOMSON, THE RETIREMENT OF 770
Peas, dwarf culinary 779
Peas, germination of seed 780
Pernettyas not fruiting 770
Plants at Vincent Square, noteworthy 771
Primula Mrs. MacGillavry 771
Raoulia australis ... 772
Reading and District Gardeners' Association 782
Register of growers of certified stocks of Potatoes in 1926 ... 780
R.H.S. Gardener's Diary for 1927 770
Roses, red spider on... 781
Roses to plant with Mabel Morse 781
ROYAL HORTICULTURAL SOCIETY 773
Stachys lanata 782
Sternbergia lutea ... 772
TREES OF CAWDOR, THE OLD 776

Floral Decoration of Churches

'HE old heavy masses of commonplace Evergreen have given place to light festoons or delicate tracery. Well-berried lly, of course, we must have, and Ivy, h its jet-black clusters of berries and long ceful sprays. Other Evergreens that in iter give our gardens such a snug look we st also have, and ecially those that bear ries. Amongst flowers, ite ones predominate, h just a sprinkling of liant colour to give life the whole. On enter-, the first thing that acts attention in most rches is the font; this nostly decorated at the with Ferns, Lycos, and dwarf foliage its plunged in fresh n Moss, the other imentations being nter Cherries ysalis), pods of our tive Gladwyn (Iris dissima), some brilt berried Solanums, te and red Primulas, te and red Tulips, when possible, that t appropriate and frait of bulbs, the early ian Hyacinth. The lows are generally oned with very smalled Ivy, and on the low-sills a bed of green Moss makes pital groundwork for lowers. The columns rches are lightly athed with long s of Ivy, as are also candelabra, and varidevices in variegated and other handfoliage surround the that are placed on walls. The pulpit reading-desk are ally prettily deed with wreaths of the very finestd Conifers, Box, or associated with dried flowers, the Chinnchees (Ornithogalum im), or Everlastings designs in brilliant berries. At the base plants of dwarf habit are used with good effect, notably Ferns and other fine-foliaged plants intermixed with white and red flowering plants. But it is on the altar and reredos that we find the most lavish display of flower, and although some still adhere to formal gilt stands and flower holders with water tubes for the stalks, many have adopted more natural styles of arrangement, consisting of zinc or tin troughs for holding water, in which flowers and foliage and good-sized branches of hardy shrubs or Fern fronds are inserted, the tins being hidden by flakes of fresh green Moss. Bold and striking arrangements consist of Arum Lilies associated with their own foliage, late-flowering Japanese Chrysanthemums, Poinsettias, and Amaryllises. In large decorations in which plants are employed very effectively Palms are most useful, especially tall graceful kinds, such as Seaforthia elegans and Cocos Weddelliana. Amongst hardy flowers white Christmas Roses might be employed with advantage. In mild seasons and in sheltered localities they are sometimes produced in profusion, and if protected with a handglass, their blooms may be had untarnished by the weather. If there is one flower better suited than another for church decoration, it is certainly the Christmas Rose (the Helleborus niger), and especially that form of it well named maximus, and sometimes called the Scotch variety, and altifolius. The flowers are produced in twos and threes on stout, erect stems fully 8 inches long; they measure 4 inches across at least when fully expanded, and, rising well above the soil, in addition to the natural protection afforded by the autumnal leaves lying on the surface of the ground, the broad dainty cups of lovely whiteness remain unsullied by even a speck of the closely adjacent soil, though quite unprotected with cloche or handlight. The flowers do not all expand at one time.

Winter Cherries (Physalis) are useful for the decoration of rooms during the winter, and come in very handy for church decoration (See page 770)

NOTES OF THE WEEK

Winter Cherries (Physalis)

THE Winter Cherries delight in a warm border, and should not be planted in any other position, as, if the winter is severe, they often die off when planted on exposed cold ground. There are several varieties, all differing but slightly, some of them being stronger growers than the others. Of the varieties the oldest is P. Alkekengi, that known as P. Franchetti (page 769) being considered a form of this, with larger and more deeply-coloured calyces, the most recent being P. Bunyardi, a strong-growing hybrid form. Mistakes are often made in planting too thickly and in too shaded a position. On good ground the plants grow to a larger size, and in this way the evil effects of overcrowding are clear. From 18 inches to 2 feet is quite close enough and the position a sunny one. The roots during the summer are benefited by a good mulch of rotten manure and well soaked several times with liquid-manure. After standing a season the growths should be well thinned, removing all the weakest. A well-known gardener of our acquaintance used to lift his plants every season, putting them into a cold frame during the winter, starting them into growth in the spring, and, when well hardened off, planting out in May. They are easily raised from seed.

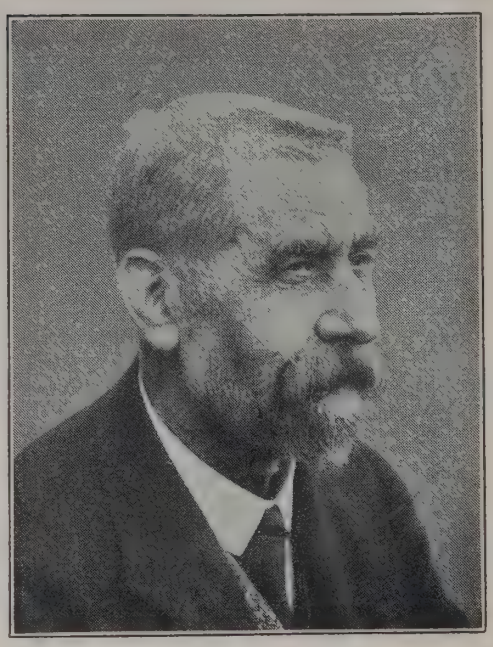
R.H.S. Gardeners' Diary for 1927

This well known pocket diary, published for the Royal Horticultural Society by Messrs. Charles Letts and Co., is invaluable to all interested in the garden. Many of our readers, both amateur and professional, regard this handy little diary as the most useful of all pocket books. It may be obtained from the offices of the Royal Horticultural Society, Vincent Square, Westminster, price, 2s. 2d. post free.

The retirement of Mr. W. P. Thomson

AT the close of the year Mr. W. P. Thomson, who is now in his 78th year, is retiring from our editorial staff, having served this journal with distinction for twenty-six years. Mr. Thomson comes of a gardening family, his father and two brothers all being gardeners.

The following is a brief outline of his gardening career:—He was born on September 27th, 1849, at Easter Skene—an estate about eight miles to the north of Aberdeen, where his father was gardener. At the age of eighteen years he was apprenticed to Mr. John Clark, who was then gardener at Brodie Castle. Leaving these famous gardens he went to Fyvie Castle as outside foreman, and from there he passed to Linkfield House Gardens, Musselburgh. In 1874 he joined the staff of the Royal Horticultural Society at the old Chiswick Gardens as clerk to Mr. Barron, the superintendent of those days. In 1887 his association with Mr. William Robinson commenced, and he was sub-editor of "The Garden" from that year to 1900, when he took over the editorship of GARDENING ILLUSTRATED, which was founded on March 1st, 1879. For many years he has been on the executive committee of the Royal Gardeners' Orphan Fund, and in February of this year he was honoured with the Award of the Veitch Memorial Medal in gold for his contributions to horticultural journalism.



Mr. W. P. Thomson

Mr. Thomson will continue to live at Chiswick, where he has lived since 1874, and he will look forward to attending the Royal Horticultural Society's meetings, of which he has been on the Floral Committee for over 20 years. Even in advanced years his interest circles around horticulture, as it has done all his life.

That Mr. Thomson may long be spared to enjoy better health in his well-earned retirement is the sincere wish of all readers, colleagues, and a wide circle of gardening friends.

Correspondence

Contributions to these columns are invited, but the Editor is not responsible for the views expressed by correspondents.

Pernettyas not fruiting

WITH reference to your reply to Mr. Barton on p. 757, it appears evident that the reason for his Pernettyas not berrying is the soil or situation in which they are now planted, since the plants berried freely in his former garden. But in my garden I have two plants, supplied at different times by different dealers. Both are in the same bed under the same conditions of soil and aspect. One berries very freely, the other not at all. The one which fails is obviously a different variety, if not species. It appears to expend all its energy in running widely at the roots, and though it produces a few flowers, it does not set any fruit. I have tried cutting off all the runners this year and await the result, though I do not anticipate much success.

A. H. WOLLEY-DOD.

—— In your issue of the 18th inst., page 757, Mr. Harry S. Barton asks for advice on growing above, and Mr. Markham gives very sound advice on the general cultivation. I suggest, however, that probably Mr. Barton's Pernettyas failing to produce berries is due to all his plants being female, and I feel sure that if he plants a male plant in close proximity to his present ones he will get over his difficulty. I have found this absolutely necessary, and have at present both red and white varieties covered with fruit.

BELFAST.

Should Fruit Trees be Root-pruned?

The friendly exchange of garden practic has always a fresh interest, especially to th amateur gardeners, particularly when suc opinions are based upon experience or pe sonal observations. But surely, as practic craftsmen—professional or amateur—w may express our opinions in a friend manner without fear of giving or receivir hard knocks, as suggested by your corr spondent.

The following personal experience of roo pruning is to me most remarkable, at th same time remembering "That one swallo does not make a summer." Likewise, ther fore, this root-pruning experience does n establish the value, or desirability, of th system generally.

Ten years ago I rented a small plot ground for the purpose of vegetable cultu and experimental manurial trials upon Irise This plot was part of a larger field, to a appearances "virgin soil."

Upon the south side there was an old Ja gonelle Pear tree, probably seventy or eigh years old. My neighbour claimed—a rightly so—his share of the Pears; f twelve Pears hung upon his side of the fenc Before the root-pruning, the annual crop w from eighteen to twenty Pears.

We commenced digging and trenching the early part of the year, cutting throu many long roots, probably 20 feet to feet long. These were naked roots, fr from any feeder or fibrous roots. There we no trees near to this old Pear tree, ther fore there was no mistake that the roots we from this tree.

It is well to state that this work was ca ried out on my side of the fence only; t other half of the roots was under the s upon my neighbour's field.

Fresh soil and plenty of very old stal manure were incorporated with the old so while near, and among the roots, and espe ally underneath the tree—we used the fo so as not to damage the remaining roots we gave a heavy dressing.

In past years this old Pear tree w always a picture of great beauty during t spring flowering season, but, as stated, t crop was most unsatisfactory.

The following season, after root-prunin we were rewarded by hundreds of larg rich luscious Pears. But, passing stran they were mostly upon my side of the tr very few grew upon the unpruned side of neighbour's.

One would naturally have expected that circulatory system would have proved be ficial to the whole of the tree. But, stated, this was not so.

The following year, and each year sin excepting in poor fruiting seasons, there always been a very large crop of Pears up the whole of the tree. MURALIS

—— I have enjoyed the fighting over t question. "A Scottish Gardener" has t roughly enjoyed himself, too! Now, I'm border man—on this side—and do not w to "tilt" against my Scottish friend, w ever he is. But perhaps my experience m be interesting.

Northern soil conditions are not to be c trasted with those south of the West Ridi We seldom have any depth of good s except in such districts as Corbridge, or (s Carlisle. I have had experience of gard ing in Northumberland, Cumberland, a Yorkshire, and visited many other places, my experience is not local.

I remember one by-place near Carl where a gardener friend was very upset to the digging of a deep drain right in fr

f his grand wall (Pear) trees—very tall—gainst the house. I told him the old Greek tory of how a gardener lay a dying sur-ounded by his lazy sons. The old man nformed them that the fortune he was leav-ng them was buried in the orchard beneath tree. After the funeral the sons dug under very tree but found no money or other valu-bles. Luckily the trees were all put back gain, and, as the father expected, in due ourse grand crops were gathered. The lazy ons had at least learnt the benefit of honest ail.

Well, the drain was dug at about 3 feet f the wall, and, except that he used his nife after the workmen had done their orst, the gardener awaited impatiently the esults. Where there had been excess of rowth and little or no fruit, there came amper crops. Needless to say the filling in f the drain hole was supervised by the gar-ener.

Then there is the historical advice regard-g the barren Fig tree. "Dig round about in a circle" is the Greek, and then, having ot-pruned it, dung it, that is, hand-feed it. 'riend C. A. Jardine—true to his etymo-gical ancestry, French jardin—a garden—quite right about a balanced all-round et.)

I have shifted Allington Pippin eight years d with success, also Worcester Pippin, also ramley's. The trees are there to see. I member Duchess of Oldenburg belonging a gardener friend being "hacked," and t, as with Mr. Pearson, it succeeded. That ee is still standing at Corbridge, so far as know. I was asked two years ago to advise titled person about some 100 grand pyra-id and bush trees which had been planted rly in the Great War by another titled per-n, then the tenant. Lifting was out of the uestion, so I advised cutting trenches up ch side of the trees, 3 feet away. The xt year the same treatment, at right gles. Result: Success. The job was pro-rly done, of course.

I have had Seedling Apples under my ob-rvation for nearly 20 years, and it was ly constant lifting, *i.e.*, root-pruning, hich made them bear well in 12 years. The ees are here to be seen.

One veteran gardener up North practises e lifting of Gooseberries annually. It saves uning them!

My advice is to carefully select the trees itable to your soil conditions. For example, arly Victoria, Golden Spire, James Grieve, d Lane's Prince Albert are suitable trees plant. They do not need root-pruning, d are ideal for garden work. I have not uched on commercial planting. Now, Scottish Gardener," I'm not arguing, I'm lking!

J. BERNARD HALL.

Knaresborough.

—— I have been fruit growing all my e, and have had the management of all rts of fruit trees for over 30 years. During is time I have been called upon to give lvice on fruit trees that have made too uch growth and no fruit. There are more uit trees making too much growth and not uiting through wrong pruning. Then there e trees that want root-pruning. If trees e planted right and pruned right we should ot hear so much about root-pruning. A ee is more often wrong in the top than it at its roots. How often have we seen ople, Pear, and Plum trees pruned year ter year and making strong growths and fruit? Now we let the trees go for a year ithout pruning, only thinning them a little, d in nearly every case we find them form-g fruit buds. By careful pruning and thin-ng these trees bear good crops again with-t being root-pruned. Now, let us take an ople or Pear tree that has been making strong growth. We take off the tops and regraft them. With care we soon have a good fruitful tree, yet the roots have not been pruned. Look at the fine old Apple and Pear trees we see in orchards, carrying good crops of fruit, and all they get is a little thinning out.

HEREFORDSHIRE.

Noteworthy plants at Vincent Square

RUSCUS ACULEATUS, A.M.

At the fortnightly meeting held at Vincent Square on the last day of November, our native Butchers' Broom received the Award of Merit. All comes to those who wait, but our dear old friend had to remain for several geological periods before recognition. It put on no new fangled ways, but remained in its primitive simplicity, and at length, in this year of grace, that august body, the Floral Committee of the Royal Horticultural Society, extended to it their patronage, and granted it that great mark of distinction, the Award of Merit. Ruscus aculeatus probably existed in the carboniferous period. The stiff spearlike branches do duty for leaves, and no doubt protect the insignificant scales upon them (which are, in fact, the leaves) from the attacks of some browsing, and, perhaps, lizard-like, animal. The tiny flowers, which scarcely deserve the name, save in a botanical sense, which appear occasionally on the undersides of the leaf-like branches, would certainly attract no bee, butterfly, or moth had they existed, but they may have been visited by some droning beetle, and these early insects may have tasted the rare, if not refreshing, fruit at intervals, shared by the early lizard-like bird. The Butchers' Broom may not be quite so ancient as a Cycad or Araucaria, but it is certainly an interesting survival. After all time is only relative, but, to see our old friend described as a "novelty," and as a noteworthy plant at Vincent Square, is surprising, to put it very mildly. Two brand-new Carnations and a small yellow Chrysanthemum also received the Award of Merit. They have not been long enough with us to test their merits as to flowering habits or constitution in the same way as our old geological friend has. Any criticism of the Floral Committee must be given with diffidence, but it should be recognised that a too-free bestowal of the Award of Merit renders it of no value, whether bestowed on a new variety or on a particularly fine specimen of a familiar plant.

During the last few years a large number of branches of Butchers' Broom have reached our markets from France, which are frequently decorated with scarlet Solanum berries cleverly wired on to them.

Brighton. F.R.H.S.

Name of fruit

What is the name of the fruit which one commonly sees impaled upon the branches of Butchers' Broom and sold for Christmas decorations? It looks like a small Orange, but has nothing to do with that family.

A. H. WOLLEY-DOD.

[The fruits seen by our esteemed correspondent are doubtless those of the orange-coloured Solanum aculeatissimum, which have been much in evidence in recent years on the branches of Butchers' Broom. The fruits of Capsicum or Red Pepper, which also belong to Solanaceæ, are sometimes impaled on the branches of Butchers' Broom and sold by hawkers, but the fruits most commonly used are those of Solanum aculeatissimum.—ED.]

Chrysanthemums at Christmas

During the last few years the Japanese varieties of this useful flower have become extremely popular, and I find amongst them several that have the valuable habit of flowering after the majority of other kinds are over. Therefore by adopting a system of late propagation and retarding the flowering as much as possible, Chrysanthemums may be had in bloom at Christmas, or even later, when, I need hardly say, they would be most acceptable. Such fine blossoms, however, from plants checked in growth can scarcely be expected as from those grown on interruptedly, but this detracts little from their value at the date mentioned, when one is glad of anything in the way of flowers for cutting, especially white flowers, and of these there are several excellent varieties. From amongst those possessing various shades of colour I pick out such as show a natural propensity for late flowering, and propagate them late in the summer from tops of the flowering shoots. I put three in a 4-inch pot; they soon strike root in a close frame, and may then be inured to the open air and grown on in an open sunny position until the bloom-buds are formed, when they should be set in the coolest and shadiest place available, keeping them out-of-doors until danger from sharp frost renders it unsafe to trust them out longer. When placed under glass, a house with a north aspect is best for them; there they can expand gradually, and be allowed a free circulation of air.

H. G.

Primula Mrs. MacGillavry

In your "Answers to Queries," issue December 18th, page 768, under the heading of "Names of Plants," you deal with Primula Mrs. MacGillavry, not McGillveray as printed. You state "where the plant originated we do not know." It originated in the Royal Moerheim Nurseries at Dedemsvaart, Holland, and was put into commerce by them. They state it is a new cross, but they give no further particulars. We are trying it this season for the first time.

Edinburgh. GEO. M. TAYLOR.

Apple Lane's Prince Albert

The note by a Sussex grower in praise of Lane's Prince Albert Apple I can bear out by experience in the West Riding of Yorkshire at 500 feet altitude, where only a very few kinds of Apples do any good at all. As a rule, they do best here as dwarfs, and do not thrive on grass, but crop early and regularly year by year, never getting big trees, but Lane's is as profitable as any variety that suits hereabouts. The three varieties that have done best are Bramley's, Lane's, and Lord Derby. I am trying a few new varieties, but they will have to be of good constitution to thrive in this neighbourhood.

WILLIAM REYNARD.

Apple Bismarck

Your correspondent, "M.," issue of December 11th, states that Bismarck "is not worth the ground it occupies," "that it is addicted to mildew, and the fruits are leathery and juiceless," with him in Sussex. Sussex is a large county, and I think very few who have grown this fine Apple can have had such an experience. I grew it for many years in Hertfordshire, and one standard tree alone often provided three or four bushels of delicious juicy soft-fleshed crisp fruit, good alike for kitchen use and dessert. They were frequently used for cooking in September, and some were every year kept for the dessert table till the first week in March, some weighing half a pound. The Barnham Nurseries, Sussex, list it both on Paradise stock or on Crab for standard orchard trees. It is one of the very last varieties I should think of discarding, and I have never seen a trace of mildew upon any tree I have grown. There may be some local peculiarity in the

soil where your correspondent has attempted to grow it, but I hope no reader will be deterred from planting this really fine old Apple from the remarks which have appeared respecting it. It is most decorative in the garden and orchard, as the large fruits are beautifully coloured, being yellow, heavily striped or flushed with rich crimson. It is accurately described as "a valuable Apple," with quite a distinct sub-acid flavour of its own, and I regard it as a true and good old friend, who did its best for us year after year with very little attention save careful pruning. H. H. W.

Brighton.

—— In reference to the observations *re* the Apple Bismarck, this variety requires a well drained soil, and the probable reason for the trees not having fruited is that they have not received the necessary attention to ensure this. In districts where there is a gravel subsoil this would be one of the best Apples. We grew here once as heavy a crop of fruit as was ever produced in the district from two cordon Bismarcks, the produce realising 2s. 6d. per dozen in the Covent Garden Market in the year 1890.

J. CHEAL AND SONS, LTD.

Crawley, Sussex.

Sternbergia lutea

This is an interesting bulbous plant, flowering bravely during November and December. In general appearance it resembles the Autumn Crocus, but instead of throwing up nude solitary flowers this blooms from a leafy tuft, and therefore better able to withstand the bad weather. The blooms, too, are firmer than those of the Autumn Crocus. It succeeds best in warm, light, and rich soils in positions fully exposed to the sun. It is, moreover, suited for the mixed border, but is of such remarkable beauty and grace that it may be used with good effect near the lower plants of the rock garden or on low parts where a rich autumn effect is desired. It is worthy of naturalisation on light rich soils by wood walks. It is also excellent for snug corners on the fringes of choice shrubs in peaty soil. The plants enjoy full exposure, and to have it to perfection the bulbs should be left undisturbed, for they will never outgrow this position. H. STEVENS.

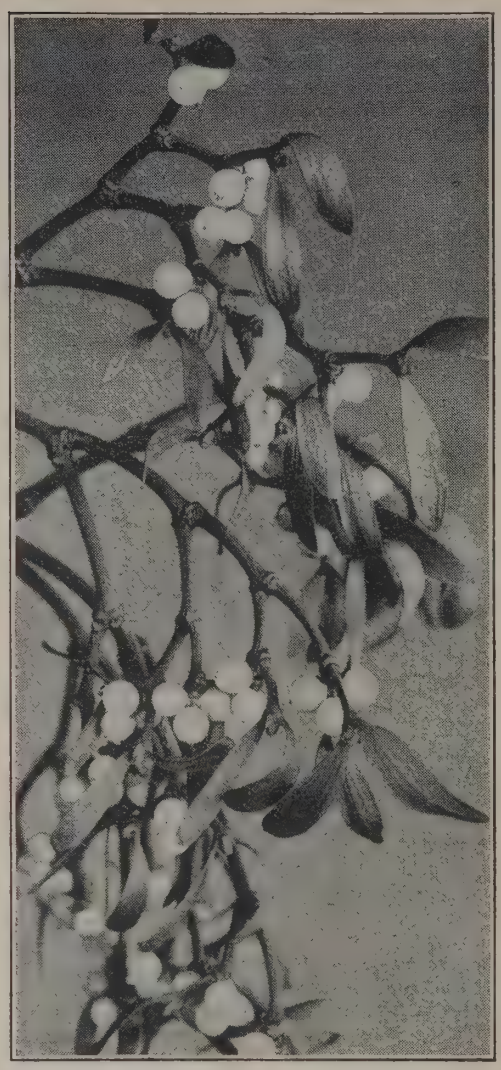
Raoulia australis

This is a splendid plant for a dry elevated position, for it will withstand heat and drought with impunity. It is worthy of a place on the rock-garden, where a plant of great endurance is required, its silvery foliage relieving to a great extent the usual barrenness associated with the dreary season. It covers flat rocks and stones like a silvery moss, and where it has a modicum of soil to root into develops into beautiful little grey tufts.

The plant has no brilliant flowers to recommend it, but this need not be regretted, as it is the silvery moss and not the flowers that is its charm. In winter it may exist on the level ground, but its true position is on old walls in some earthy or mossy chink, the plant looking as fresh and vigorous when emerging from some dry chink where a drop of water seldom falls upon it as when planted in good soil in raised beds. It will grow on almost earthless mossy rocks provided a handful of finely broken sandstone is placed about the plants and fully exposed.

The plant is best increased by side shoots which are numerous, and root as they go, when the plant is happy. These may be fixed to the surface of a flat sandstone with sand and small stones, when they quickly form plants of rich verdure.

H. STEVENS.



The Druids called it "All Heal"

Mysterious Mistletoe

From the Twilight of the Gods it comes, the "Tree of Mist," the mysterious Mistletoe. It looks a fateful, fatal plant, with its wan leaves and ghostlike berries, this "Bane Bush," as folk of old called it.

In Norse mythology, it was with a sprig of Mistletoe, flung at the bidding of wicked Loki, that Hodur, the blind god, slew Baldur the Beautiful. And for that crime Freya, Mother of Life, set it apart, suspended between heaven and earth.

The Druids saw the Mistletoe hang, mystic, luminous, and worshipped it for that very strangeness, gathering it with many rites on the shortest day, December 21st. Caught, before it touched the ground, in the outspread robes of the Chief Druid, it was separated into small portions and divided amongst the worshippers, who carried it home and hung it over their house-doors, as a protection against winter dangers.

So here is one reason why Mistletoe finds a place in our homes at Christmas. But why do I—we—they—he and she kiss under it?

Going back to the Norse legend, we find that Freya's spell ordained that the "kiss of peace" must be exchanged under the plant, to salve the woes which fell upon the world with Baldur's death, and for this reason the Druids called it "All Heal."

Amongst the Franks, the plant was still regarded as a peacemaker. If mortal enemies met beneath the tree where the Mistletoe hung, a truce was declared, for no blood must be shed there.

When Christianity spread northwards, th Church adopted and adapted many pagar rites, and, amongst others, it was long th Christianised practice to exchange a "kis of peace" under the Mistletoe, at a certai point in the service for Christmas Day.

Yet, even so, it was looked upon as a uncanny plant. "Tree of the Cross" they call it in Brittany, and legend said that th Cross was made from Mistletoe-wood, whe it grew as a forest tree, and that for thi dis-service to mankind, it was condemned t be a thing apart.

Soon the Mistletoe relapsed into paganism It was banished from the churches, and fron church decorations, yet it retained its potency as a "Kissing Bush." That kissing wa conducted as a joyous ceremony in Elizabethan days, when each swain, as he kissed, must pluck off a berry, and, when there were no more—why, no more kisses!

A pale shadow of that old ceremonial kissing still survives; and even yet, at Christmas the Mistletoe hangs between heaven and earth, in the glaring light of shops, in the moonshine of country orchards, a wistful strange plant, holding its own secrets and its own counsel—still mysterious. VIOLET M. METHLEY.

Cotyledon simplicifolius

The Cotyledons have a bad reputation, as some have only proved to be biennials and others perennials, while they are not hardy enough for our climate. C. simplicifolius has neither of these drawbacks, as it is a real perennial and thoroughly hardy. It is quite amenable to cultivation in our gardens, and is truly a choice alpine plant for the rock garden. It grows about 6 inches high, and has fleshy leaves, like those of some of the Sedums, while it bears little heads of drooping flowers which have not inaptly been described as tiny, "grotesque, drooping lambs' tails." In cultivation this Cotyledon would appear to love a rather sandy soil and a sunny place, but I have grown it quite well in semi-shade. S. ARNOTT.

The newest Chrysanthemums

Only five novelties were placed before the Floral Committee of the National Chrysanthemum Society, at its meeting on Monday last, the 13th inst., at the Royal Horticultural Society's Hall, Vincent Square, Westminster, S.W. Four of the new sorts were so good that they gained the coveted award of First-class Certificates. They were as follows:—

LAVINIA.—A beautiful single, about four and a half inches in diameter, having several rows of fairly broad florets, evenly arranged around a well-proportioned disc; colour, bronzy terra-cotta, with narrow yellow zone round disc. First-class Certificate. Shown by Mr. H. Shoesmith, jun., Mayford, near Woking, Surrey.

FUSILIER.—This is a new large flowered single, favourably referred to a short time since. The florets are of medium width and good length, very evenly arranged around a nicely proportioned disc, building up a flower fully five inches across; colour, ruby crimson, beautiful under artificial light. F.C.C. Also shown by Mr. H. Shoesmith, jun.

YELLOW FAVOURITE.—This is a striking sulphur yellow sport from the well-known market variety Favourite, and as such is sure to become popular. The florets are long and rather narrow, and build up a pleasing decorative flower of somewhat drooping form, about six to seven inches in diameter. F.C.C. Shown by Mr. A. G. Vinten, Oldland Nurseries, Balcombe, Sussex.

CRIMSON CONQUEST.—The descriptive colour of the name of this new sort is hardly correct; its colour is really reddish bronze.

It is a good thing, however. The florets are medium to fairly broad, and they build up decorative flowers, each nearly four inches in diameter. As shown before the committee it is undoubtedly a variety of considerable promise for late cutting. F.C.C. to Mr. H. Woolman, Shirley, near Birmingham.

D. B. C.

Royal Horticultural Society

December Flowers and Ornamental Fruits

THE last fortnightly meeting of the year was held at Vincent Square on December 14th. It was probably the smallest exhibition of the year; nevertheless, it was an interesting meeting, and there were two gold medal groups, one of Orchids and the other of berried trees and shrubs.

Carnations were, perhaps, the brightest flowers in the hall. There were particularly bright groups from Messrs. Stuart Low and Co. and Messrs. Allwood Bros. The brightest varieties were Topsy, Ruby Glow, Spectrum, Brilliant, Canadian Pink, and Laddie. Mr. C. Engelmann showed the three new varieties, Zorro (dark heliotrope), Red Laddie, and Brenda (scarlet).

An outstanding feature of the meeting was the bold and extensive collection of Orchids sent by Mr. Robert Paterson (gardener, Mr. A. Merry), Stamperland, Cathcart, Glasgow, for which the gold medal was awarded. Here were to be seen handsome spikes of a particularly good form of Vanda cœrulea, also Miltonias, Cymbidiums, Odontoglossums, and a great array of Cypripediums in diverse forms and colours, which formed the body of the exhibit. The good health of these plants was not the least remarkable feature, and it was a source of wonder to visitors to know how the plants had withstood so well the very long journey from Glasgow. The gem of the whole collection was the new dark red Odontonia Nesta Stamperland variety, which gained the high award of a First-class Certificate.

The new Chrysanthemum, Yellow Favourite, figured here, was shown by Mr. A. G. Vinten, Balcombe, Sussex, and received an Award of Merit. It is a decorative Japanese variety of good size and luminous colour. The petals are pleasantly quilled and slightly twisted. There is room for this good late yellow variety. It will be in demand for market and conservatory purposes. It was shown in quantity and will, we predict, live up to its name.

Very fine, indeed, was the gold medal collection of berried trees and shrubs sent by the Hon. Vicary Gibbs and staged by his able gardener, Mr. Edwin Beckett. The Snowberry, laden with great clusters of white fruits, attracted a great deal of attention. The variety shown was Symphoricarpus racemosus lævigatus. The contorted branches of Corylus Avellana contorta and the equally curious-looking growths of Corokia Cotoneaster were the source of great interest. In the foreground of the group were hardy Heaths and beautiful dark green patches of Veronica edinensis. The best of the berried shrubs were:—Cotoneaster frigida Vicari, Pyracantha angustifolia, P. coccinea, Pernettya mucronata, Butchers' Broom, Hollies in great variety, and the amber-yellow translucent fruits of Viburnum Opulus fructu luteo, a good yellow fruiting form of the Water Elder and the subject of an illustration on this page.

The serviceable and well-made Medoc Secateurs, so much in use at this time of the year, were well displayed by Mr. C. A. Jardine, 106, Sutton Court Road, Chiswick. It was an appropriate exhibit at this time of the year, when so many gardeners are thinking of pruning fruit trees.

To the lovers of hardy Ferns the collection of about 50 forms of our native Polypodium vulgare came as a pleasant surprise. These were shown by Mr. Amos Perry, and included forms peculiar to Wales and Cornwall.

H. C.

Androsace geraniifolia

The uninitiated would scarcely recognise this plant as an Androsace, for in habit it is far removed from any other species. The leaves certainly bear some resemblance to the foliage of some Geraniums, and are withal rather pretty. The most remarkable feature is the production of an abundance of Strawberry-like runners, with, at intervals, the formation of tiny plants, which quickly root and so form a ready and simple means of propagation. The flowers are produced on very long stems in small umbels, and are rather insignificant, pale pink or blush in colour, and are freely produced over a long season. This interesting and quaint little plant presents no great cultural difficulty, for I have found it "easy" in well-drained gritty soil in full sun, a surfacing of granite chippings, and some protection from excessive damp, an evil to which, like many of its congeners, it is rather prone. It quickly spreads into masses of appreciable size, which present a feature of considerable interest in the rock garden.

RALPH E. ARNOLD.

A Water Elder with translucent amber yellow fruits (Viburnum Opulus fructu luteo)
Shown by the Hon. Vicary Gibbs, Aldenham House, Elstree

The Chrysanthemum Yellow Favourite, which gained an Award of Merit. Colour clear sulphur yellow
Shown by Mr. A. G. Vinten

Achievemen

EVENTS of outstanding importance to all interested in gardening have taken place in the year now drawing to its close. This year has seen the foundation-stone laid of the new hall of the Royal Horticultural Society. This in itself is an event that marks great advance in the love and interest for gardening throughout the country. While we deplore the decline of so many of the very large estates and gardens owing to the cost of upkeep, it is gratifying to note that smaller but not less interesting gardens are greatly on the increase, while the spread and improvement of municipal parks and gardens in all parts of the country are healthy signs of the times.

This year the National Rose Society celebrated its Jubilee. It is the largest Society devoted to any one flower in the world, and it has every reason to be proud of its great record. Continuing along its road of progress, the National Rose Society is making arrangements for an International Rose Conference to be held in 1928, and we have reason to hope that the Society will establish a much-needed trial garden for Roses in the near future.

While many gardeners have every reason to be satisfied with their results this year, there are others who regard it as the worst year on record for hardy fruit. The Apple crop was most disappointing. Nevertheless, the exhibits of British-grown fruit have been of a very high standard, the quality of the fruit being well above the average. The success of the Royal Horticultural Society's fruit show was one of the surprises of the year. The hall was filled with Apples, Pears, and other home-grown fruits, and competition was good in practically all classes. The increased prize money to gardeners has met with encouraging results, but when the great expenses of exhibiting are taken into consideration we cannot help feeling that there is still room for improvement in this direction Grapes were shown better than in previous years, and it was evident that even in a lean year we can produce Apples of finer quality than those from any part of the world.

Owing to the General Strike, which did so much to clear the air in the industrial world, the Chelsea Show was postponed till May 25th, 26th, and 27th. It was just as well that it was postponed for a week, as exhibitors were more than equal to meet the strain, and it proved to be one of the most brilliant and successful shows on record. In passing, it might here be pointed out that in 1927 an important alteration is made in the arrangements of the Chelsea Show, which will be held on Wednesday, Thursday, and Friday, May 25th, 26th, and 27th. The show will not be open to the public on Tuesday, May 24th.

Apart from Chelsea, the exhibition at Holland Park Hall and the special shows at Vincent Square of Rhododendrons, Irises, Orchids, Daffodils, Delphiniums, Carnations, Pæonies, Sweet Peas, Gladioli, Dahlias, and Chrysanthemums were all so far successful that insufficient accommodation, resulting in overcrowding at the Hall, has been one of the problems of the year.

Horticultural Societies have carried out highly successful programmes, and the best-organised shows have been better attended than ever. Chelsea Show alone is of sufficient magnitude to attract visitors from all parts of the world, and it is very clear that interest in gardening is on the increase throughout this and other countries.

Special mention should be made of the great shows at Southport, Shrewsbury, Edinburgh, York, Wolverhampton, Cheltenham, Southampton, Hanley, Brighton, Tunbridge Wells, Cardiff, and Birmingham, and the more or less successful shows of the North of England Horticultural Society. These and many other exhibitions throughout the country go to prove that flower shows are popular, and even better attended than ever.

Now let us turn to the individual firms of seedsmen and nurserymen. It gives us great pleasure to record that this has been a red letter year in the history of Messrs. Sutton and Sons. The visit of the Royal Show to Reading permitted them to increase their exhibits considerably. Here they constructed a demonstration garden illustrating their work in the hybridisation of flowers, vegetables, and farm crops, and which, they are proud to say, was greatly admired by their Majesties the King and Queen when they visited the show.

His Royal Highness the Prince of Wales also visited Reading in June of this year, and was very much interested in the various branches of their work in plant-breeding, and during the course of his tour kindly planted a tree to commemorate the occasion.

In regard to shows, the chief achievement of the Reading firm was winning once more the Sherwood Cup at the great Chelsea Show for the most meritorious group with a magnificent display of flowering plants from seed.

With Sweet Peas they also secured striking successes, winning the Eastbourne Cup, the City of Bath Cup, and two large gold medals at the National Sweet Pea Society's Show, the Cavendish Cup and a large gold medal at Cheltenham, and, in addition, six gold medals at other exhibitions for Sweet Peas.

During 1926 Messrs. Sutton and Sons won, in all, five cups, "Coalport China" (Shrewsbury), and 33 gold medals, a record, we venture to say, unsurpassed by any other house.

Messrs. Robert Veitch and Son are to be envied this year for having obtained Awards of Merit for Escallonia Iveyi, Ceanothus Henri Defosse, Colletia spinosa rosea, and Astilbe chinensis pumila. The Colletia is, we understand, flowering now in the Exeter nurseries, as well as Berberis Beali hyemalis and B. nepalensis. The former is, surely, one of the most attractive of all hardy winter-flowering plants.

Magnolia Veitchii, one of the Exeter introductions which received an Award of Merit a few years ago, flowered well this year. Another new plant now being distributed from the same nursery, through the kindness of the introducer, is Erica australis Mr. Robert.

Messrs. Kelway and Son, the well-known pioneers of the modern Gladiolus, Pæony, Delphinium, Pyrethrum, and Gaillardias, have had a particularly successful year as exhibitors, having gained gold medals at Westminster, Gloucester, Wells, Southampton, Bakewell, and Taunton Deane. From their long list of certificated plants we select Gladiolus Kelway's Defiance for description.

Twelve bunches of Grapes shown by the Duke of Newcastle (gardener, Mr. S. Barker), Clumber, Worksop

Awarded the George Monro Memorial Cup at the Royal Horticultural Society's Fruit Show for the best exhibit of Grapes grown by an amateur

of the Year

This variety was granted the R.H.S. Award of Merit on August 10th. The colour is full crimson-red and the flowers are of extra size and striking beauty, well set on a long spike.

The very long list of successes achieved by Messrs. James Carter and Co. would fill more space than we can spare, but mention should be made of the gold medal exhibits at Chelsea, Reading, Hanley, Croydon, Bakewell, Southport, Dundee, and the highest and special award at Shrewsbury. Of their novelties attention should be drawn to Myosotis Azure Beauty, Aubrietia Rose Queen, and Pentstemon Imperial Hybrids, while the vegetable novelties include the new Goliath Pea, claimed to be the largest-podded maincrop variety.

Anything exhibited by Messrs. Clarence Elliott, Ltd., of Stevenage, is worthy of inspection. Their Chelsea exhibit was one of the best rock gardens ever put up at Chelsea. Apart from their delightful exhibits of rock gardens and alpines in stone troughs, they gained two Awards of Merit for alpines during the year, viz., Phyteuma commosum, the finest pan we have ever seen, and the rare Primula Allionii alba. We ought also to draw attention to the Edition-de-Luxe of their catalogue of alpines, with hand-coloured illustrations, by John Nash, limited to 75 copies, signed by the artist. This they consider their most sensational success.

Messrs. Hewitt and Co., Ltd., have been associated more with Delphiniums and Gladioli than any other plants. They commenced their success this year at York Gala, where their new Delphinium Rose Marie received an Award of Merit. Following this, their varieties Monarch of Wales, Violet Queen, Joy Bells, The Bishop, Great Strides, and Integrity have gained many honours, bringing the total awards for Delphiniums alone up to 12 gold medals and numerous silver and silver-gilt. Their outstanding novelty among Gladioli this season has been Louise Hémon. This unique variety was given an Award of Merit at the National Gladiolus Society's Show at Burton-on-Trent last August, where the group also gained the first prize of £20 in open competition with the leading growers of this country and the Continent.

Messrs. Samuel McGredy and Son exhibited at comparatively few shows during 1926, owing to the trouble in transport. However, they received the following awards during the year:—First prize, Mrs. A. R. Barraclough, a new Rose not in commerce, N.R.S. Provincial Show, Leeds, July 13th; Certificate of Merit for new Rose, Cherry, N.R.S. Special Seedling Show, July 23rd; first prize 12 new Roses, which was won by Mrs. A. R. Barraclough; Certificate of Merit for new Rose, Sir David Davis; Certificate of Merit for new Rose, Portadown Bedder; special piece of plate for the best Rose in show awarded to a new seedling, Portadown Yellow, N.R.S. Provincial Show, Southport, August 25th; gold medal for new Rose, Patience, N.R.S. Autumn Show, September 10th; and last, but not least, the Wigan Cup and gold medal for the best group of Roses in show, N.R.S. Autumn Show, Holland Park, September 21st.

We cannot speak too highly of the exhibits by Messrs. Blackmore and Langdon. Their principal successes during the season include Begonias and Delphiniums, silver cup, Chelsea; gold medals at following shows: Somerset Agricultural Show, Wells; Royal Counties, Bournemouth; Three Counties, Gloucester; Bath and District, Bath; Wolverhampton; Bristol and District, Bristol; Royal Lancs., Burnley; Bakewell and Burton-on-Trent Shows. Begonias only: First prize in each case at Royal Agricultural Show, Reading; Shrewsbury Floral Fête; Southport. Delphiniums only: First prize at Royal Agricultural Show, Reading, and gold medal Shrewsbury Floral Fête.

In recent years Messrs. Keith Luxford and Co. have made great strides as exhibitors. This year they have obtained gold medals at the Brighton and Norwich Shows, also at the National Chrysanthemum Show, and have won the silver challenge cup again at Eastbourne, also the silver cup for Carnations at the Southport Show. (This has been won three times in succession during the last three years, and is now won outright.)

Among their Chrysanthemum novelties we would specially mention Thalia, a deep crimson, F.C.C., N.C.S., A.M., R.H.S.; Andania, chestnut red with light buff reverse, very fine variety; Lady Edward Miller, rich deep yellow; Dr. Thomas Walker Live, extra large deep chestnut variety of great promise; Geraldine, salmon flushed with rose, quite a new colour; Lady Findlay,

(*Continued on page 782.*)

A sky blue Poppy with golden anthers from Tibet—Meconopsis Baileyi—said to be the most beautiful thing at Chelsea this year

Dame Edith Helen

The new pink Rose that gained the National Rose Society's Gold Medal at the Spring Show and the Clay Challenge Cup at the Autumn Show

The Old Trees of Cawdor

IT is difficult to realise that at the end of the 18th century trees can have been as scarce in Scotland as Boswell would have us believe. Yet Boswell is deemed a veracious recorder of facts. "This is a day of novelties," he reports Dr. Johnson to have said. "I have seen old trees in Scotland, and I have heard the English clergy treated with disrespect." The "day of novelties" on which Johnson made this remark was August 27th, 1773, and the place where was the Manse of Cawdor, the residence of the Rev. Kenneth Macaulay, uncivil disparager on this occasion of the English clergy, but a man in his time of sufficient note to induce Johnson to go somewhat out of his way to visit him. On that day, for the first time apparently in Scotland, Johnson had seen old trees, and that after he had travelled along the East Coast, by Edinburgh, St. Andrews, Aberdeen, and Elgin, where "the hedges were of stone," and where it filled him with wonder to see "a country so divested and denuded of trees." Could Johnson now revisit this land of "stone hedges," and retrace the route he took with Boswell in 1773, he would find on either hand woods as extensive and as amply tree'd as any in Britain. But a century and a half ago, it would appear, he had to travel beyond the Grampians, as far as Cawdor, to see old trees. Though this seems unbelievable, it was no doubt in the main true. As far, at least, as the statement concerns Cawdor, there, at this hour, are the trees—many of them—to answer for Boswell's veracity. The trees in question were mainly Ashes, Oaks, and Sycamores; but those which Johnson noted for their age, and no doubt for their beauty, were, beyond question, chiefly Ashes. To see the finest Cawdor Oaks, Johnson would have had to go further afield than he would have had the time to go or probably the inclination; for though there are fine Oaks mingled with the Ashes and other trees in the purlieus of the castle, the finest are in the middle of the adjacent wood, and the very finest, as a matter of fact, are scattered outliers at somewhat remote points of the estate. Fine Sycamores Johnson could not fail to see, those, namely, planted (and, for the garden, not too wisely planted, one must think) by Campbell of Clunas early in the century along the wall of that lower garden which, during his tutorship, he had formed and brought under cultivation.

The Drawbridge, Cawdor Castle

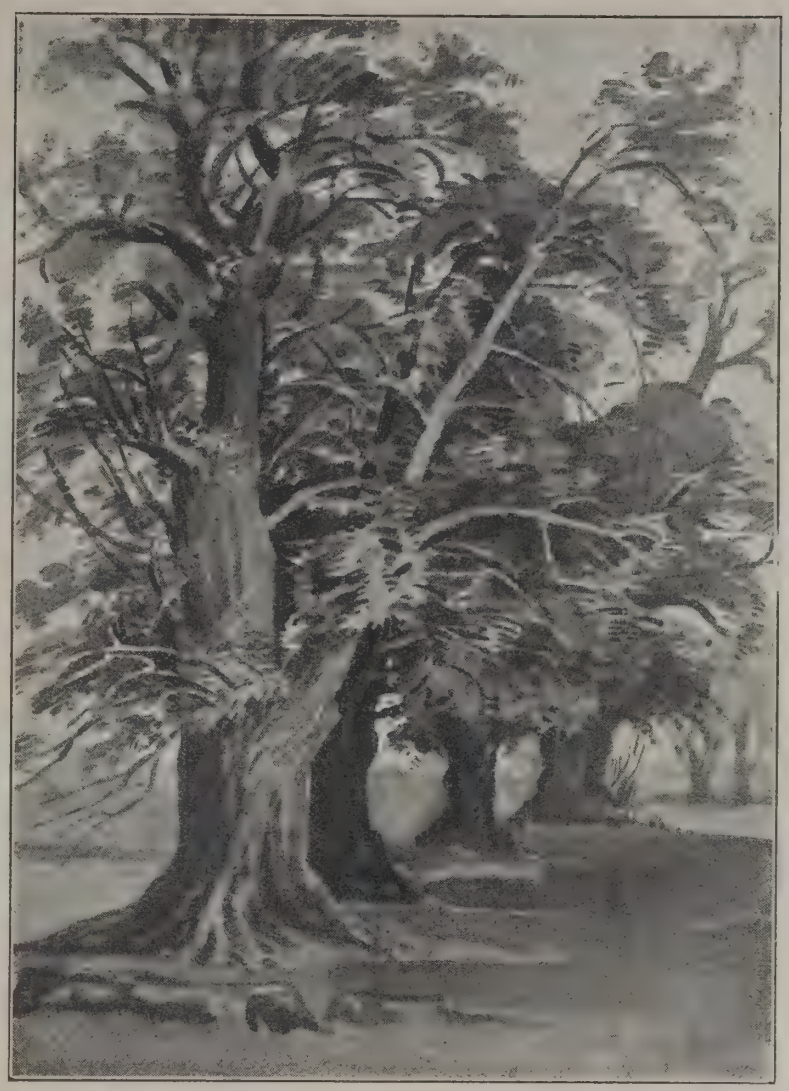
These Sycamores, some 70 years old at the date of Johnson's visit, had had time to grow into fine trees, with a good spread of branch and foliage, and must have reached, or nearly reached, their full height; but, though flourishing trees, they could not be regarded as old. The numerous Ashes, on the other hand, which Johnson saw on his visit to Cawdor must have been even then of a venerable age. They are now in their decrepitude; but 150 years ago they were no doubt fine upstanding trees, with wide-spread, full-foliaged heads—their leaves beginning, possibly, on that day in late August when Johnson saw them, to show a first touch of autumn yellow, for the Ash, like the Aspen, is one of the first among woodland trees to show colour and shed its leaves. It is now fully a century and a-half since Johnson saw and noted those patriarchal Ashes which, on the most modest calculation, must have been growing at least that length of time before he saw them. Many of them have since succumbed to stress of time, but a good few remain, aged, but lusty still. The regular distribution discernible in those that remain shows them to have been originally planted by hand and not to have been chance seedlings, though by whose hand there is no evidence to show, nor can even the approximate date of their planting be more than a matter of moot conjecture. Now, in their old age, the Cawdor Ashes are for the most part mere torsos, which, though they still live and sprout, have ceased appreciably to grow. Their heads, lofty and leafy no doubt in Johnson's day, are now much reduced, many of them but bushy mops, pollarded not by the forester's bill-hook, but by sheer lapse of time, while the trunks of not a few have become mere hollow cylinders of sap-wood and bark, natural aviaries for owls, starlings, and other winged creatures that house in the holes and cavities of growing timber.

As Johnson entered Cawdor by the change-house at the east end of the village, on his way to the manse at the west end, he would pass between rows of fine Ash trees—to the left those in the enclosure which was then the deer park, and on the right the double row extending from the inn to the stone bridge, which then spanned the burn, but which has recently been swept away by a flood. Across the stream, in the quarter-mile he had still to drive, he would have fine trees to right and left of him until he reached his destination at the manse, in the grounds of which there must have stood at the time a score of Ashes equal in age and size to those he had already passed, of which number, however, not much more than a third part remains at the present time. Boswell does not say where exactly were Johnson and the minister when they carried on the heated conversation about the social status of the English clergy. It was in the manse, of course—the old manse, rebuilt some 50 years later—and probably in the guest parlour, which would then, as now, look out to the south, full on to the green and the Ash trees in front. It displeased Johnson to hear the Scotch parson speak slightingly of his English brothers of the cloth. But though he could be a bear upon occasion, Johnson was urbane and kindly by temperament, and would not reprove his too outspoken host without tempering the reproof with a touch of compliment—to Cawdor and the manse, if not to Scotland. That day he had had two experiences new to him: he had listened to a pert parson running down the English clergy, and he had seen trees that *were* trees, the first he had seen so far since he crossed the Tweed.

At Cawdor, as might be expected, Johnson was treated with the distinction due to his reputation. Kenneth Macaulay, though not so distinguished a writer as his yet unborn grand-nephew, Thomas Babington, subsequently became, was nevertheless in his way a man of letters, who had done work approved by Johnson; so that at the manse the distinguished visitor found himself in the proper atmosphere. As for the Castle, which on such an occasion might have been expected to do the honours, unfortunately the Laird of that day, who was well qualified to appreciate a man of Johnson's learning and character, was not then, nor had ever been, in residence there. His factor and representative, however, sought out Johnson at the

anse and brought him to the castle, where is safe to surmise that the thoughts of the akespeare scholar and editor were less conrned with the trees of the place, however old, an with that legendary king of Scots one of hose fateful titles had been Thane of Cawr. Still, if he had eyes to spare for them, ere were round the castle fine trees in abundce. Conspicuous among them would be the o Walnut trees on the lower green; one now ne, but one still left—a magnificent tree of nerable age, girthing now, whatever it y have measured then, fully 17 feet at a rd from the ground, and sending out picresquely tortuous branches, any one of ich would in itself make a respectable tree which no castle demesne need be ashamed. en, in front of the castle, there was the tangle of Limes and Sycamores, a feature ich could not escape the notice of a visitor th any eye for trees—planted almost cerinly by Sir Archibald of Clunas, or so, at st, one likes to believe. Then there were Elms in the moat by the drawbridge—e trees and old enough, though perhaps, as ms go, not of stupendous size. Such as they e, they look now probably very much as y looked to Johnson's eyes when he crossed drawbridge under their shadow in 1773; Elms, after they reach a certain age and ge of growth, do not very visibly change th the years, except that at long last they come bald and stag-headed, a phase which se trees have not yet reached. Those who ve known the drawbridge Elms for a good years can see little difference in the trees they knew them first and as they see them w.

If after viewing on one side the wide proect to the north, Johnson looked out, as k out he surely would, on the other side of castle, the sunny south side, which gives on the rocky channel and the amber-brown ter of the Cawdor Burn, he must have seen ndance of timber old enough to satisfy reasonable taste for the picturesque. He uld not, to be sure, have seen the profusion variety of vegetation visible to-day from same standpoint. The planter has been ustriously at work here since Johnson's e. When Johnson visited Cawdor no es grew on the edge of the stream at the e of the rock on which the castle stands, ere now spring up various Tsugas, quoias, Cypresses, Piceas, and what not—trees unquestionably, tall and symtrical as church spires, their leaders, ugh the trees cannot be more than 50 years old, if so much, now almost on a level with the topmost turrets of the castle. Opinions are likely to differ as to whether, fine as they are, these young trees are in the right place. They certainly conceal to a regrettable extent the simple and severe, but impressive, lines of the castle masonry, and must intercept the light in rooms where the windows are not large or the light too abundant. Also they must modify to a considerable extent the outlook from the castle, and not by way of improving it. As Johnson saw it, however, there was nothing to interrupt his view of the Birch-fringed stream and of the Oak and Beech woods beyond. As for old trees, from the window where he stood Johnson could hardly fail to note, in a leafy hollow across the stream, at least one notable tree—the Big Beech—known for its great size and its sweet nuts to generations of school children and of older folk. Probably the Big Beech looked as large to Johnson's eyes as it does to ours—larger, possibly, for within living memory it has lost through age or accident a good third of its bulk. And even the Big Beech is not the biggest Beech to be seen within easy distance of the castle and village. Had the factor taken him a ten minutes' walk into the wood, Johnson would have found other trees as old and as large as those he had already seen, Beeches chiefly, but other kinds also, and among them a Spanish Chestnut of no contemptible girth and age.



Cawdor Ashes in the park

The Walnut tree on the Lower Green, Cawdor Castle

In the course of Nature, like all living things, the Cawdor Ashes have had to pay the inevitable penalties of age. They have no longer the stamina and recuperative power they had when Johnson saw them 153 years ago, have little heart left to speak of or power of growth—are, in short, on their last legs. That is to say, as the "last legs" of trees go; for the life-phases of a hardwood tree move more slowly than those of the relatively short-lived human subject. So that though

the Cawdor trees are nearing the final stage, nevertheless "keep hands and gun-poother aff them," they may, like Glasgow Cathedral, weather many a year yet. It is idle to conjecture how many successive Thanes of Cawdor those Ashes, since they were saplings, have seen come and go, any one of whom might have had them cut down and turned to material profit, though, fortunately for the Cawdor landscape, each in his turn refrained, preferring the living trees to their value as timber. Even since the days when Johnson spoke of the trees as "old," further generations have passed—five at least—and still the buttressed roots seem so sturdily anchored the soil as to give a reasonable hope that tl battered trunks and branches may be goc for yet another century of storms, and ma see a few more generations of Thanes ar other folk come on the scene and leave it.

NESS.

REMINDERS FOR THE WEEK

Southern and Midland

Spring Cabbage

Where the planting of this crop was done late in the season and the plants were not far enough advanced to draw soil up around the stems as previously advised, much damage is liable to occur amongst them during severe spells of frost. Immediately a thaw sets in the bed should be gone over and any that appear loose in the soil should be made firm. Keep the surface stirred with the hoe whenever the ground is in a fit condition to tread upon.

Seakale

To keep up a succession of this, roots should be placed in the forcing house at intervals, the second batch being taken in before the former is too far advanced. Nine-inch pots are handy and suitable receptacles for Seakale, and will accommodate five or six strong crowns. These should be covered with pots of the same dimensions. Watering must not be overdone, neither must the soil become dust dry. Light spraying daily will help the crowns to sprout. When cutting the Seakale, it should be cut level with the top of the plant.

Horseradish

There is usually a demand for this around the festive season, and when the ground is in a frosty condition there is a great difficulty in lifting the roots, so it is advisable to lift a portion of the bed during open weather and store under cover in soil or sand, where it may easily be got at when wanted. Small roots should be saved for planting in spring.

Winter Cherries

These beautiful scarlet-berried Solanums are very attractive during this season. To keep them in a fresh condition as long as possible, they require careful watering. When growing in warm rooms it is fatal to water them with cold tap water. This should be warmed before using. Where a greenhouse that is heated is available it is wise to change the plants each week, and keep in a light position as far as possible.

Chrysanthemum cuttings

These should now be taken as they become fit, and inserted several in a 3-inch pot, containing light sandy soil. A box 6 inches deep with a layer of fibre placed in the bottom and covered with sheets of glass makes a convenient propagating case. A stage in a cool greenhouse is the best place to start the cuttings, and the glass should be wiped or reversed each morning. Keep the soil moist without overdoing it, or many of the cuttings will damp off. When rooted they should be grown on close to the roof glass.

Tulips

The mild autumn has been favourable to the growth of early Tulips growing in beds. In cases where the beds are carpeted with Arabis, Forget-me-not, or other plants, Tulips will have some protection, but in the open it is advisable to cover them with leaf mould or a little old potting soil as severe frosts are liable to damage them.

Protect tender plants

A general look round the garden should be made, and any plants that are not hardy enough to stand the severe frosts that are likely to appear during the next few weeks should be given some protection. Mats or sacking placed around such plants as Fuchsias, Hydrangeas, Lemon Verbena, and tender Roses will answer, while a shovelful of ashes placed over the roots of many tender subjects will prevent damage.

Pruning

This is now in full swing, and where grafting is anticipated in spring, some of the best shoots should be retained for the work. These should be labelled and tied in small bundles, and heeled in on a sheltered border facing north. The best and straightest of the remainder should be tied up and kept in the dry, when they will come in handy for staking small plants during summer.

The seed catalogues

These are now arriving by every post, and a careful study should be made of them before placing the order for the requirements of the coming season. Standard varieties are the most reliable kinds to rely on for general use, while consideration should be given also to a few novelties each season.

W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Scotland

Peach houses

If the cleaning of the structures has been delayed it ought now to be pushed on without delay. The washing and retraining of the trees, too, should be at once taken in hand, for it is surprising how, even in the latest house, the buds begin to move after the New Year. When they swell there is much more danger that they may be rubbed off in the process of cleaning, so, for this reason if for no other, the washing and retraining should be hastened.

Peach trees in pots

When these are required for late fruiting, the pots will be better plunged to the rim out-of-doors for some considerable time yet. Peaches are perfectly hardy, and such comparatively early sorts as Hale's Early, Stirling Castle, and the like may remain plunged almost until the buds begin to expand in April. Housed then such Peaches will give ripe fruits in a quite cool house round about the middle of August.

Decorations

At this season there is always a demand for greenery for decoration—Hollies, Aucubas, Bays, Pernettyas, and so forth. The cutting of such ought to be in intelligent and careful hands, otherwise there is certain to be heartburning over the mutilation of shrubs at a later date. Berried plants, and especially Holly, are (here, at all events) heavily laden this season.

Newly-planted trees

It is an axiom that all newly-planted trees must be staked at the time of planting. It may be feared, however, that when stakir is done the trees, in many instances, a never afterwards inspected to see whether tl ties continue to hold. It is a very paying pr position, therefore, to have a personal loc round all recently-planted stuff with a vie to seeing that all is well with them. Th course very often prevents damage whic might have been avoided.

Plant houses

During the dull season very little waterin is required in cool greenhouses and in cor servatories. Sufficient water, and no mor ought to be the rule, and each pot should b individually tested as to its condition. Ir discriminate, out-of-hand, once-a-week wate ing is bad gardening. Let the plants be a tended to in the early morning, so that super fluous moisture may be dried up before nigh fall. Even although fuel is now procurabl in former quantities there should be n driving of the furnace, either in frost weather or in order "to make up for los time." Inside thermometers should bear relation to those out-of-doors. It is folly t keep a stove-house at a temperature of 6 degs. to 70 degs. when the temperature out side may be 10 degs. to 15 degs. The late Chrysanthemums will now be useful, an there will be, of course, plenty of bulbs in th greenhouse in addition to the various form of Primula and other seasonable stuf Libonia floribunda is useful and now rathe uncommon; so, too, are the berrie Solanums, which are so useful for Christma decoration.

Begonia Gloire de Lorraine

The second batch of this useful winter flowering Begonia is effective at, and after the New Year. Plants of the first batc which are now becoming shabby can be cu over for the production of cuttings, remem bering that for a time they must be rathe underwatered, kept warm, and placed nea the glass, otherwise they may be disappoint ing.

Pruning

Most of us endeavour to have the bulk o the pruning completed before the last day o the year, but much, of course, depends on th weather, and, to some extent, on local con ditions. For example, where birds ar troublesome it may be safer to leave th pruning of Plums and of Gooseberries unti February unless it is possible to net or other wise to protect them. Under ordinary cir cumstances, however, it is sound policy t hurry on the pruning, for the New Yea brings its own work.

Potting-shed work

At this time there is, very often, a perio of inclement weather, of which advantag should be taken to attend to what may b termed potting-shed work. Dirty pots can b washed and graded, seed-boxes repaired an new ones made, Birch brooms should b made and stored, labels made, the "binns of soil and of leaf-mould required for pottin can be replenished—in short, the customar odds and ends should be attended to, in orde that all may be ready for a fresh start i 1927.

W. MCGUFFOG.

Mabie Gardens, Kirkcudbrightshire.

ORCHIDS

Cypripedium insigne

HE best known and most abused of all Orchids is undoubtedly Cypripedium insigne, the common "Ladies' Slipper." is often found in mixed collections of ants, and except for an occasional watering ıd repotting when its pot inadvertently gets oken it is seldom given other attention, but ill it continues to give a fresh supply of oom each December, when flowers are so uch in demand.

I wonder how many of us would care to kept without water for several weeks at time. We know that we should cease to ist, and yet many people expect these ants to keep alive and flourish on air.

The flower is very attractive and lasts out six weeks in bloom. Its dorsal sepal greenish, thickly spotted with purple-own and tipped with white; the oblong-ovate petals and the saccate lip are green-h, more or less tinged with olive-brown.

There are several varieties of Cypri-edium insigne, and all are worth culti-ating, but the varieties of outstanding merit re insigne Sanderæ, the yellow form grown rgely for the cut-flower trade, and the andsome bold type called insigne Harefield Hall. This is worth a place in every collec-on and is the parent of some of our finest ybrids.

Cypripediums should be grown in a cool ouse and never be allowed to become bone-ry. Unlike so many Orchids, these do not quire a resting period. They should be re-otted every two years and will thrive best in mixture of good loam to which a little peat, lver sand, and brick-rubble have been added. Repot as soon as the plants have finished owering. A. T. S.

Cypripedium insigne Harefield Hall, the parent of some of the finest hybrids

Lycaste Skinneri

This Orchid, introduced from Guatemala 1 1842, is a variable one, so variable, in-eed that it has been said large importa-ons have reached this country in which no wo plants had flowers exactly alike. In hat may be termed the typical form the epals are blush-white, the smaller petals eep rose, and the lip white, spotted and tained with crimson; but the range of olour found in this species may be illus-rated by var. nigro-rubra, with deep auve and purple flowers, on the one ex-reme, and var. alba, wholly pure white, ex-ept for a faint patch of yellow on the lip, n the other. Var. alba was for many years very rare and expensive Orchid; latterly, owever, it has become more plentiful and heaper, occasional plants being imported nd the older ones propagated. It is the ıost delightful of all Lycastes. The flowers f Lycaste Skinneri each measure from 5 nches to 6 inches in diameter, and, con-idering their large size and the substance f the segments, the number produced by igorous plants is extraordinary. The nor-nal flowering season of this species is the irst three months of the year, but one sees hem as early as November and as late as May.

CULTURE.—Lycastes should be grown in ots, or, in the case of large specimens, in ans, and as they require water in great ıbundance in summer, the importance of erfect drainage is very necessary. The nost suitable compost for them as a whole s one of fibrous peat and chopped living sphagnum, but for healthy plants of L. skinneri some loam fibre in addition—say proportion of one-fourth—and a little oarse silver-sand or fine broken potsherds nay be added. Notwithstanding the size of the pseudo-bulbs of Lycastes, which seem to indicate a power of withstanding long periods of drought, it is found under culti-vation that they should not be "dried off" when at rest; but, on the other hand, kept fairly moist, more especially when grown in the Cattleya (intermediate) house. One of the good qualities of Lycastes is their suit-ability under cultivation to different condi-tions, which enables those without houses specially set apart for Orchids to grow them successfully. They may be grown in an in-termediate or cool-house. The temperature which best suits them is probably one be-tween the two, so that if grown in the in-termediate house they should always be given the coolest part, if in the cool-house the warmest part.

The flowers of Lycaste Skinneri, though somewhat stiff looking, are always striking, either by reason of their size or colour. They are produced singly, very rarely in pairs, on upright scapes springing from the base of the matured pseudo-bulbs, and generally last a long time in good condition. Lycaste Skinneri is used frequently for room deco-ration, for which purpose the firm texture of the flowers and the robust condition of the plant make it better fitted than most Orchids.

VEGETABLES

Dwarf culinary Peas

UNDER the above heading, on page 708 in GARDENING ILLUSTRATED dated Novem-ber 20th, appears a query on the ger-mination of these from Mr. Thos. Aldersey, The Cottage, Shifnal, Salop. In this he says: "Whether sown in boxes under cold frames or out-of-doors before the middle of March, the germination is very unsatisfac-tory." He states he moistens the seed with paraffin oil and rolls them in red lead before sowing. The reply to this query states that there is fear of this faulty germination having arisen from dressing the Peas with red lead after moistening with paraffin.

After dressing Peas with red lead for a great number of years I can vouch that there is no danger in doing so, and Mr. Aldersey can rest assured that that is not the cause. When sowing Peas in the Midlands before the middle of March it is essential that a round-seeded variety be chosen for the pur-pose. Up till the early part of April the soil is wet and cold, and seed remains long in the soil before germination takes place. Marrow-fat or wrinkled varieties are thin in the skin, and unless the soil is somewhat warm many will rot without germination taking place. As regards

SOWING IN BOXES under cold frames, a few practical hints may be useful. Boxes 4 inches to 6 inches in depth should be chosen, and holes made in the bottom for drainage. Over these should be placed some coarse turves, afterwards filling the box to within 2 inches of the top with loam that has been well pulled to pieces. If this is retentive a little coarse sand may be mixed with it. This should be pressed level and firm, and the Peas placed at the distance of 3 inches apart, just pressing them into the compost. Water with a finely-rosed can and allow the boxes to drain for several hours. Pass some loam through a ½-inch sieve, mix with coarse sand, and cover the seed to the depth of 1½ inches. Level this over and place the boxes on a bed of ashes in the cold frame. Do not give any more water until the young plants appear above the surface, but to prevent the soil be-coming dry keep the frame close and cover

with mats or sacking until the plants are through, when these should be removed at once and air given freely. By following these hints there will be few failures with any variety of Pea sown in boxes and grown in a frame. W. E. WRIGHT.

Tregarth Gardens,
Creigiau, near Cardiff.

Register of growers of certified stocks of Potatoes in 1926

During the past season, Inspectors of the Ministry of Agriculture and Fisheries have examined many fields of growing crops of potatoes of varieties which have been approved as immune from Wart Disease, with a view to the certification of the crops under the Wart Disease of Potatoes Order of 1923 as being true to type and reasonably free from rogues. A list of the growers of these certified stocks has been prepared, and copies may be obtained, price 1s., from the Ministry, who will also supply on application the names and addresses of growers of certified stocks of any particular variety, together with the numbers of the relative certificates.

Growers are reminded that the only potatoes which may be planted on land infected with Wart Disease are those from crops which have been so certified.

The list also includes the names and addresses of growers of varieties not approved as immune from Wart Disease, whose crops were inspected while growing and found to be true to type. The importance of planting true stocks is becoming better realised by potato growers, and the extension of the system of inspection to non-immune varieties has, it is believed, proved to be of material assistance both to growers and purchasers of seed potatoes.

Germination of seed Peas

The Regulations made under the Seeds Act, 1920, require, in the case of a sale of seed Peas, that the seller shall deliver to the purchaser a statement in writing containing certain specified particulars including (1) the name and address of the seller; (2) a statement that the seeds have been tested in accordance with the provisions of the Act; (3) the kind of seed; (4) the percentage of purity if below 97 per cent.; and (5) the percentage of germination; provided that if the percentage of germination is not less than the authorised minimum percentage of germination prescribed in the Schedule to the Regulations (viz., 70 per cent.) a statement to that effect, which shall include the authorised minimum percentage of germination, shall be sufficient. As was the case last year, there are indications that the germination of the 1926 crop of seed Peas is below normal, and that, consequently, a considerable proportion of the Peas marketed this season will be found to germinate slightly less than the minimum percentage prescribed in the Seeds Regulations. The sale of seed Peas with a germination of less than 70 per cent. is not contrary to the Regulations provided the actual percentage of germination is declared. To avoid failures in the crop it is advisable that seeds testing less than 70 per cent. should be sown rather more thickly than usual.

Answers to Queries

Questions—*Queries and answers are inserted in* GARDENING ILLUSTRATED *free of charge if correspondents follow these rules: All communications should be clearly written on one side of the paper only, and addressed to the* EDITOR *of* GARDENING ILLUSTRATED *Bouverie House Fleet Street, London, E.C.4. Letters on business should be sent to the* PUBLISHER. *The name and address of the sender are required in addition to any designation he may desire to be used in the paper. When more than one query is sent each should be on a separate piece of paper, the name and address being added to each. As* GARDENING ILLUSTRATED *has to be sent to press some days in advance of date, queries cannot always be replied to in the issue immediately following their receipt. We do not reply to queries by post.*

Naming plants—*All who wish their plants to be named should send fair examples of each—the stem, leaf, flower, or fruit. (Snippets of leaves and points of shoots are useless.) Not more than four plants should be sent in any one week by the same correspondent. Where more than one kind is sent they should be numbered. Of conifers the cones should always be sent.*

Naming fruit—*Several specimens in different stages of colour and size of the same kind greatly assist in its determination. We have received from several correspondents single specimens of fruits for naming, these in many cases being unripe and otherwise poor. We undertake to name not more than four varieties at a time.*

FRUIT

Treatment of bush Apple trees

I shall be glad if you can suggest the proper treatment for two bush Apple trees, one planted about 12 years ago (Devonshire Quarrenden) the other about 20 years ago (unknown variety). Both have fruited moderately well until the last year or two. There is plenty of spurs all over, but some are dead. In spring, when growth commences, only leaves are produced. Those on the lower branches gradually die back, but fresh buds are produced on the old spurs. On the upper parts there is moderate wood growth, but no blossom. Soil, heavy clay; subsoil, yellow clay. They have always been rather hard pruned. H. R.

[From the description you give of the condition of the trees we think the clay soil to be the cause of the trouble, and as both are, no doubt, on the Paradise stock, the clay is more inimical to their well being, or more unsuitable, especially for the Devonshire Quarrenden, than if they were on the free or Crab stock. Devonshire Quarrenden, we may add, succeeds best in a warm loam of medium texture, and is not a success on cold clayey soils. We advise you to remove, as far as possible, the clay soil from among the roots and replace it with soil of a more genial nature. Some turfy loam or the top spit taken from an old pasture, chopped roughly and mixed with an equal quantity of good garden soil or burnt soil, should form the basis of the compost. To it should be added a fair amount of lime-rubbish and about a peck of bone-meal to every four barrowloads of compost. Garden soil alone, with the other ingredients added, may be used if loam is unobtainable, as this, if it has been in cultivation for a considerable period, would prove more satisfactory than that in which they are now growing. To carry out our suggestion you will need to open a trench some 3 feet to 4 feet away from the stems and around the trees. Then with a fork carefully remove the clay from among the roots. Do this until you get within a couple of feet or 18 inches of the stem, according to the condition in which the roots are found. Then tunnel under the remaining portion, first on one side and then on the other, in case there are tap roots present. If any are found cut them off close to the ball. For obvious reasons one side only should be tunnelled under at one time, and the soil returned and made absolutely firm by ramming it before operating on the other side.

Carefully examine the roots, and if (which is not improbable) any are found dead, cut them back to where they are alive and sound. Also trim off the ends of all that are broken. Then lay them out in as nearly level position as possible and in different layers in the fresh compost, which make quite firm as the work proceeds. The top most layer of roots should be within 6 inches to 9 inches of the surface, where they will feel the benefit of the sun's influence and produce an abundance of fibrous surface roots. When all is completed mulch the surface with half-decayed litter. Then perform the necessary pruning, and we suggest that all dead wood or spurs be looked for and cut clean out. Finally, cleanse the trees by spraying with caustic alkali solution or any other approved preparation which answers the same purpose.]

Diseased Apples

(A. A. S.).—(1) The young shoots of Apple Cox's Orange Pippin are badly affected with Apple scab, which is caused by the fungus Venturia inæqualis. This variety of Apple is very prone to this disease, especially on cold, wet, stiff soils. You should remember that the soil is only the indirect cause of the disease, in that soils of this type do not suit this variety of Apple. The vitality of the tree is lowered, and then when the disease attacks the tree it offers very little resistance. All the young wood that is "scabbed," like that sent, should be removed and burned, because such material will bear spores in the spring which will infect the leaves, fruit, and young wood. In addition to pruning away the diseased wood you should spray the trees next season. Three applications will be necessary: (1) When the trusses of bloom have opened out sufficiently for you to see the individual flowers, but before the petals open; (2) as soon as all the petals have dropped; (3) three weeks later. Lime sulphur would be the best fungicide to use, and for the variety Cox's Orange Pippin, it should be used at half summer strength, *i.e.*, 1 gallon of lime sulphur plus 59 gallons of water.

(2) The Pear spurs are affected with Apple canker, which is caused by the fungus Nectria galligena. This disease attacks both Apples and Pears, and causes a deal of trouble, especially on some varieties. The fungus is a wound parasite, *i.e.*, it gains an entrance to its host by way of wounds. One of the most common modes of entry seems to be through the leaf scar. When a leaf drops from the tree it leaves a scar on the wood. The fungus gets into the tissue of the Apple or Pear and begins to grow. First of all, it usually kills the bud just above the scar, and then goes on to attack the tissue surrounding the bud. The dead tissue breaks away from the healthy tissue, and forms the well-known "canker." If this canker is neglected it goes on year after year increasing in size, eventually killing the tree. The fruiting stage of the fungus was present on the material you sent to us. Look carefully at some more of the cankered spurs and you will find some small, deep crimson coloured bodies, packed closely together. These are the winter fruiting bodies, which produce large numbers of spores, which will produce fresh canker on the attacked trees, or on others near by. Again, soils which do not suit certain varieties of Apples or Pears are an indirect cause of bad attacks of canker, as mentioned under Apple scab above. Apple canker is a very difficult disease to control when it has become established. If the disease can be detected early enough, cutting out the affected portions will often save the branch or spur. At the time of winter pruning you should cut out and burn all the canker you can find. Small shoots might

removed entirely. Canker on large anches should be removed by means of a arp chisel, taking care to cut down into ind wood. Where practical, all wounds ide should be covered with a good graft-g wax. Pears are very liable to canker badly drained soils, therefore if you can anything to improve the drainage of your il you would help the trees to stand up tter against attacks of both canker and ab. Finally, if you find that on your soil tain varieties of Pears canker badly and hers do not, we should advise you to head ck the susceptible varieties and regraft em with the more resistant varieties.

(3) The young wood is showing damage used by woolly aphis.

(4) Apple spurs are also affected by the me pest, but the damage is of older anding than that of No. 3. You should refully compare the "canker" of Nos. 3 d 4 with that of No. 2, and you will notice at they are entirely different. On the her hand, tree canker often follows at-cks of woolly aphis. When Apples are tacked by woolly aphis, the roots are at-cked as well as the aerial portions, and ere is more or less a constant interchange tween the root form and the aerial form. n effort should therefore be made to con-ol both forms at the same time; failing is, repeated efforts must be made to con-ol the aerial forms. On a small scale a ood soil insecticide should be used for the ot form, and the aerial form could be alt with by applying methylated spirit to e affected portions with a stiff paint brush.

FLOWER GARDEN

upins diseased

(R. G., York).—Your plants are affected ith a fungus known as Finger-and-toe or lub-root. The only remedy (and this is not ways effective) is quicklime used at the rate 3 tons to the acre, or 1½ lbs. to each square ard. This should be dug in at once, and a onth or so afterwards the ground should be rked or ploughed over again. The lime ust be thoroughly mixed with the soil. as lime is useless. Such acid chemical anures as superphosphate and sulphate of mmonia favour the spread of this disease. either slaked lime, chalk, gypsum, nor gas me has proved of any use as remedial treat-ent when once the disease has gained a othold. We advise you to stop using nimal manures for a time and curtail the mount of artificials which you have been sing to excess. Plants so highly fed are ore prone to such diseases than are those rown under harder conditions on poor but weet soil. It would pay you to lift all your lants and, before replanting on freshly-pre-ared ground, to plunge the roots into a uddle of lime and mud, especially seedling lants. The clearings from pig-houses are onsidered to favour the spread of this isease.

avatera Olbia

Will you, please, let me know if Lavatera lbia should be cut down in the autumn? If o should it be cut right down or only all he branches shortened? G. C.

[Your best plan will be to give it slight rotection, more especially at the roots, as it s not quite hardy except in favoured dis-ricts. When the spring comes you may rim it into shape, thinning somewhat and utting out any dead wood.]

ROSES

Red spider on Roses

(Rosamond).—The specimen foliage you ave sent is badly attacked with red spider. In the case of the Rose in the cool green-house, we should expect that the pest would go on breeding, more or less, all the year round. If you examine your Rose carefully you will find present on the foliage a number of very minute insects with eight legs. You will probably require a pocket lens to aid you in your search. These creatures breathe through their skins and are protected by webs of very fine silky material, and are very difficult to control. You state in your letter that the greenhouse is a cool one. If there are any hot-water pipes in it the best method of control would be to get some flowers of sulphur and mix it up into a paste and paint the pipes with it. Then heat the pipes, but do not use too much fire, gentle heating being all that is required. Over-heating the pipes after painting with sulphur results in damage to the foliage. Repeat the treatment several times at intervals of about a week. If you have no pipes in the house you must treat as for outside Roses mentioned below. In the case of your Rose on the east wall, you can do little at this time of the year. When the pest appears next sea-son you should spray with a solution of liver of sulphur. This solution is much improved for the control of red spider if wheaten flour is added. Take ½ lb. of wheaten flour and mix it to a smooth paste with cold water, and then gradually stir in a gallon of boiling water. Dissolve 1 oz. of liver of sulphur in a little boiling water and make up to 4 gallons with cold soft water. Add the liver of sulphur solution gradually to the paste, stirring well. Spray the Roses several times at intervals of 10 days. A fresh spray fluid should be made up for each operation. Spray-ing Roses frequently with cold soft water will help very much in keeping red spider in check.

Roses to plant with Mabel Morse

Which are the three best Roses to plant as companions to Mabel Morse, same habit of growth and flowering desirable? What is the best stock for the Roses you suggest?

WILLIAM THOMSON.

[With Mabel Morse plant Florence Izzard, Golden Emblem, Souvenir de Claudius Pernet, and Christine. All are yellow Roses of first quality and of the same habit as M Morse. All have the blood of Marechal Niel, but perfectly hardy and excellent for bedding in every way. They must be well done and generously grown on seedling Briar stock.]

VEGETABLES

Manuring a kitchen garden

Which is the proper method of manuring a kitchen garden (1) to dig over and then cover with fresh manure, lime, etc., to rot on the surface before being finally dug in, or (2) to cover with manure, etc., and at once dig the raw manure in? Which yields the better result? LOWTHER BRIDGER.

[The best and correct way is to spread the lime and manure over the surface of the ground, and the sooner it is dug in the better, as any of a long and strawy character begins to decay from the time it is buried and be-comes ripe for the plants to feed upon by the time it is required. When left exposed on the surface for any length of time half of the goodness is lost. The above practice yields the best results.]

MISCELLANEOUS

Slaked lime

Does slaked lime revert to quicklime when left in a heap? In other words, is lime in lumps always quick? G. L. C. EDE.

[Slaked lime, when left in a heap out-of-doors, begins to take up carbon dioxide, and in time becomes chalk, or calcium carbonate. When exposed under these conditions the slaked lime takes up too much water, and hard lumps of chalk are formed which are almost useless for garden purposes. Slaked lime, when exposed under cover, still takes up carbon dioxide, but remains in a powdery condition and in a fit state for obtaining an even distribution of the material. Lump lime is only "quick" when it has been burned, slaked, and used before it has had time to revert to calcium carbonate. Calcium bicarbonate is extremely soluble in water, and is, therefore, removed in the drainage water. Please see, also, "Lime for Gar-dens," on page 662 of our issue for October 30th, and "Uses of Lime," on page 691 of our issue for November 13th.]

SHORT REPLIES

R. G., York.—The address you ask for is The Secretary, Royal Horticultural Society's Office, Vincent Square, Westminster, S.W. 1.

Golden Juniper.—Your Junipers are not budded. It is the juvenile form. If you must cut the plants down, this should be done in spring, but if you cut off 3 feet last spring we should advise you to leave the plants alone.

J. D. Macpherson.—Knotting is a composi-tion used for covering the resinous knots in timber or for covering the ends of shoots that have been cut. It can be had from any Italian warehouseman. It is also used to stop bleeding in Vines.

Clark and Willsher.—The head of Cabbage you send is not Winningstadt. This is a very distinct Cabbage, and, when once seen, is easily recognised. The one you send is one of the early varieties, as Duke of York, Flower of Spring, and suchlike.

NAMES OF PLANTS

J. N. B.—Euonymus patens, closely allied to E. japonicus, the Evergreen Spindle Tree, but hardier.

J. McH.—Ornithogalum lacteum, the Chincherinchee of South Africa. The cut flowers, which are sent over to this country in large quantities, remain fresh for many weeks.

NAMES OF FRUITS

T. A. V.—Pears: Larger, Brown Beurré; smaller, Nouvelle Fulvie. The two labels were enclosed with one fruit.

TRADE NOTE

The Duple-Joint

There is one outstanding improvement in the orthodox flimsy-tongued and grooved matchboarding that commands attention. Prattens, of Midsomer Norton, have patented a weather-board called "Duple-Joint." A wooden "wall" is no more weatherproof than the joints of the boards will permit, hence it is the joint that is all-important. Boards built up on the Duple-Joint principle are guaranteed against drought and damp. It is said to be the only board of unit con-struction that is positively proof against the elements. Duple-Jointed Weather-boards are standard in many of Pratten's productions, including garages and bungalows, their poultry-houses, the base of their "Villa" glasshouses, and many other lines.

CATALOGUES RECEIVED

James Carter and Co., Raynes Park.—Garden and lawn, 1927.

Sutton and Sons, Reading.—List of vege-table and flower seeds, etc.

H. Woolman, Shirley, near Birmingham.—Novelties in Chrysanthemums, 1927.

J. E. Carter, Guelph, Ontario.—Gladiolus and Begonia price list, 1927.

Wm. Power and Co., Waterford.—Trees and shrubs, 1927.

Dobbie and Co., Edinburgh.—Spring cata-logue, 1927.

R. Veitch and Son, Exeter.—Garden seeds.

Achievements of the Year

(*Continued from page 775*)

colour ivory-white, F.C.C., N.C.S.; and Mrs. A. M. Dunkell, beautiful purple, quite distinct, F.C.C., N.C.S. These varieties are in the Japanese section and are all introduced by this firm.

In single varieties mention should be made of Valerie, reddish terra-cotta, A.M., R.H.S.; Clarice, chestnut-red with a yellow zone, A.M., R.H.S.; Hilary, sulphur-yellow shaded bronze; Thea, lovely apricot; Ofia, deep bronze with yellow zone; Acantha, deep apricot; and Amber, a lovely apricot-bronze. (This last variety is hardy and suitable for the garden.)

It is of more than passing interest to note that at the Chelsea Show, 1925, Messrs. Dobbie and Co. received their 25th gold medal of the Royal Horticultural Society for Sweet Peas. We venture to think that few firms, if any, can boast of 25 R.H.S. gold medals for one particular subject. Since then they have received three other R.H.S. gold medals, making their record to date 28 in all. Apart from the R.H.S. awards they have received 25 gold medals this year. A record that would take a lot of beating.

Messrs. Barr and Sons exhibited some extraordinarily fine new Daffodils last spring, and during the autumn put up a fine exhibit of the Earlham Montbretias, for which the raiser, the late Mr. Sydney Morris, of Earlham Hall, Norwich, previously gained the R.H.S. gold medal. The beautiful Michaelmas Daisy, Barr's Pink, was one of the sensations of the Holland Park Show.

Mr. H. J. Jones' recent gold medal successes with Chrysanthemums are well known; in addition, his comprehensive groups of Hydrangeas at Chelsea, Delphiniums, Phloxes, Dahlias, and Michaelmas Daisies at Vincent Square and other shows, will long be remembered. Any one of these large groups provided an admirable example of perfection in staging, while at Chelsea his friends were unanimous in their decision to crown him Hydrangea King.

The principal awards gained by Messrs. Edward Webb and Sons (Stourbridge), Ltd., include gold medal Royal Agricultural Society's Show (Horticultural Section), Reading, for flowers raised from seed. (This display was much admired by H.M. the King.) Premier award (Coalport Tea Service), Shrewsbury Floral Fête, for flowers and vegetables. Special gold medal, Wolverhampton Floral Fête, for vegetables and flowers. Silver cup and gold medal, Birmingham Floral Fête, for vegetables and flowers. Silver cup, Windsor Flower Show, for Sweet Peas. Silver cup, Llandilo Flower Show, for Sweet Peas and other flowers. Gold medal, Hanley Floral Fête, for flowers. Gold medal, Bakewell Show, for flowers. Gold medal, Freshwater (I. of W.) Chrysanthemum Show, for Potatoes.

Mr. W. J. Unwin, the Sweet Pea specialist, has also been very successful with Gladioli, for which he received the highest award at Shrewsbury, the premier award of the National Gladiolus Society large gold medal, 50-guinea silver cup at Northampton for best trade exhibit, large gold medals at Southport and Burton-on-Trent, and two gold medals at other places. Other novelties include Tomato Histon Ideal, a wonderful cropper, all fruits perfectly shaped, firm in texture, and of fine flavour. He has received 11 awards from the R.H.S. for new dwarf culinary Peas of his own raising. He is putting two novelties on the market this season—Histonian and Cantab. These are good croppers, both blunt-nosed, dark green, and of exceedingly good flavour; height, 2 feet. They are real acquisitions.

The following is a list of most interesting new plants for which an Award of Merit has been given to Messrs. Perry's Hardy Plant Farm, Enfield, Middlesex:—Allium Schuberti, Adiantum emarginatum, Berberis Thunbergi atropurpurea, Biarum eximium (Botanical Certificate), Hemerocallis Maggie Perry, Iris Watbract, Pontederia Crassipes var. lanceolata, Satyrium corifolium, and Scolopendrium vulgare Sagittatum crispum cristatum, Perry's Variety. Empire-grown bulbs from New Zealand, Australia, India, Canada, and South Africa have been a feature of this firm's exhibits this year.

Messrs. J. R. Pearson and Sons, Ltd., Lowdham, Notts, specialise (among other things) in home-grown Daffodils. In the present year they exhibited three fine groups of cut blooms at Vincent Square. The first of these appeared in March at the early bulb show of the R.H.S. All these were grown under glass and contained many fine specimens, showing that with proper conditions and due care blooms may be produced indoors quite as fine, if not finer, than one can get from plants in the open, unless it be in a perfect season, and such are of very rare occurrence in this country. Some of the best things in this group were:—Gen. Townshend, a much-improved Lord Roberts; Golden Emperor, very like King Alfred, but finer; Phantasy, a pale bicolor trumpet which comes quite white under glass, one of the late Mr. Ernest Crosfield's good things; Potentate, a very showy bright yellow trumpet, a grand flower for the garden as it makes itself seen; Tresserve, another large yellow trumpet variety; Lemon Giant, a trumpet Daffodil of unusual colouring and of the largest size; Lady Mine, a well-formed and very bright-looking bicolor trumpet; Spring Glory, perhaps the best of the large bicolors, which will in time entirely take the place of things like Horsfieldii; Brilliancy, a very fine Barrii of large size and brilliant colouring; Sanctity, a very refined pure white giant Leedsii, whole flower pure white; Florence Pearson, a large pale bicolor trumpet which comes especially fine under glass; Empire, a very fine giant Leedsii, another of Mr. Crosfield's productions; also the Lowdham Leedsii, Mrs. Francklin, Vega, Capella, Norah Pearson, and Lowdham Beauty, all of which are very good in pots. On April 7th the same firm had a more extensive exhibit from the open. Beersheba, the giant all-white trumpet; Gertie Millar, the largest Leedsii yet seen; Hymellus, Mitylene, and Tenedos, three of the finest new giant Leedsii; Ben Alder, a large deep yellow trumpet of late-flowering habit; Kwasind, a very distinct giant Incomp.; and Van Waveren's Giant were some of the outstanding Gold medal varieties. Another good group was contributed by the same firm at the end of the season, when a fine lot of Poets—Poeticus Striking being the most attractive—and many of the late red cups were staged. Not a few of the latter were from the late Mrs. R. O. Backhouse's fine collection of seedlings.

We are mindful also of the superb Daffodil exhibits staged by Mr. J. L. Richardson and his grand novelties, including Golden Chariot and Glorious.

Messrs. Lowe and Gibson's successes include first prize, trade display, at the National Carnation and Picotee Society's Show; a gold medal at Gladiolus Society's Show, Burton-on-Trent; and following Awards of Merit:—Cyril Blake Amos, a new colour in Gladioli, warm biscuit-apricot with brown blotch, large-flowered hybrid; Mr. Geo. Kellner, brilliantly-coloured Medi rose-pink with fiery scarlet throat marking and Lady Madden, cream Medio flush warm pink.

At the National Rose Society's Provinci Show at Bath last July Messrs. T. Engli and Sons showed among the novelties a vari gated Rose named Achievement, which al produces decorative clusters of small pi flowers. The habit of the plant which a companied the sprays of bloom suggested pillar variety growing to the height of abou 5 feet.

New fruits by Messrs. Laxton Bros. hav been consistently well shown. These includ Apples Lord Lambourne, Laxton's Exquisite Superb, and the October Pear, Beurré Bec ford.

One of the most promising novelties of th year is Gypsophila Bristol Fairy, whic Messrs. W. Wells, Junr., Merstham, ar introducing. It is a splendid border flower The new Michaelmas Daisy, Queen Mary one of the best yet raised, is also being sen out from Merstham.

H. C.

Reading and District Gardeners' Association

The last meeting of the winter session wa held in the Abbey Hall on Monday evening December 13th, when Mr. J. R. Lloyd (Vice Chairman) presided over an excellent attend ance of members. The lecturer for the even ing was Mr. W. Chislett, Bill Hill Gardens Wokingham, and his subject was Violets In his opening remarks he said "what a simple flower to talk about," but it was one of undying popularity, and holds its own with any flower that can be grown at this season of the year, whilst its outstanding charm is its fragrance. It is grown all over Europe, in parts of Asia, and in every district in our own country, and enormous quantities of its flowers are sold in our towns and cities. The lecturer proceeded to give full details as to propagation, soil, planting, watering, manuring, and with the prevention of pests, etc. Mention was made as to the most suitable varieties for coming into flower at various periods of the year, and also for different situations. An excellent discussion followed. At the close a very hearty vote of thanks was accorded to Mr. Chislett for his useful and unique paper. In the competition for three dishes of Potatoes there were seven entries, and many splendid tubers shown for so late in the season. The first prize was awarded to Mr. A. H. Dow, The Gardens, Calcot Park; the second to Mr. A. E. Kirby, Amity Road, Reading; the third to Mr. C. S. Clacy, The Gardens, Sidmouth Grange, Reading; and the fourth to Mr. A. Priest, Westbourne Terrace, Tilehurst. For three stems of Brussels Sprouts Mr. R. G. Taylor, Highgrove Street, Reading, won first prize with magnificent stems of Sutton's Exhibition, whilst Colonel F. E. Mascall, Hughenden, Shinfield Road, Reading, was second.

LATE NOTE

Stachys lanata

This is of unusual aspect. Its unique appearance is due to the thick woolly foliage and stems, which are of a silvery white hue, and provide a welcome change during the summer. It will thrive with a modicum of soil, and even that need be only of the poorest character. For this reason it is admirably adapted for planting in the lower courses of a dry wall or other places where plant life is difficult to establish.

H. Stevens.

END OF VOLUME XLVIII.

Gardening ILLUSTRATED

FLOWERS · FRUIT · VEGETABLES · BEES · GARDEN DESIGN
TREES & SHRUBS · THIS WEEK'S WORK IN THE GARDEN

VOL. XLVIII.—No. 2494 | Saturday, December 25, 1926 | TWOPENCE

"GARDENING ILLUSTRATED" is registered at the General Post Office as a Newspaper. The Offices are at Bouverie House, Fleet Street, London, E.C. 4.

BARR'S SURPLUS SPRING-FLOWERING BULBS.—Daffodils, Tulips, Hyacinths, Chionodoxas, Scilas, Irises, Wood Hyacinths, etc. Bulbs in splendid condition on at Greatly Reduced Prices. List on application.

BARR'S SURPLUS HARDY PLANTS FOR Flower Border and Rock Garden, including Asters Irises, Delphiniums, Hemerocallis Pæonies, Saxifragas Helianthemums, etc., etc. List on application.—BARR & SONS, King Street, Covent Garden, W.C. 2.

DOBBIE'S 1927 Catalogue and Guide, 144 pages, 229 illustrations; free to all readers. Please mention GARDENING ILLUSTRATED when writing.—DOBBIE & CO., LTD., Edinburgh.

SEWAGE DISPOSAL FOR COUNTRY HOUSE, FACTORIES, FARMS, etc. No emptying cesspools; no solids; no open filter beds; everything underground and automatic; a perfect fertiliser obtainable.—WILLIAM BEATTIE, 8, Lower Grosvenor Place, Westminster, London, S.W. 1.

BOWE & GIBSON, Crawley Down, Sussex.—For highest class service in Border Carnations and Bearded Irises. Our stocks are clean, healthy and true to name. Perfect packing and prompt dispatch. Write for illustrated List.

12 CHOICEST H.T ROSES to name, white to crimson, 11s 6d. 6 for 6s. 12 Choice Flowering and Evergreen Shrubs, in best variety, 3 years old 9s dozen. Packed and carr. paid. List free.—DILLISTONE Sturmer, Haverhill.

SEND for H. J. JONES' CATALOGUE if you want the best
GOLD MEDAL CHRYSANTHEMUMS,
HYDRANGEAS, MONTBRETIAS,
MICHAELMAS DAISIES, PERENNIAL
PHLOX, etc., free on application.
WYECROFT NURSERIES, LEWISHAM, S.E. 13.

HARDY PLANTS, ROSES, and FRUIT TREES. Revised catalogue now ready, free on application to—THOMPSON & MORGAN, Ipswich.

THE WHITCHBERRY.—The finest Hybrid Berry yet raised. The fruit is twice the size of a Raspberry, with a delicious flavour, and is splendid for dessert and culinary purposes. It is absolutely self-fertile and therefore sets freely. Strong plants, 7s. 6d. each, 84s. per dozen.—LAXTON BROTHERS, Nurserymen, Bedford.

LOAM. Fibrous Yellow Turf Loam. Illustrated Catalogue Free.—A. B. JOHNSTON, New Park, Cranleigh, Surrey.

BIRDS' BATHS, Nesting Boxes, Sundials, Vases, and all Garden Ornaments. Catalogue No. 10 free. MOORTON, 17, Eccleston Street, S.W. 1.

IRON and WIRE FENCING for GARDENS.—Ornamental Iron and Wire work of every description, Catalogue G.I. 158. Iron Fencing and tree guards, Catalogue G.I. 65. Wood and Iron Gates, Catalogue G.I. 163. Kennel Fencing, G.I. 83. Poultry Fencing, Catalogue G.I. 70. Ask for estimate lists.—BOULTON & PAUL, LTD., Norwich.

NOW IS THE TIME TO PLANT KELWAY'S LOVELY PÆONIES,
NOW IS THE TIME TO PLAN AND PLANT A KELWAY COLOUR BORDER.
Write to-day to:—
KELWAY & SON, The Royal Nurseries, Langport.
BUY BRITISH GOODS FROM A BRITISH FIRM.

WEBBS' 1927 GARDEN CATALOGUE is Now Ready. Beautifully illustrated. All Garden Lovers should obtain a copy, post free. Flower Seeds from 3d per packet. Vegetable Seeds from 4d. per packet. WEBBS' VEGETABLE and FLOWER SEEDS. Awarded 200 Gold Medals and Silver Cups in recent years.—WEBB & SONS, LTD., The King's Seedsmen, Stourbridge.

WM. DUNCAN TUCKER & SONS, LTD., Lawrence Road, Tottenham, N. 15. Conservatories, Winter Gardens, Vineries, Peach Houses, etc.

PRIOR'S Colchester Roses, Fruit Trees, Gladioli, Dahlias, Carnations, Herbaceous. Catalogue containing cheap collections, free.—D. PRIOR & SON, LTD., Colchester.

NEWEST CHYSANTHEMUMS.—My Novelty List now ready, including Yellow Majestic and other Japanese also single and early flowering novelties, which have been awarded the R.C.C.'s this season. Post free.—H. WOOLMAN, Shirley, Birmingham.

RUSTIC POLES—Fir, Pine and Hardwood—1-1½ in butt, 8s; 2-2½ in., 12s 6d.; 3-3½ in. 17s 6d; 4-4½ in., 25s per 100 feet, cut your lengths. Carr. paid. Odd lengths half-price, 1½-2 in., 5s. 6d.; 2-3 in., 7s. 6d. 100 ft.; 2 to 5 ft., mixed.—COLEMAN & SONS, 4, Cranfield, Bletchley.

BARGAIN GARDEN WIRE!! Ideal for Peas, fruit trees, Tomatoes, arches, repairing fences, tying, and scores of other uses. Strong, flexible, and waterproof covered. Special prices small lots or 19s 6d mile. Samples free.—GREENS, 409, Albert Street, Lytham.

THE HORSECOMBE QUARRIES & STONE WORKS, Combe Down, Bath, for garden ornaments. Old World Sundials, Bird Baths, Seats, Dove Cotes, Garden Houses, Crazy Paving, Walls in Solid Bath Stone. Write for Photos.

JOYBELLS shall now ring merrily throughout the lands where Apple—Apples of appealing aroma—are enjoyed, because prices are now: 3 year, 12s. 6d.; 2-year, 7s. 6d.; 1-year, 5s. on Paradise stock; packing and carriage included. Two or three specimens, fruiting, transplanted, 9 ft. x 6 ft., at 63s. each. Award of Merit, R.H.S., 14th Nov., 1922—WILL TAYLER, Peace, Godalming.

GARDEN GLOVES. Protect your hands and work in comfort. Strong, warm, invaluable for ladies, 4s. 6d. pair, post free; men's, 5s. Good rock plants, 7s. 6d. doz.—F. HEDLEY, 41, Watts Lane, Eastbourne.

BEDFORD CRIMSON. Awarded Clay Cup for Scent. The finest scented crimson Rose yet raised. This is the long sought for variety combining scent, colour, and constitution. Strong bushes, 5s. each; 55s. per dozen.—LAXTON BROTHERS, Rose Specialists, Bedford.

YORK STONE PAVING, for Garden Paths and Lily Ponds, rectangular or crazy for rustic work, steps and wall coping, rockery.
GEO. VINT & BROS., Idle, Bradford, Yorks.

SUTTON'S SEEDS.
A wonderful sequence of successes gained during 1926.
No fewer than 5 Cups, 33 Gold Medals and many other honours were awarded to the produce of SUTTON'S SEEDS.
SUTTON & SONS, The King's Seedsmen, Reading.

YOUR GARDEN will be much better if you buy from Waterers. Bulbs, Hardy Perennials and Alpine Plants, Fruit Trees, Roses and Shrubs for every purpose and every garden are available in stock of the very finest quality. Please write for catalogues. One is issued for each department.
JOHN WATERER, SONS AND CRISP, LIMITED, Twyford, Berks.

BLACKMORE & LANGDON, Twerton Hill Nursery, Bath. Begonias, Delphiniums, Gloxinias, Border Carnations, Cyclamens, etc. Catalogue free.

THAT BOOK YOU WANT!—We can supply it. Immense stock (second-hand and new) on gardening and all other subjects. Catalogues free. Mention requirements. Books sent on approval. That book you do not want! We will buy it.—FOYLES, 121, Charing Cross Road, London.

HORTICULTURAL ADVISER. Landscape Gardening and Estate-improvements; 40 years specialist in Fruits and Roses: moderate fees; any distance.—WILL TAYLER, Peace, Godalming, Surrey.

PRIVETS, strong plants, 1s.; Thorns 6d. doz.; Forest, Fruit, Rose, and Ornamental Trees just as cheap. Catalogue on application.—POWELL, Nurseryman, Warrington.

"ACHIEVEMENT," the new variegated rambler, every leaf perfectly variegated, flowering freely all the summer, and as hardy as other ramblers, 2s. 6d. each, 3 for 6s. Postage, 9d. 3 trees or more carriage paid.
ENGLISH & SON, Rose Growers, Gloucester.

ALPINES, pot grown, Herbaceous Plants, Aquatics, Lilies, Rare Shrubs, including Rhododendrons on their own roots. Write for Catalogues.—G. REUTHE, Keston, Kent.

NEW CHRYSANTHEMUMS—Catalogue of 700 varieties, also Dahlias, etc., now ready. J. W. COLE & SON, Nursery Gardens, Peterborough.

GLASS, HORTICULTURAL, all sizes stocked; Rough Plate Glass for poultry houses; Ready Mixed Paints, Putty, Diamonds, etc.—BRITISH GLASS CO., "G." Dept., Coopers Buildings, Church Street, Liverpool.

YORK STONE PAVING for GARDEN PATHS.
Buy direct from the Quarries,
JOSEPH BROOKE & SONS.
Quarries:
Hipperholme, Halifax, Yorks.
London Office:
65, Victoria Street, Westminster S.W.

GREENHOUSE PAINTING and GLAZING.—"Vitrolite," superior to White Lead Paint. 18s. 6d. per gall., cans extra. "Plastine," the imperishable Putty, 32s. per cwt., kegs extra; 7lb. tins. 4s., post free; 14lb. tins, 5s. 6d. each. Carriage extra, tins free.—Full particulars from W. CARSON & SONS, Grove Works, Battersea, London, S.W. 11.

THE LIBRARY OF THE UNIVERSITY OF ILLINOIS

FERTILISERS, MANURES, &c.

MASKELL'S HOP MANURE.—Best substitute for stable manure, 56 lbs., 4s.; cwt., 6s. Times Guano, the all-round fertiliser, 56 lbs., 5s.; cwt., 8s. 6d. Ground garden lime, 56. lbs., 4s.; cwt., 6s. Screened Gas Lime, cwt., 5s. Basic Slag, cwt., 6s. 6d. Packed in bags, and carriage paid. All fertilisers, etc., supplied. Booklets free.—MASKELL'S LTD., Dirleton Road, West Ham, E.15.

AUTUMN MANURES.—Send for descriptive Booklet of all Artificial Manures, also Basic Slag and Lime at lowest prices. Carriage paid.—JAMES & GEO. H. MATTHEWS, Harold Wood, Essex. Phone: Romford 284.

STEAMED BONEMEAL, best quality. 13s. 6d.; Kainit, 7s. 6d.; Basic Slag, 7s.; Sulphate of Potash, 21s.; Sulphate of Ammonia, 21s.6d.; Nitrate of Soda, 21s.6d.; Superphosphate, 9s.; Sulphate of Iron, 21s. cwt. All carr. paid.—CHAS. ORME & CO., Swinton, Rotherham.

SEED POTATOES

SEED POTATOES.—50 varieties, Scotch and English Grown, certified Stocks, for immediate despatch, for early boxing. Send for list.—CROSS & CO., Elm Road House, Wisbech.

MISCELLANEOUS

NO MORE DAMAGE FROM INSECTS, Mildew, Blight.—For Mildew, Blight, or destroying Caterpillars, Beetles, Slugs, etc., use Tobacco Powder. 7 lb. bags, with full directions, delivered free, 5s. per bag.—LAWRENCE, 57, Vine Street, Minories, London.

NOW is the time to look to your garden. The HOME GARDEN BOOKS deal with every branch of the art. Send for leaflet D. post free from THORNTON BUTTERWORTH Limited, 15, Bedford Street, London, W.C. 2.

APRONS.—GARDENERS' Blue Twill with pocket and bib, 3s. 9d. post free. Gardeners' Trousers, "Glenskot," Registered Scotch Tweeds. Patterns sent post free. —SHAW & MONTGOMERY, 623, Argyle Street, Glasgow, C. 3.

LABELS.—SPECIAL OFFER to introduce Labels below. 100 Labels, 50 Stakes for rockeries, 50 Tie Wires, 1 Pocket Nail to write them. 10s., post free, the lot, 5s. half.—WEBSTER'S PATENTS, Witheridge, Devon.

LABELS TO LAST—AT LAST. You write by any nail on prepared metal; can't fade or break; 20 sizes; samples 2d.—WEBSTER'S PATENTS, Witheridge, Devon.

LABELS for ROCKERIES, ROSES, etc., as above, with stakes or ties, list designs free, R.H.S. Award, from WEBSTER'S PATENTS, Witheridge, Devon.

LABELS BY THE BUSHEL ARE WASTED, being bought ready named. Write Webster's on the spot, no ink, only a nail, from 5s 100.—WEBSTER'S PATENTS, Witheridge, Devon.

ORDER TENNIS COURT FENCING NOW. Complete enclosure, 120 ft. x 60 ft. for one Court, 9 ft. high with iron standards, gate, strained wires, ready for erection, £34. Carriage paid to stations in England and Wales. Other sizes in proportion. — Write for special Leaflet to Dept. FP/GI, BOULTON & PAUL, LTD, Riverside Works, Norwich.

FINEST SEA SAND for Bowling Greens and Lawns. 10s. per ton, f.o.r. Lowestoft.—BOROUGH SURVEYOR, Town Hall, Lowestoft.

LIGHT IT AND LEAVE IT.—The perfect Stove for the small greenhouse. No fumes. No attention. Write for particulars and ask for Free Trial.—THE SYMPLEET STOVE CO., 6, Queen St., Wolverhampton.

Knitted Corsets.—Support without pressure. Anti-Rheumatic Corsets prevent chills. Boneless Coutil Corsets from 5s. 11d. List free.—KNITTED CORSETS CO., Nottingham.

SLUG TRAPS.—V.T.H., for Garden Pests, Highly commended by R.H.S. 2s. each (postage 6d.); 24s. doz., post paid. Seedsmen and Stores. Trade terms from—LEAVER, Ironmonger, Weston-s.-M.

CHEAP GOVERNMENT WIRE!!!—Great for training Fruit trees, Peas, Beans, Hops, Arches, Greenhouses, Tomatoes, Logans; Tying, Fencing, etc. Strong, flexible, steel-stranded, and waterproof covered. Several thicknesses, from 19s. 6d. mile (full 1,760 yards). Small lots quoted. Post card to-day for free samples and list of 300 bargains.—GREEN'S GOVERNMENT STORES, 70, Albert Street, Lytham.

PLANTS, &c.

ONE of Farrer's best Shrubs, BUDDLEIA NANHOENSIS, a miniature only 3-4 ft. high, Plumes of purple blossom 1s. 6d. each; 3 for 3s. 9d.; 6 for 7s. Carriage and packing extra.—CLARENCE ELLIOTT, LIMITED, Six Hills Nursery, Stevenage, Herts.

RARE PRIMULA and Alpine Seeds from large (2,000) collection. Also seedlings and plants. Lists free.—REV. F. ANDERSON, Glen Hall, Leicester.

CHRYSANTHEMUMS, Michaelmas Daisies, Allwoodii. Send post card for our up-to-date Descriptive Catalogue, post free.—F. H. WILLIAMS, 85, Park Rd., Leyton, E. 10.

GRAND FRUITING Bush Apple trees, 4 years old, leading sorts, 34s. doz., carr. pd. Discount to large buyers.—CATHERWOOD, Burton Joyce, Notts.

RHODODENDRONS (200 sorts), choice hardy kinds, 2 to 5 ft., Azaleas, Heaths, Kalmias, large stocks; catalogues free.—F. STREET, Heathermead Nurseries, West Chobham, Surrey.

STRAWBERRY PLANTS, plant now, 10 varieties, 5s. 100.—A. BUNTING, Bentinck Farm, Terrington St. John, Wisbech.

5,000 GLADIOLI, 10,000 Irises, 15,000 Darwin Tulips, 8,000 Crocuses, and 5,000 Dutch Roman Hyacinths, red, white, and blue, separate colours, 35,000 in all to be cleared cheap, samples 6d. List free.—J. HANDSCOMBE, Nursery Stores, Feltham, Middlesex.

RARE ALPINE LINARIA SEED.—Var. flavum, delicate yellow, height 4 ins., 1s.; var. navadensis, most lovely deep crimson; Spanish dwarf linaria, wonderful, grown in a mass, 1s 6d.—TORKINGTON, Maidenhead.

GARDEN SHELTER AND PRIVACY COMBINED.—Black Italian Poplar, most effective, quickly grown. Cuttings, 1½-2 ft. 2s. doz., 10s. 100; 3-4 ft., 3s doz., 15s. 100; 5-6 ft., 4s doz., 20s. 100 (50 at 100 rate) Carr. paid. —COLEMAN'S NURSERIES, 4, Cranfield, Bletchley.

LAVENDER PLANTS IN FOUR VARIETIES, 17s. 6d. 100. Sample doz., 3s. 6d., carriage paid Satisfaction guaranteed.—CHILVERS & SON, Hunstanton.

TREES & SHRUBS.—Excellent stuff, lowest prices.—W. B. WRAGG, Spring Cottage, Hackney Matlock.

PLANTS, &c., WANTED

WANTED—English Grown Liliums. State variety and quantity to offer.—WM. ARTINDALE & SON, Nether Green, Sheffield.

ORNAMENTAL FISH & AQUATICS

COLOURED FISH, Water Lilies, and pretty Aquatic Plants for Garden Pools. New Catalogue and Guide, 3d., post free.—HAIG, Newdigate, Surrey.

Where to obtain

If you do not see what you want advertised in this issue, please write the Editor,

"Gardening Illustrated"

Bouverie House, Fleet Street, London, E.C.4.

We want to assist you!

Not experimental

THE pioneering we did, on the cleansing of dormant trees was made possible only by our XL ALL Winter Wash. XL ALL is the original, proven prescription—not a subsequent experiment. Of all nurserymen seedsmen, and florists.

XL ALL WINTER WASH

G. H. RICHARDS LTD.

234. Borough High Street, London, S.E.

R.231.

ILLUSTRATED LIST Post Free

Greenhouses from £4 17 6

Poultry Houses from £1 12 6

Huts from £3 12 6

Bungalows, Garages, Rustic Houses, and Poultry Appliances of every description.

T. BATH & CO., Ltd., Savoy St., London, W.C.2

IF you are a new reader of GARDENING ILLUSTRATED and are interested in its pages, please fill up the accompanying form and hand it to your nearest Newsagent or Bookstall

Please Deliver
GARDENING ILLUSTRATED
(Two Pence Weekly)
Till Further Notice

to .....

Address.....

.....

Should you prefer to receive copies by post it will be necessary to send the form to the Manager, "Gardening Illustrated," Bouverie House, Fleet Street, London, E.C. 4, with remittance for 13/- to cover twelve months' copies.

CLAY'S FERTILIZER

The Gardener's best friend

MAKES THE GARDEN GAY ALL THE YEAR ROUND

Sold everywhere in TINS at **10d.** & **1/6**; and in BRANDED and SEALED BAGS:—7 lbs., **3/6**; 14 lbs., **6/-**; 28 lbs., **10/-**; 56 lbs., **18/-**; 112 lbs., **32/-**. Or direct from the Works, carriage paid in the United Kingdom for Cash with Order (except TINS).

Every ***Bag, Tin,*** *and* ***Seal*** *bears our Trade Mark, the only guarantee of genuineness.*

CLAY & SON, *Manure Manufacturers and Bone Crushers,* **STRATFORD, LONDON, E. 15**

Pool's Advt. Service

Cheals
of CRAWLEY

Have over Fifty Years' experience in
GARDEN & ESTATE PLANTING & GENERAL IMPROVEMENTS.
ONE HUNDRED & TWENTY ACRES
of Nursery, stocked with a first-class collection of
ORNAMENTAL TREES & SHRUBS,
Fruit Trees, Herbaceous and Alpine Plants, Roses, Dahlias, and all Garden Requisites.

It would pay you to consult them.
Catalogues of each Department and an Illustrated Pamphlet on Garden Design.

J. CHEAL & SONS, Ltd.,
The Nurseries, CRAWLEY

Laxtons——Bedford
SEASONABLE GIFTS

Any of the following will be appreciated by Gardening Friends:—

LAXTONS' "Exquisite" APPLE, an early "Cox's Orange"... ... bushes, 10/6
LAXTONS' "Bountiful" PLUM, an early and improved "Victoria" standards, 15/-
LAXTONS' VEITCHBERRY, the best new hybrid berry. Blackberry x Raspberry ... ... 7/6 each, 84/- per dozen
LAXTONS' MITE FREE Black Currant, 3 yr. old bushes. The most immune to Big Bud ... ... 3/6 each, 36/- per dozen
LAXTONS' No. 1 Red Currant. The heaviest cropping and best growing Red Currant, 3 yr. bushes ... ... 2/6 each, 24/- per dozen
LAXTONS' "Bedford Crimson" ROSE. The best crimson scented Rose ... ... bushes, 5/-

Full Catalogue of the above and many other novelties, and Cultural Hints, Post Free.

Laxton Brothers,——Bedford

DOBBIE'S *SCOTCH-GROWN* ROSES

13/- per dozen. Carriage paid

These succeed where others fail. Send at once for a Catalogue.

DOBBIE & CO., LTD.
Nurserymen, EDINBURGH

ENGLISH GROWN

Fruit Trees—Standard Apples, Allington Pippin, Bramley Seedling, Lane's Prince Albert, Chas. Ross, Newton Wonder, James Grieve, Worcester Pearmain, 3/6 each, Victoria Plum, Egg Plum, 3/6 each. **Hedging Plants**—Thorn Quicks 1½-2 ft. 5/-, 2-3 ft. 6/- per 100; Oval leaf Privet 1-2 ft. 8/-, 2-3 ft. 10/- per 100; Beech 1½-2 ft. 6/-, 2-3 ft. 10/-, 3-4 ft. 20/- per 100. **Herbaceous Perennials**—12 first quality plants, different sorts 9/- doz. **Raspberries**—Bath Perfection, 25 for 3/-. Gooseberries, Black and Red Currants 5/- doz. Kentish Nuts, 6d. bush. Strawberries, Royal Sovereign, 6/- per 100. Norway Spruce, 1-2 ft. 1/-, 2-3 ft. 2/- each. American Arbor Vitæ 2-3 ft., 1/6 each. Cupressus Lawsoniana 2-3 ft., 2/- each.
Home Grown. Inspection Invited. List Free.

BAGGESEN'S HARDY PLANT NURSERY, Pembury, nr. Tunbridge Wells

Hydrangea mad!

THE MODERN HYDRANGEA gives this delightful sensation, and everyone can enjoy it by growing these wonderful new varieties. They are easy to grow, last longer, and are more effective in the greenhouse or garden than any other plant.
If you want the best GOLD MEDAL CHRYSANTHEMUMS, HYDRANGEAS, MICHAELMAS DAISIES, HARDY PHLOX, etc., send for

H. J. JONES' CATALOGUE
FREE ON APPLICATION.
Ryecroft Nurseries, Lewisham, S.E. 13

THE PLANTING SEASON IS IN FULL SWING

Why not choose one of the following Collections and ensure having a good show in ***your*** garden next summer:

12	DELPHINIUMS, in 12 distinct varieties	24/-
12	MICHAELMAS DAISIES, in 12 choice varieties ...	15/-
12	ROCK PLANTS, in 12 choice varieties	10/-

Box and Carriage free

SEND FOR OUR DESCRIPTIVE CATALOGUE, POST FREE.

W. Wells, Junr.
HARDY PLANT NURSERIES . : : : : MERSTHAM, SURREY

ROSES — DAHLIAS — GLADIOLI
and other Autumn and Spring Plants

Obtain your supplies direct from Holland.
Large Stocks. Immediate Dispatch.
Catalogue post free on request

The First Dutch Bulbgrowers Association
Rykesstraatweg 215-217, Schoten, HAARLEM, Holland

ORCHIDS

Clean, well-grown and cheap: also Many Rare and Choice Varieties
STOVE & GREENHOUSE PLANTS OF ALL KINDS
Kindly send for Catalogue.
JAMES CYPHER & SONS
Exotic Nurseries, CHELTENHAM

Fruit Trees Rose Trees
ALL ENGLISH GROWN
Descriptive Catalogue post free on demand Inspection Invited
S. SPOONER & SONS
Established 1820
THE NURSERIES, HOUNSLOW, MIDDLESEX

PEARSON'S RELIABLE SEEDS

Our aim is to give *the finest possible seeds* at *moderate* prices, and the number of unsolicited testimonials we receive proves that our efforts are not unsuccessful. The selections of vegetable and flower seeds we offer are the result of many years of testing and comparison, and may be fully relied upon. Our Seed Catalogue will be ready for distribution early in January, and will be sent free to anyone mentioning this paper.

J. R. PEARSON & SONS
LIMITED
LOWDHAM, NOTTS.

FRUIT TREES ROSES

Alpine Plants Hardy Perennials
Ornamental Trees and Shrubs

Can be successfully planted NOW.

The Barnham Nurseries, Ltd., offer an immense stock of healthy, well-grown trees in great variety.

Descriptive Catalogue on application.

The Barnham Nurseries, Ltd.
BARNHAM SUSSEX

BURBAGE ROSES

A Popular Collection of 12 best Varieties, carriage paid for Cash with order, for **12/6**

All guaranteed first size Trees and British grown

Betty Uprichard	W. C. Clarke
Gen. McArthur	Souv. de Claudius Pernet
Clarice Goodacre	Hugh Dickson
George Dickson	Frau Karl Druschki
Maud Cumming	Mrs. H. Stevens
Mrs. H. Morse	Lady Hillingdon

A Complete List of Roses, Fruit, and Ornamental Trees post free on application

THE BURBAGE NURSERIES, Ltd.,
Near Hinckley, LEICESTERSHIRE
ESTB. 1773. *Please mention this paper.*

LOWE & GIBSON'S

offer of

1926 Crop

PEDIGREE SEEDS

Comprising

DELPHINIUM, "British Birds" strain,
GLADIOLUS, in 9 separate offers,
IRIS, June Flowering,
,, SIBIRICA (new Hybrids), and
LILIUM REGALE.

Border Carnation Seed sold out.

Our new Seed List for 1927 is now ready, free on application; also an entirely new and comprehensive guide to the successful raising of above seeds. Price Sixpence (refunded from seed orders).

LOWE & GIBSON, Crawley Down, Sussex

PREPARE NOW

For Next Summer

"FERRY" BRAND

Regd. *TradeMk.*

GARDEN MANURE
SOIL PEST DESTROYER

"FERRY" GARDEN MANURE gives back to the soil the Phosphates, Potash, Nitrogen, and other foods that have been taken up by the growing plants during this year. It is the finest manure for general garden purposes. Apply at the rate of 2 to 3 ozs. per square yard.

14 lbs., 3/6; 28 lbs., 6/-; 56 lbs., 11/6; 1 cwt., 21/-.

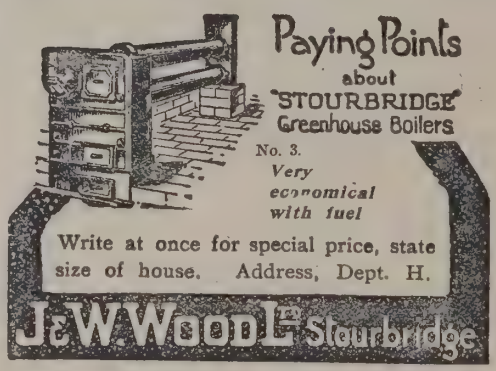
"FERRY" SOIL PEST DESTROYER sweetens and sterilises the soil, and destroys pests, such as slugs, wireworms, caterpillars, ants, etc. Its use provides a quick, sure, and reliable way of freeing your land from all insect pests. Apply 2 to 3 ozs. per square yard.

14 lbs., 3/6; 28 lbs., 6/-; 56 lbs., 11/6; 1 cwt., 21-

ALL PRICES CARR. PAID TO NEAREST STATION FOR CASH WITH ORDER.

Agents wanted throughout England for "Ferry" Specialities.

The BRITON FERRY CHEMICAL AND MANURE CO., LTD. (Dept. C.), Briton Ferry, South Wales. (Est. 1886.)



PERKIN'S SWEET PEAS

My spring catalogue embodies ninety-nine choice varieties. Special offer No. 1, 12 varieties, 25 seeds of each, for 2/6; or No. 2, 12 Finest Exhibition varieties, 260 seeds for 3/-. Offer No. 3, 20 varieties as recommended by the N.S.P.S. for general garden cultivation, 425 seeds for 5/-. If ordered alone, postage 6d. extra.

Famous for twenty years in the South of England.

LIONEL PERKIN, Westgate-on-Sea

Dept. S P.

Cut down painting, wood & putty!

BUILD BOARD'S PATENT "WIRE TENSION" GREENHOUSES

Send for Catalogue.

Iron Frame. Flat Glass. Phosphor Bronze Clips.

SPECIAL OFFER! We have in stock 12–16 ft. x 10 ft. houses as illustration, with Iron Plant Staging, which we will erect on customers' brickwork within 100 miles, at £70 each, to clear. If we supply wood base to save masonry, £8 extra.

SKINNER BOARD & COMPANY, Exmoor Street, BRISTOL

SANKEY'S PATHMAC

for

HARD COURTS

Better than brick rubble: as durable and porous as Sankey's Famous Garden Pots

Prices and Samples on application

RICHARD SANKEY & SON LTD.

Royal Potteries, BULWELL, Nottingham

SAFETY FIRST—FOR ANIMALS AND PEOPLE.

Non-caustic; no smell; kills the roots; superior to arsenical compounds.

TINS, 1/- for 4 - 2/- 12½ 3/6 25 6/6 50 12/- 100 gals.

ALSO

LETHORION

Improved Nicotine Cone

FUMIGATOR

Certain destruction to all pests in glass-houses

No. 1 .. For 1,000 cubic feet .. 10d.
No. 2 .. ,, 1,500 ,, ,, .. 1/3
No. 3 .. ,, 2,500 ,, ,, .. 1/9

Sold by all Seedsmen and Nurseryman.

CORRY & CO., Shad Thames, London, S.E.1

JUST PUBLISHED. *Price Two Shillings Nett.*

VIOLET CULTURE

For Pleasure and Profit

By E. DILLISTONE, F.R.H.S.

Growing Violets for Profit

THIS is the first book ever written on growing Violets for large scale production in this country and should be in the hands of all market gardeners and those who are in a position to cultivate the Violets on something more than amateur lines. Full of expert information from planting to marketing. Invaluable, a book that should enable you to increase profits and develop a wider market.

CONTENTS.

Introduction
Soil and Drainage
Situation
Water Supply
Propagation and Selection
Planting, Hoeing and Feeding
Housing and Protection
Diseases: Insect and Fungoid
Picking and Marketing
Costs and Profits

ORDER YOUR COPY TO-DAY

ERNEST BENN LIMITED, Bouverie House, Fleet St., E.C.4

UNWIN'S SWEET PEAS

HAVE PROVED THEIR SUPERIORITY – COMPARE OUR PRICES & REMEMBER THERE ARE NO SWEET PEAS OF BETTER QUALITY

FULL CATALOGUE
POST FREE

An Example of "Unwin" Value

OUR EXHIBITION COLLECTION

Every variety included is first class and reliable

W. J. Unwin. Salmon-cream pink.
Charming. Cerise.
Crenadier. Geranium red.
Mauve Beauty Deep mauve
Matchless. Cream.
The Sultan. Black velvet-maroon.
Sybil Henshaw. Rich crimson.
Powerscourt Lavender lilac.
Constance Hinton. White.
Youth. Picotee.
Picture. Deep cream-pink.
Hebe. Rose-pink.
Royal Purple. Purple.
Mrs. Tom Jones. Blue.

25 Seeds each of above 14 for **3/9** (350 Seeds).
12 ,, ,, ,, 14 ,, **2/-** (168 ,,). Postage 1½d. extra.

FOUR REASONS WHY UNWIN'S SWEET PEAS ARE KNOWN AND GROWN ALL OVER THE WORLD

1. QUALITY. We take every precaution to ensure a maximum percentage of "trueness" to name, type, and colour.

2. GERMINATION. We remove all "doubtful" seeds by hand before packeting, only leaving those which our experience shows may reasonably be expected to produce robust and healthy plants.

3. COST. Send for our Catalogue, compare our prices, and remember that no better Sweet Peas are obtainable *whatever their cost.*

4. REPUTATION. We have long realised that our reputation is at stake on every packet we sell, and that a satisfied customer is our best advertisement, and *vice versa.*

READ THIS: Kilkenny, Ireland.—"I have found your seeds more satisfactory all round than any others during the last 15 years, and my unbeaten record since I dealt with you is proof of this."— H. B. M., Esq.

You will eventually grow UNWIN'S. Why not THIS Season?

W·J·UNWIN·F·R·H·S·· *Sweet Pea Specialist and Seedsman,* · HISTON - Cambs.

EMPIRE GROWN
Lilies and Miscellaneous Bulbs.
Perennials & Alpines. Catalogues free
PERRY'S Hardy Plant Farm, ENFIELD

FLOWERS FOR ALL OCCASIONS
Delivered anywhere in the World
JOHN RUSSELL (Hampstead), LTD., *Florists*
Devonshire Nurseries London, N.W. 3
Wellington Nurseries, St. Johns Wood, N.W. 8
"SAY IT WITH FLOWERS"
Phone: PRIMROSE HILL 3856. Cable: RUSELFLOWA, HAVER.

NOW READY!
"My Garden Book"
1927
Recognised by many as
Britain's Best Seed Catalogue

A descriptive and illustrated list of all the best Vegetable Seeds, Flower Seeds, and Highland-Grown Seed Potatoes. Full of useful information and a most valuable book of reference

Post free on request
Secure your copy now

Alexander & Brown
(Dept. D.)
The Scottish Seed House, Perth.

The R.H.S. GARDENER'S DIARY for 1927

Published for the
ROYAL HORTICULTURAL SOCIETY

By Charles Letts & Co *Diarists & Manufacturers, London*

This Diary is invaluable to all interested in the Garden—contains weekly instructions of seasonable work to be done, and upwards of 66 pages of valuable information compiled especially for all those interested in Gardening.

AN IDEAL XMAS PRESENT

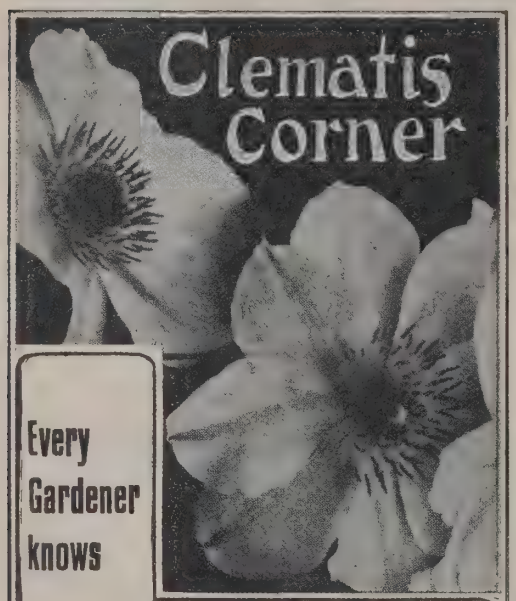
Price Two Shillings *Of all Stationers and Booksellers*

SEEDSMEN BY APPOINTMENT

The Principals and Staff at Raynes Park and Branches respectfully convey to Customers and Gardening Friends their Yuletide Greetings and Best Wishes for the New Year

GARDEN SHOPS:
134 Regent Street, W.1
53a Queen Victoria Street, E.C.4
115 Cheapside, E.C.2
129 High Holborn, W.C.1
237 & 238 High Holborn, W.C.1

Barters
TESTED SEEDS
Seedsmen to H.M. the King
RAYNES PARK, LONDON, S.W.20



Every Gardener knows

"JACKMANNI"
THE BEST CLEMATIS YET

Woking's 200 acres of Choice Stock also include:
Flowering Shrubs. Fruit Trees
Roses. Alpines and Herbaceous

Catalogue Free

JACKMAN Service is unique in Horticulture

G. JACKMAN & SON
Woking, Surrey

PEMBERTON'S ROSES
HYBRID MUSKS. A new race of Cluster Roses; Perpétual, fragrant, good in Autumn. Moonlight, Pax, Prosperity, Vanity, New Mahal, Penelope
New Catalogue of these and other Roses now ready.
J. H PEMBERTON, Havering, Romford Essex

Gold Medal BEGONIAS
Awarded 95 Gold Medals
Unsurpassed both for Conservatory Purposes and Bedding.

Unequalled DELPHINIUMS
Awarded 5 Gold Medals
17 Awards of Merit at R.H.S. Trials in 1925.

NAMED COLLECTIONS
15/-, 22/-, 30/-, 42/-, & 70/- per doz.

Other High-class Specialities:
Gloxinias, Cyclamen, Blue Primroses, Polyanthus, Violets, Phlox, Michaelmas Daisies, etc.

CATALOGUE FREE
Apply—
BLACKMORE & LANGDON,
BATH

British Made
ABOLENE
Tar Oil
Winter Wash

Clears Tree Trunks of Moss and Lichen and destroys Insects' Eggs and Fungus Spores

Abolene is thoroughly reliable and efficient. Easy and safe to use. Supplied in small sizes to suit owners of only two or three trees.

Pint	...	1/6
Quart	...	2/4
½ gallon	...	3/8
1 gallon	...	6/-

Write for Descriptive Folder

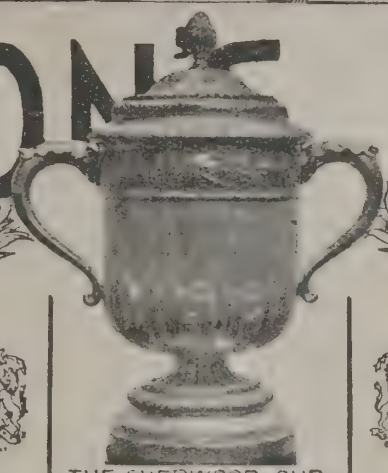
Abol Limited, 11, Beltring, Paddock Wood, Kent

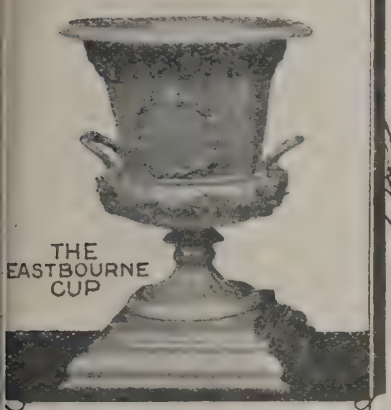
SUTTON'S SEEDS

WONDERFUL RECORD

previous records must have been ten by the wonderful sequence of cesses gained during 1926, when addition to the three Cups here strated, two other Cups, thirty-ee Gold Medals, and many er honours were awarded to

the produce of Sutton's Seeds, an eloquent testimony of the superiority of these pedigree strains. All Garden Lovers should send at once for a copy of "Sutton's New Garden Seed Catalogue," profusely illustrated in colour and half-tone. Gratis and post free.





SUTTON & SONS The King's Seedsmen READING

PEDIGREE QUALITY Sutton & Sons Reading SEEDS

YOU want the Best

DELPHINIUMS

WE have them

1 each of our famous novelties: Coquette, Joy Bells, Monarch of Wales, and Violet Queen, Catalogued at 39/- for 30/-, carriage and packing free.

Join the Crowd who go to

HEWITTS

SOLIHULL, WARWICKSHIRE

RECOGNITION OF MERIT IN HORTICULTURE

It would be difficult to eclipse the list of Awards of Merit, Certificates, Diplomas, and Medals awarded to

KELWAY & SON

The Royal Nurseries, LANGPORT

for Hardy Plants and Gladioli. Established in 1851, the firm commenced to produce and exhibit novelties early in the '60's. From 1871 to the present the Awards of Merit for Gladioli, Pæonies, Delphiniums, Pyrethrums, Lupines, Gaillardias, etc., run into hundreds, and the Medals and Diplomas total 370, all direct awards to KELWAY & SON, the actual raisers, growers, and distributors of the plants shown by them.

Estd. K *1851*

PRICE LISTS ON DEMAND

Catalogue No. 35 illustrating Bungalows, Summer Houses, Garden Furniture, Garages, etc., Post Free on request. If interested in Poultry or Dog Kennels ask for Catalogue No. 33.

GENERAL PURPOSE BUILDING

Tenant's Fixture. Pratten-built for security and artistic appearance. Shipped in sections for easy erection, without skilled labour. Made only of selected Red Deal timbers. Reduced Prices.

7 ft. x 4 ft. 6 in. ...	£4 11 0
8 ft. x 5 ft. 6 in. ...	£5 10 0
9 ft. x 6 ft. 6 in. ...	£6 10 0

Carriage Paid.

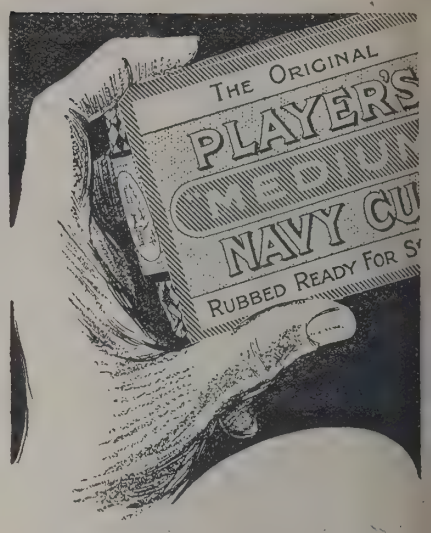
BEFORE selecting any type of horticultural building, whether a handsome Conservatory, inexpensive Glasshouse, Garden Frame, etc., compare our prices! They are the lowest consistent with the Pratten standard of production.

PROFITABLE POULTRY

We specialise in Poultry House construction, and gained the only Gold Medal awarded at Olympia in 1922. The "Widcombe," illustrated, is a popular design for general Utility Housing.

10 ft. x 4 ft., £3 15 0	12 ft. x 4 ft., £4 0 0
12 ft. x 5 ft., £5 8 0	*Carriage Paid.*

F. PRATTEN & CO., LTD., 16, Midsomer Norton, Nr. Bath



"All ready to put into your pipe—*that's handy!*"

PLAYER'S "Medium" Navy Cut Tobacco (Rubbed Ready for Smoking) comes as a great convenience to those Smokers who prefer their tobacco "rubbed up" before filling the pouch.

PLAYER'S "MEDIUM" Navy Cut

PLAYER'S NAVY CUT. REGD No 154011.

RUBBED READY FOR SMOKING

P 1316

The WIZARD Plant Label

RED POTTERY LABELS, 2½ x 1½ in. with rustless wires, 12 in., 2/3 doz.; 7 in., 1/9 doz.; 1½ x 1 in., 6 in. wires, 1/6 doz. WATERPROOF INK, 9d. and 7½d. bott. GROW QUILLS, 2d., postage extra. Highly commended by R.H.S. at Wisley.

E. TORKINGTON, D. 2 MAIDENHEAD

For mud & marshland mire & meadow wear Boots* with Uppers of "Beva" Waterproof Leather.

*Look for the "Beva" on the looping.

Gardening Difficulties

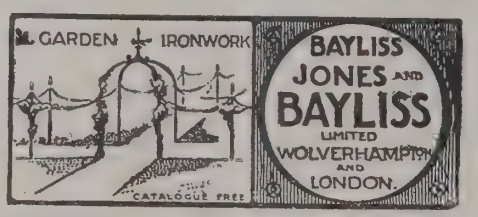
Whatever your difficulty is in growing Flowers, Vegetables, or Fruit, we are ready to give the best Advice.

Address—THE EDITOR, "Gardening Illustrated" Bouverie House, Fleet Street, London, E.C. 4

EUREKA WEED KILLER

LABOUR SAVERS. "EUREKA" LAWN SAND. SOIL FUME. NICOTINE, INSECTICIDES, FUMERS, SPRAYS AND OTHER CHEMICALS AND SUNDRIES. SEE LIST. PLEASE ASK YOUR AGENT FOR THE EUREKA ARTICLES—THEY ARE ALWAYS SATISFACTORY. IF ANY DIFFICULTY IN OBTAINING, WE SEND DIRECT, CARRIAGE PAID

Only Address: TOMLINSON & HAYWARD Ltd LINCOLN.



"The Boiler (No. 1) warms my Greenhouse nicely at a cost of about 2d. per day. I am a new beginner with a greenhouse, so had no experience of Heating Apparatus till I got

The 'HORSE SHOE' BOILER

which took my fancy, and I have not regretted it," writes Mr. F. G....., Clifford, Boston Spa, Yorks, 26/3/26.

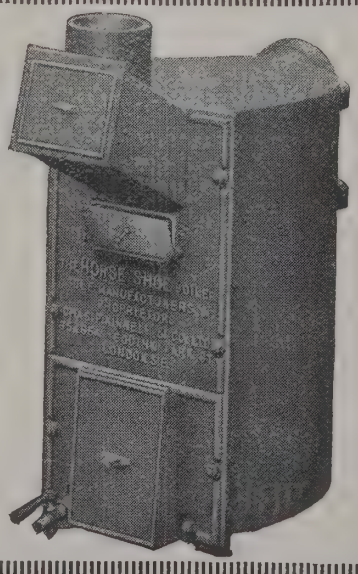
HAVE YOU BOUGHT YOUR HORSE SHOE YET?

To CHAS. P. KINNELL & CO., LTD., Engineers, Southwark St., S.E. 1.
Please send me Booklet C, "Making the most of your Greenhouse," and price of complete Outfit to suit § Span-roof (lean-to) greenhouse .....long.....wide inside, sides of § (wood) (brick).....thick

Name.....

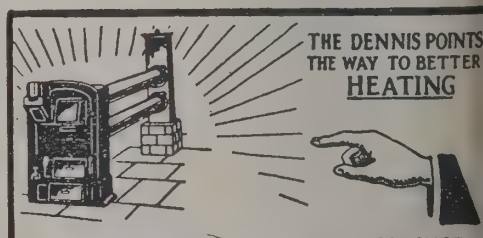
Address.....

§ *Strike out particulars not needed.* Cut out and send by ½d. post.



CHAS. P. KINNELL & CO., LTD., 65, Southwark Street, London, S.E. 1.

Wire: "Kinnell-Boroh-London." *Phone:* Hop 0362 (Three lines)



FOR GREENHOUSE GARAGE OR WORKSHOP.
ILLUSTRATED LISTS POST FREE.

THOS. W. ROBINSON, Ltd
DENNIS PIPE WORKS,
STOURBRIDGE.

SPECIAL AUTUMN OFFER

.2 FRUITING BUSH APPLES selected from the following varieties for **40s.**, Carriage Paid for Cash with Order, or

; Fruiting Bushes for **22s. 6d.**, Carriage Paid, C.W.O.

Allington Pippin
Arthur Turner
Beauty of Bath
Blenheim Orange
Bramley Seedling
Bismarck
Cox's Orange Pippin
Ecklinville Seedling
James Grieve
Gascoyne's Scarlet
Maidstone Favourite
Gladstone Rival

Vrite for our Descriptive Catalogue and particulars of our other Collections, gratis on receipt of a card.

he FOREST and ORCHARD NURSERIES, Ltd., MILBURY HEATH, FALFIELD, GLOS.

MÈDOC SÉCATEURS

Since the Mèdoc Sécateurs were introduced, there has never been a Sale of them. In order to clear the existing stock to make room for the latest Patent No. 233981, a reduction of 33⅓% on the catalogued price of Patent No. 195908 is being made. All Mèdoc Sécateurs have a "serpette" or knife attached to the guard by two rivets which any smith can knock out to convert them into Guienne Sécateurs for those who prefer the latter type. The new Guienne Sécateurs are about 33⅓% dearer than the Mèdoc of the older Patent, as they are more expensive to manufacture and because they pay a 33⅓% duty. The latest Mèdoc will be very dear in comparison. This is therefore an opportunity to possess a Mèdoc Sécateur at a remarkable reduction which will **never** occur again. Only the blades are different in the two Patents, and as they are detachable when new blades are required the new Patent blades can be fitted to the older Patent.

MÈDOC SÉCATEURS

		Priced. s. d.	Sale Price. s. d.	Postage and Package. s. d.
24 Pairs	7 in.	23 6	15 8	1 3
26 ,,	8 in.	25 0	16 8	1 6
48 ,,	8¾ in.	27 6	18 4	1 9
18 ,,	9 in.	28 6	19 0	
6 ,,	9½ in.	30 0	20 0	2 0
6 ,,	10 in.	32 6	21 8	

Cash with order only. Free copy of "Plant Surgery," eleven illustrations, with every Sécateur. This special reduction only applies to Mèdoc Sécateurs and not to the Guienne, and is limited to the existing stock.

Illustrated Price List of Mèdoc and Guienne Sécateurs from

Mr. C. A. JARDINE, F.R.H.S., *Horticultural Expert and Consultant*

106, Sutton Court Road, Chiswick, London, W. 4

IORTICULTURAL GLASS

lass cut to any size. Write for prices. *Mention Paper.* Glass is sent from my warehouse carefully examined as to soundness and quality before dispatch.

. B ROBINSON, Glass and Builders' Merchants, 31, MOOR LANE, CRIPPLEGATE, E.C.

36 Years' Advertiser in GARDENING ILLUSTRATED

ADCO

TURNS

GARDEN REFUSE

INTO

SYNTHETIC FARMYARD MANURE

1 cwt. of ADCO makes from two to three tons of manure according to the class of rubbish treated

ADCO Accelerator, 28 lb., **4/6**; 56 lb., **8/-**; 1 cwt., **15/-**
Standard **ADCO**, 28 lb., **6/-**; 56 lb., **11/6**; 1 cwt., **20/-**

Carriage paid to nearest Goods Station. *Cash with order.*

Stocked by all Seedsmen, Harrods, Ltd., etc. Write for full particulars.

ADCO LTD., 70, HARPENDEN, HERTS

BULB BOWLS

AND

ARTISTIC FERN PANS

State quantities and sizes required, and have "Carriage Paid" quotations, or write for Price List — FREE.

RICHARD SANKEY & SON, Ltd.

Royal Potteries, Bulwell, Nottingham

Our New List of

HRYSANTHEMUMS

for 1927 is NOW READY

ntaining all the finest and most desirable rieties. Free on application to:—

KEITH, LUXFORD & CO.,

Chrysanthemum Nurseries,

AWBRIDGEWORTH, HERTS.

TOP DRESSING for HARD COURTS

Get your dressing from the makers of Hard Courts, actual manufacturers of the material.

Dispatch same day
Large stocks

Write for samples and prices.

W. H. GAZE & SONS, LTD.

KINGSTON-ON-THAMES

'Phone: KINGSTON 3000 (Extn. 5).

IN INDIA

THE best way to obtain gratifying results in introducing, selling, or popularising your Seeds, Bulbs, Plants, Fertilizers, Garden Implements, and all other Garden Requirements is to write to us. We are the leading suppliers to the NATIVE STATES, NURSERIES and NUMEROUS GOVERNMENT DEPARTMENTS. You can use our offer to your best advantage. We shall be pleased to attend to your enquiries and sell and introduce your goods broadcast here in India. The results will surprise you.

We can also accept exchange

L. R. BROTHERS,

Seedsmen and Nurserymen,

SAHARANPUR, U.P., INDIA

HE

MEET-ALL WATER STOVE 52/6

A Complete Heating Apparatus for Greenhouses up to 20 × 10 ft.

Burns — Cinders, Coke, Anthracite, etc.
Moist Heat. No Injurious Fumes.

Boilers & Heating Sets for all requirements.

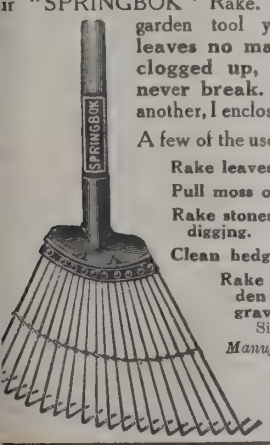
PRICE LISTS FREE

12 HOURS' STOVE SYNDICATE LTD.
CENTRAL AND DOMESTIC BOILER WORKS,
258c, Vauxhall Bridge Road, S.W.1.

he "SPRINGBOK"

What it does.

Being a Gardener, I cannot speak too highly of ir "SPRINGBOK" Rake. It is the finest garden tool yet invented. **It leaves no marks, never gets clogged up, and the teeth never break.** Please send me another, I enclose 5/6 postal order.



A few of the uses I make of it are:

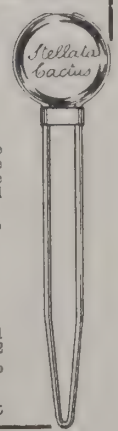
Rake leaves off grass.
Pull moss out.
Rake stones off garden before digging.
Clean hedge brushings up.
Rake the weeds off garden after hoeing, also gravel paths.

Signed:————."

Manufacturers—

W. PARK & Co.,
Clarington Forge, WIGAN

THE "LEGILAB" PLANT LABEL



Always Legible.
Name Instantly Changeable.
Absolutely Weather-Proof.

A high-grade label of most pleasing appearance for hanging on tree or staking. Can either be conspicuous or unobtrusive. Reversible name disc, white or green, suitable for special cultural notes.

If unobtainable from Seedsmen or Nurserymen, apply to manufacturers.

Staking.	Suspending.	Post.
1 in. 3/9	2/9 doz.	4d.
1½ in. 4/9	3/9 doz.	6d.
2⅝ in. 9/6	6/9 doz.	1/-

Wholesale from—

CORRY & CO., Ltd., Shad Thames, S.E. 1
GEO. MONRO, Ltd., Tavistock St., W.C. 2

Send **2/3** for sample ½-doz. 1 in. & 1½ in. sizes to

LEGILAB PLANT LABELS,
5, Lychett Road, Bromley, Kent

DOBBIE'S

Catalogue and Guide to Gardening

144 Pages—229 Illustrations

Send to-day mentioning **"Gardening"** and you shall have a copy free per return post.

DOBBIE & CO., Ltd.

Seedsmen and Florists to H.M. the King

EDINBURGH

A. TURRELL & SONS

FOR EVERYTHING IN PORTABLE BUILDINGS, GREENHOUSES, & RUSTIC

Compare our Specifications and Prices with other Makers. Showyard over Quarter Mile Long.

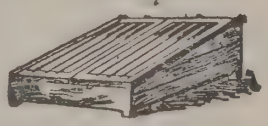
AMATEUR SPAN-ROOF GREENHOUSE

These Greenhouses are made specially for Amateurs, at a nominal figure, thereby coming within the reach of those who require a strong, but not expensive structure. Can be erected by any handy man in a few hours. The framework is substantially constructed of Red Deal, the lower part being filled in with good sound tongued and grooved match-boarding, painted one coat of good oil colour.

Supplied with all necessary ironwork and stages for each side of house. Complete with 21 oz. glass for glazing

Lgh. ft.	Wdh. ft.	Hgt. ft. in. to eaves.	Price £	s.	d.	Lgh. ft.	Wdh. ft.	Hgt. ft. in. to eaves.	Price £	s.	d.
7	5	4 0	6	6	0	15	9	5 0	17	2	0
8	5	4 0	7	2	6	20	10	5 6	24	14	0
9	6	4 0	8	4	0	25	10	5 6	30	12	6
10	7	4 6	9	18	0	30	12	5 6	39	9	0
12	8	5 0	12	17	0						

GARDEN FRAMES



Made of best 1-inch tongued and grooved boards; have necessary parting pieces and fanlights for Lights, which are 2-in. by 2 in. and fitted with iron handle, glazed with 21-oz. glass and all woodwork painted two coats.

	£	s.	d.		£	s.	d.
4 x 3 ft...	1	5	6	12 x 6 ft.. 3 lights..	5	0	0
6 x 4 ft...	1	17	6	16 x 6 ft...4 ,, ..	6	8	0
8 x 4 ft...2 lights.	2	6	6	20 x 6 ft...5 ,, ..	7	10	0
8 x 6 ft...2 ,, ...	3	7	6	24 x 6 ft...6 ,, ..	10	2	6

DO NOT PAY HIGH PRICES

for your frames made from 1½-in. boards. We can supply at the following low prices. Frames made of 1½-in. tongued and grooved best quality boards, complete as above.

	£	s.	d.		£	s.	d.
4 x 3 ft... 1	10	0		12 x 6 ft...3 lights..	5	10	0
6 x 4 ft... 2	2	0		16 x 6 ft...4 ,, ..	7	5	0
6 x 4 ft...2 lights ..2	14	0		20 x 6 ft...5 ,, ..	8	8	0
8 x 6 ft...2 ,, ..4	7	0		24 x 6 ft...6 ,, ..	10	2	6

Compare these prices with other makers

LEAN-TO GREENHOUSE

This illustration shows a lean-to greenhouse most suitable for amateurs. A very useful house at a small cost, answering in many cases as well as those costing several times the amount

SPECIFICATION.—Is well made of thoroughly well-seasoned Yellow Deal. The lower part is enclosed with good tongued and grooved boarding; door at one end, fitted with good lock and key, and brass furniture; ventilators in roof according to size of house, with all necessary ironwork for opening same; lattice stage for plants; painted one coat good oil colour; glass 21-oz., packed in boxes (no charge for packing). Is made in sections, and plainly marked before leaving our works, making them quite easy for erection.

Length. ft.	Width. ft.	Height. ft. in.	To Eaves. ft. in.	Price. £	s.	d.
7	5	7 0	4 0	5	18	6
8	5	7 0	4 0	6	12	6
9	6	7 0	4 0	8	0	0
10	7	7 6	4 6	9	10	0
12	8	8 0	5 0	11	15	0
15	9	8 6	5 0	15	0	0
20	10	9 0	5 6	20	5	0
25	10	9 0	5 6	25	10	0
30	12	9 0	5 6	33	0	0

SPAN-ROOF GROWING OR FORCING HOUSE

This is a cheap form of Growing House. It is well-made in sections, good tongued and grooved boards on base flat lattice staging on each side of doorway, good lock and key for door, all necessary ironwork for Ventilators, with glass 21 oz for glazing. The woodwork is painted one good coat, plainly marked for re-erection.

Lgh. ft.	Wdh. ft.	Hgt. ft. in.	£	s.	d.	Lgh. ft.	Wdh. ft.	Hgt. ft. in.	£	s.	d.
7	5	7 0	5	16	6	15	9	8 0	16	0	0
8	5	7 0	6	12	6	20	10	9 0	19	0	0
9	6	7 0	7	18	0	25	10	9 0	23	4	6
10	7	7 6	8	0	0	30	10	9 0	44	10	0
12	8	8 0	10	12	0						

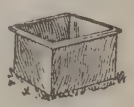
PORTABLE MOTOR GARAGE. No. 6m

Best materials and workmanship. In complete sections bolts supplied.

SPECIFICATION OF HOUSE.—*Sides, Ends, Walls, etc.:* Framing 3 in. by 2 in., and 2 in. by 2 in., covered ⅝ in. tongued, grooved and beaded matching. *Roofing:* Purlins 3 in. by 2 in., covered T.G.B. Matching, and good quality bitumen felt. *Windows:* As per illustration, almost the length of one side, fixed and glazed 21 oz. glass. *Doors:* Double-framed and ledged, hung on strong garnets, complete lock and key, and tower bolts. *Wood Preservative:* Outside treated with special "stop-rot." *General:* Holes are bored and bolts supplied for erection on arrival. Made in the following sizes—

Length. ft.	Width. ft.	Height to Eaves. ft. in.	Height to Ridge. ft. in.	Reduced Prices. £	s.	d.
10	8	6 0	8 6	12	17	0
12	8	6 0	8 6	14	0	0
15	10	6 3	8 10	15	5	0
16	10	6 6	9 0	16	17	6
18	11	6 6	9 0	23	0	0
20	10	7 6	9 3	24	0	0
20	12	7 0	9 3	27	10	0
24	12	7 3	10 0	31	5	0

GARDEN FLOWER BOXES



Very useful for plants, shrubs, etc. Strongly made. Treated inside and out with stop-rot, nut-brown colour. Outside measurements.

12 in. square ..	4/9 each.	12 doz. only to clear.
15 in square ..	5/6 ,,	7 doz. only to clear.
18 in square ..	6/6 ,,	8 doz. only to clear.
21 in. square ..	8/6 ,,	3 doz. only to clear.
24 in. square ..	10/6 ,,	4 doz. only to clear.

GARDEN BARROWS

Strong Oak or Ash Frame, planed Elm body. Size, 2 ft. 9 in. at top, 2 ft. wide, 1 ft. 2 in. deep. Reliable 18-in. wood wheel, ¾-in. iron tyre. 250 to clear at 23/6 each. Extra heavy make large size, Stable or Garden Barrows. 250 only to clear, at 28/6 each.

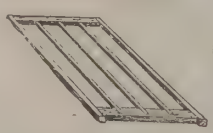
TOOL HUT No. 47

This hut is suitable for storage of tools, also useful on allotments and numerous other purposes, earth-closets etc

Complete in sections, constructed ⅝-in. tongued and grooved match boards on strong framing. *Window as shown,* glazed 21-oz. glass. Lock and key for door. Roof boarded and covered best bitumen felt.

Depth, 4 ft. Width, 3 ft. 6 in Height at front, 6 ft.; at back, 5 ft. Price £3 15 0.

GARDEN LIGHTS



These lights are well made of good well-seasoned timber. The Stiles are 2 in. by 2 in., mortised and pinned to tenoned rails and fitted with 2-in. sash bars. Painted and glass secured with superior oil putty and nailed. Strongly constructed.

Stiles, 2 x 2 in. Sash bar, 2 x 1½ in. Bottom plates, 4 x 1½ in. and 3 x 1½ in.

Unglazed.		Glazed. 21-oz. glass and painted.	
3 x 2 ft.	3/9 each.	3 x 2 ft.	7/6 each.
4 x 3 ft.	4/9 ,,	4 x 3 ft.	9/6 ,,
5 x 3 ft. 6 in. ..	6/9 ,,	5 x 3 ft. 6 in. ..	13/6 ,,
6 x 4 ft.	7/9 ,,	6 x 4 ft.	15/6 ,,

SPECIAL OFFER

5,000 CASES of 21 oz. HORTICULTURAL GLASS

at the following reduced prices:

In Boxes, 100 sq. ft.	s. d.	200 sq. ft. s. d.	100 sq. ft.	s. d.	200 sq. ft. s. d.
9 x 7 in. ..	14 6	25 6	20 x 12 in. ..	20 0	38 6
10 x 8 in. ..	16 0	26 6	16, 18 20, 22,		
12 x 9 in. ..	17 0	30 0	24 x 14 in.	24 0	42 6
13 x 9 in. ..	18 6	34 0	18 22, 24 x		
14 x 10 in. ..	19 0	35 0	16 in. ..	25 0	44 6

One size only in each case.

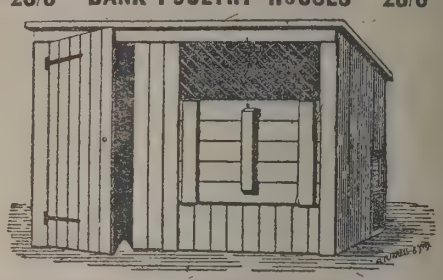
Best Quality Linseed Oil Putty,
1 cwt., 19s. ½ cwt., 10s. 6d. ¼ cwt., 5s. 6d.

GARDEN EDGING

4"x⅜" 5/- per 100 ft. If treated "Stoprot" 1/- per 100 ft. extra.

BITUMEN FELT, best quality, 12 yds. by 1 yd., 1 roll, 3/6; 12 rolls, 3/4 per roll; 25 rolls, 3/2 per roll.

28/6 BANK POULTRY HOUSES 28/6



500 in stock ready for immediate dispatch. Made in complete sections, constructed of strong framing, covered, planed, tongued, and grooved boards. Up and down sliding shutter as shown, hen exit at side.

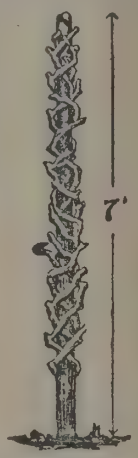
	£	s.	d.	
5 ft. x 3 ft. x 4 ft. ..	1	8	6	.. Floor 7/6 extra.
6 ft. x 4 ft. x 4 ft. ..	1	14	0	.. Floor 9/- extra.
7 ft. x 5 ft. x 4 ft. 6 in.	2	16	0	.. Floor 14/- extra.
8 ft. x 6 ft. x 5 ft. ..	3	16	0	.. Floor 18/6 extra.

HEXAGON PIGEON COTE

Very ornamental in gardens. Well made from good materials, stained and varnished. Complete with rusticated pole.
50 only to clear at
£2 17 6 each

RUSTIC ROSE PILLAR

Natural state, 4 9
With bark off, stained and varnished, 7/3 each.



RUSTIC TABLE

Made from best Rustic Hardwood, bark off stained and varnished.

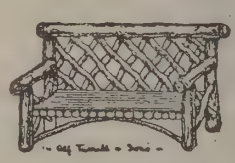
2 ft. square .. 14 6 each
3 ft. x 2 ft... .. 18/- each

RUSTIC SHELTER No. 61

Constructed of tongued and grooved matching for walls. Window openings as illustrated. Fitted hollow-bottomed seat at back. Strong floor; roof covered matching and good felt. Simply bolts together on arrival. Bolts supplied.

	£	s.	d.		£	s.	d.
5 ft. x 3 ft. ..	4	10	0	9 ft. x 6 ft. ..	9	5	0
6 ft. x 4 ft. ..	5	15	0	10 ft. x 6 ft. ..	10	15	0
7 ft. x 5 ft. ..	7	0	0	12 ft. x 6 ft. ..	11	17	6

RUSTIC GARDEN SEAT



Well made from selected material. In natural wood,
4 ft., 9/6; 5 ft., 14/6; 6 ft., 18/6.
If with bark taken off, stained and varnished,
4 ft., 14/6; 5 ft., 18/6; 6 ft., 24/- each.

Arm Chairs to match, 8/6 and 10/6.

RUSTIC POLES

Suitable for Pergolas, Fencing, Tree Stakes, etc.

		Per Doz.			Per Doz.
7 ft. long, 2 in. Butt	5/0		12 ft. long, 3 in. Butt	16/6
7 ft. ,, 2½ in. ,,	6/0		8 ft. ,, 4 in. ,,	14/6
8 ft. ,, 2½ in. ,,	8/0		9 ft. ,, 4 in. ,,	16/6
8 ft. ,, 3 in. ,,	9/6		10 ft. ,, 4 in. ,,	18/6
9 ft. ,, 2½ in. ,,	9/6		8 ft. ,, 5 in. ,,	20/0
9 ft. ,, 3 in. ,,	11/6		9 ft. ,, 5 in. ,,	24/0
10 ft. ,, 2½ in. ,,	10/6		10 ft. ,, 5 in. ,,	26 0
10 ft. ,, 3 in. ,,	13/6		12 ft. ,, 5 in. ,,	28/6
12 ft. ,, 2½ in. ,,	14/0		14 ft. ,, 5 in. ,,	30/0

'Phone: SYDENHAM 1268 (2 Minutes Forest Hill Station, Southern Railway) **ESTABLISHED 75 YEARS**

(Dept. G.I.) FOREST HILL, S.E. 23

Published by BENN BROTHERS LTD., at their Offices, Bouverie House, Fleet Street, London, E.C. 4; New York Office (J. D. Hamilton), 50, Church Street, N.Y.
Printed by THE CHANCERY LANE PRINTING WORKS, LTD., Plough Court, Fetter Lane, London, E.C. 4.

UNIVERSITY OF ILLINOIS-URBANA
3 0112 111359599